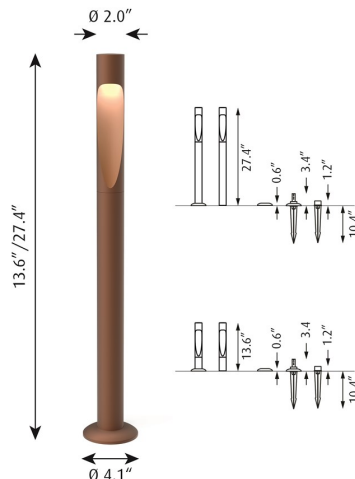


# FLINDT GARDEN BOLLARD

Black texture, 5747408818, Designed by Christian Flindt

|           |                      |
|-----------|----------------------|
| Type:     | <input type="text"/> |
| Product:  | <input type="text"/> |
| Project:  | <input type="text"/> |
| Modified: | <input type="text"/> |



## Technical specifications

### Materials

Top/Base plate: die-cast aluminum.  
Post: extruded aluminum.

### Finishes

Textured, powder coated paint in Natural Aluminum, Corten, or Black.

### Mounting

The bollard requires a separate, 24V or 230V DC power supply.

Flindt Garden with an integrated driver (230V) is available with a baseplate and anchor mounting. A mounting fixture is available as a spare part.

Flindt Garden without an adapter (24V) must be connected to an external adapter. The adapter must be brought separately. A maximum of 6 Garden bollards (6,5 W) can be run by one adapter.

The maximum distance to the last bollard is 30 m. Stem: Ø50 mm.

Spike mounted bollard(Plug&Play): For use in soil or gravel; includes weather-proof cables and connectors for above-ground runs.

Anchor mounted bollard(certified electrician): for casting in new concrete pad.

Base mounted bollard(certified electrician): Includes baseplate for anchoring to decks and floors.

### Information

#### Electrical:

System Wattage: 6.5-8.8W

LED Wattage: 6.0W

Delivered lumens: 215-291 lm

Efficacy: 24.1 - 44.7 lm/W

#### Certifications:

cULus, Wet Location

Protection class IP65

IK class 06

BUG Rating: B0-U2-G0

Color Rendering: Ra≥80

LED is non-dimming.

Low Voltage power supply 24VDC is remote mounted for multiple bollards per supply. Spike mounted bollards use provided weather-proof cables and connectors for above-ground runs. Plug and play. Anchor or Base mounted bollards: installation determined by certified electrician with below ground cabling and conduit. Consult factory for remote power supply information; maximum bollards and cable distances. For the E-socket product variants, bulbs are not included. LED light source is part of the product.

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# FLINDT GARDEN BOLLARD

Black texture, 5747408818, Designed by Christian Flindt

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Anchor or Base mounted bollards: installation determined by certified electrician with below ground cabling and conduit. For mounting instructions, see download section on the product detail page.

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# FLINDT GARDEN BOLLARD

Black texture, 5747408818, Designed by Christian Flindt

## Variant Options

For particular variant options, please check our online Product Variants Configurator on the product detail page.

| VARIANT NO. | LIGHT SOURCE                                 | VOLTAGE/FREQ | DELIVERED LUMEN | FEATURES | CABLE | COLOR, RAL         | W / H / L (IN) / W (LB)  |
|-------------|----------------------------------------------|--------------|-----------------|----------|-------|--------------------|--------------------------|
| 10000158330 | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 5.2 lb    |
| 10000158331 | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.2 lb    |
| 10000158334 | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 5.2 lb    |
| 10000158335 | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.2 lb    |
| 10000158336 | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 5.2 lb    |
| 10000158337 | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.2 lb    |
| 10000158340 | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 5.2 lb    |
| 10000158341 | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.2 lb    |
| 5747402474  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 2.8 lb    |
| 5747402487  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 2.8 lb    |
| 5747402500  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 3.2 lb    |
| 5747402513  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.2 lb    |
| 5747402568  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 2.9 lb    |
| 5747402571  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 2.9 lb    |
| 5747402597  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 3.4 lb    |
| 5747402607  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 215             | -        | -     | CORTEN COLOR, 954  | - / - / - in / 5.4 lb    |
| 5747402830  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 2.8 lb    |
| 5747402843  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 2.8 lb    |
| 5747402869  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 5.2 lb    |
| 5747402872  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 3.2 lb    |
| 5747402924  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 2.9 lb    |
| 5747402937  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 2.9 lb    |
| 5747402953  | Integrated LED 3000K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 3.4 lb    |
| 5747402966  | Integrated LED 2700K (7 W, no bulb required) | 24V          | 252             | -        | -     | NAT PAINT ALU, 162 | - / - / - in / 3.4 lb    |
| 5747405536  | Integrated LED 3000K (no bulb required)      | 24V          | -               | -        | -     | NAT PAINT ALU, 162 | 2 / 27.4 / 2 in / 4.5 lb |
| 5747405549  | Integrated LED 2700K (no bulb required)      | 24V          | -               | -        | -     | NAT PAINT ALU, 162 | 27.5 / 2 / 2 in / 4.8 lb |
| 5747405565  | Integrated LED 3000K (no bulb required)      | 24V          | -               | -        | -     | NAT PAINT ALU, 162 | 2 / 13.6 / 2 in / 4.5 lb |
| 5747405578  | Integrated LED 2700K (no bulb required)      | 24V          | -               | -        | -     | NAT PAINT ALU, 162 | 2 / 13.6 / 2 in / 4.5 lb |
|             | Integrated LED 3000K (no bulb required)      |              |                 |          |       | CORTEN             | 27.5 / 2 / 2 in / 4.8 lb |

# FLINDT GARDEN BOLLARD

Black texture, 5747408818, Designed by Christian Flindt

|            |                                              |     |     |   |           |                   |                          |
|------------|----------------------------------------------|-----|-----|---|-----------|-------------------|--------------------------|
| 5747405594 | required)                                    | 24V |     | - | -         | COLOR, 954        | lb                       |
| 5747405604 | Integrated LED 2700K (no bulb required)      | 24V |     | - | -         | CORTEN COLOR, 954 | 27.5 / 2 / 2 in / 4.5 lb |
| 5747405617 | Integrated LED 4000K (no bulb required)      | 24V |     | - | -         | CORTEN COLOR, 954 | 2 / 13.6 / 2 in / 2.6 lb |
| 5747405620 | Integrated LED 3000K (no bulb required)      | 24V |     | - | -         | CORTEN COLOR, 954 | 2 / 13.6 / 2 in / 4.5 lb |
| 5747405633 | Integrated LED 2700K (no bulb required)      | 24V |     | - | -         | CORTEN COLOR, 954 | 13.6 / 2 / 2 in / 4.5 lb |
| 5747408782 | Integrated LED 3000K (7 W, no bulb required) | 24V |     | - | With cord | BLK, 731          | 2 / 13.6 / 2 in / 3.2 lb |
| 5747408795 | Integrated LED 2700K (7 W, no bulb required) | 24V |     | - | With cord | BLK, 731          | 2 / 13.6 / 2 in / 3.2 lb |
| 5747408818 | Integrated LED 3000K (7 W, no bulb required) | 24V |     | - | With cord | BLK, 731          | 2 / 27.5 / 2 in / 4.0 lb |
| 5747408821 | Integrated LED 2700K (7 W, no bulb required) | 24V |     | - | With cord | BLK, 731          | 2 / 27.5 / 2 in / 4.0 lb |
| 5747408847 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.1 lb    |
| 5747408850 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.1 lb    |
| 5747408876 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.2 lb    |
| 5747408889 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.2 lb    |
| 5747408902 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | -         | BLK, 731          | 2 / 13.7 / 2 in / 3.1 lb |
| 5747408915 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | -         | BLK, 731          | 13.7 / 2 / 2 in / 3.1 lb |
| 5747408931 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.9 lb    |
| 5747408944 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 2.9 lb    |
| 5747408960 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 3.1 lb    |
| 5747408973 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | With cord | BLK, 731          | - / - / - in / 3.1 lb    |
| 5747408999 | Integrated LED 3000K (7 W, no bulb required) | 24V | 200 | - | -         | BLK, 731          | 27.5 / 2 / 2 in / 3.9 lb |
| 5747409008 | Integrated LED 2700K (7 W, no bulb required) | 24V | 200 | - | -         | BLK, 731          | 27.5 / 2 / 2 in / 3.9 lb |

# UR20 - Post Top

ARCHITECTURAL AREA/SITE

## FEATURES

- 20" size in single/dual arm post top, pole and wall mount
- High performance optics up to 16,874 delivered lumens
- Elegant form factor
- Diffusion lens option
- UL/cUL listed for wet locations, IP66 and 4G/1.5G vibration rated



3000K and warmer CCTs only

## CONTROL TECHNOLOGY



LIGHT GRID<sup>+</sup>

## SPECIFICATIONS

### CONSTRUCTION

- Low copper aluminum alloy die-casting is designed as one-piece.
- Molded silicone gasket throughout insures the sealing between the two compartments and provides ingress protection.
- All external fasteners are stainless steel.
- Cover is secured to Lens frame by the latch and hinge.

### OPTICS

- LEDs mount to a metal printed circuit board assembly (MCPCB).
- Optical lenses are clear injection molded PMMA acrylic.
- Optional Backlight Control on each LED module to completely control unwanted backlight.
- Optional fixture finish optical surfaces will not exceed BUG ratings of the standard white finish.

### LENS

- Standard lens (CLR) IK08
- Clear Polycarbonate Lens (CP) IK10

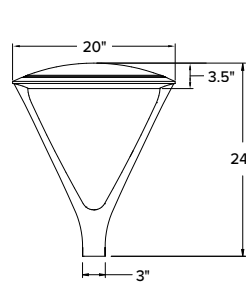
### INSTALLATION

- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

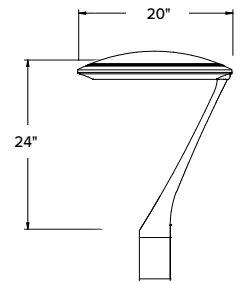
### ELECTRICAL

- Universal voltage, 120 through 277V with a  $\pm 10\%$  tolerance. Driver is Underwriters Laboratories listed.
- High voltage configurations, 347/480. Driver has a 0-10V dimming interface for multi-level illumination options. Driver is Underwriters Laboratories listed.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments.
- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Surge protection: 10,000k in parallel, 20,000k in series
- Wiring: No. 18AWM rated 105°C, wet rating.

ouro™



FM33



FMSA33/PTSA23  
FMSA34, PTSA24, PTSA34

|      | Weight           | EPA                    |
|------|------------------|------------------------|
| UR20 | 35 lbs / 15.8 kg | 0.512 ft. <sup>2</sup> |

### CONTROLS

#### 7PR

- Fully gasketed and wired 7-pin receptacle option. Easy access location above the electrical compartment. 7-pin construction allows for a user-defined interface and provides a controlled definition of operational performance. ANSI twist-lock control module by-others.

Standard customer operation modes:

- Traditional on/off photoelectric control.
- 5-pin wireless photoelectric control for added dimming feature.
- 7-pin wireless photoelectric control for dimming and additional I/O connections for customer use.

(Specifications continued on page 5)

UR20 - Post Top

ARCHITECTURAL AREA/SITE

DATE:

LOCATION:

TYPE:

PROJECT:

CATALOG #:

ORDERING GUIDE

Example: UR20-24L-25-3K8-3-L-UNV-FMSA33-BLT-7PR-BC

CATALOG #

HOUSING

| UR20  |            |                                  |                                         |                                              |                                            |                        |
|-------|------------|----------------------------------|-----------------------------------------|----------------------------------------------|--------------------------------------------|------------------------|
| Model | LED Engine | CCT/CRI                          | Distribution                            | Rotation                                     | Voltage                                    |                        |
| UR20  | Ouro       | <b>No Lens or Clear Lens</b>     | <b>AM</b> <sup>1,2</sup> Amber, 595nm   | <b>No Lens or Clear Lens</b>                 | <b>(Blank)</b> Blank for no rotation       | <b>UNV</b> 120-277V    |
|       |            | <b>24L-25</b> 3,000 lm           | <b>27K8</b> 2700K, 80 CRI               | <b>FR</b> Type I/Front Row                   |                                            | <b>347</b> 347V        |
|       |            | <b>24L-65</b> 7,000 lm           | <b>3K7</b> 3000K, 70 CRI                | <b>2</b> Type II                             | <b>L</b> <sup>4</sup> Optic rotation left  | <b>480</b> 480V        |
|       |            | <b>56L-75</b> 10,000 lm          | <b>3K8</b> 3000K, 80 CRI                | <b>3</b> Type III                            | <b>R</b> <sup>4</sup> Optic rotation right | <b>Consult factory</b> |
|       |            | <b>56L-110</b> 15,000 lm         | <b>35K8</b> 3500K, 80 CRI               | <b>4</b> Type IV                             |                                            |                        |
|       |            | <b>56L-140</b> 17,000 lm         | <b>3K9</b> 3000K, 90 CRI                | <b>4W</b> Type IV Wide                       |                                            |                        |
|       |            | <b>HDL - High Diffusion Lens</b> | <b>4K7</b> 4000K, 70 CRI                | <b>5QM</b> <sup>3</sup> Type V Square Medium |                                            |                        |
|       |            | <b>28L-30</b> 3,000 lm           | <b>4K8</b> 4000K, 80 CRI                | <b>5QN</b> <sup>3</sup> Type V Square Narrow |                                            |                        |
|       |            | <b>28L-70</b> 7,000 lm           | <b>5K7</b> 5000K, 70 CRI                | <b>5R</b> <sup>3</sup> Type V Rectangular    |                                            |                        |
|       |            | <b>68L-80</b> 9,000 lm           | Consult factory for other CCTs and CRIs | <b>5W</b> <sup>3</sup> Type V Wide (Round)   |                                            |                        |
|       |            | <b>68L-115</b> 13,000 lm         |                                         | <b>HDL - High Diffusion Lens</b>             |                                            |                        |
|       |            | <b>68L-150</b> 15,000 lm         |                                         | <b>3</b> Type III/Asymmetric                 |                                            |                        |
|       |            |                                  |                                         | <b>5W</b> <sup>3</sup> Type V/Symmetric      |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |
|       |            |                                  |                                         |                                              |                                            |                        |

| Mounting |                                                                     | Fixture Finish  |                              | Control Options          |                                                                                                                                   | Options                |                                     | Control Accessories |                                                                                                                                                                 |  |  |
|----------|---------------------------------------------------------------------|-----------------|------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------|-------------------------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| FM33     | Flush mt 3.0" OD pole, 3" fixture base                              | BLS             | Black Gloss Smooth           | 7PR-TL                   | 7 pin PCR with twist lock photocontrol                                                                                            | BC <sup>9</sup>        | Back-light Control                  | WIR-RME-L           | LightGRID+™ External Fixture Module                                                                                                                             |  |  |
| FM44     | Flush mt 3.6" to 4.0" OD pole, 4" fixture base                      | BLT             | Black Matte Textured         | 7PR-SC                   | 7 pin PCR with shorting cap                                                                                                       | SF                     | Single Fuse                         | SCH-R               | Occ. Sensor for Round Pole (up to 30' MH)                                                                                                                       |  |  |
| PT23     | 3" Post Top mount for 2 3/8" OD x 4" Long Tenon Tenon               | DBS             | Dark Bronze Gloss Smooth     | 7PR                      | 7 pin PCR, wireless control enabled                                                                                               | DF                     | Double Fuse                         |                     |                                                                                                                                                                 |  |  |
| PT24     | 4" Post Top mount for 2 3/8" OD T x 4" Long Tenon                   | DBT             | Dark Bronze Matte Textured   | AD-01 <sup>6</sup>       | AstroDIM: 50% output at midnight                                                                                                  | CLR <sup>8,9,10</sup>  | Clear Lens                          | SCH-S               | Occ. Sensor for Square Pole (up to 30' MH)                                                                                                                      |  |  |
|          |                                                                     | GTT             | Graphite Matte Textured      | AD-02 <sup>6</sup>       | AstroDIM: 50% output midnight to 4 AM                                                                                             | TPL                    | Tamper proof latch                  |                     |                                                                                                                                                                 |  |  |
| PT34     | 4" Post Top mount for 2 7/8" OD x 4" Long Tenon Tenon               | LGS             | Light Grey Gloss Smooth      | AD-03 <sup>6</sup>       | AstroDIM: 50% output 10PM                                                                                                         | CP <sup>8,9,11</sup>   | Clear Polycarbonate Lens            | NXOFM-1R1D-UNV      | NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming |  |  |
|          |                                                                     | LGT             | Light Grey Matte Textured    | AD-04 <sup>6</sup>       | AstroDIM: 50% output 10PM to 4AM                                                                                                  | WBFM3                  | Wall Bracket Arm for FM33 or FMSA33 |                     |                                                                                                                                                                 |  |  |
| FMSA33   | Solo Arm Post Top Flush Mount 3.0" OD Pole, 3" fixture base         | PSS             | Platinum Silver Gloss Smooth | NXW <sup>7</sup>         | NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor                                                | WBFM4                  | Wall Bracket Arm for FM44 or FMSA44 |                     |                                                                                                                                                                 |  |  |
| FMSA44   | Solo Arm Post Top Flush Mount 3.6" to 4.0" OD Pole, 4" fixture base | VGT             | Verde Green Matte Textured   | WSP-40F-1 <sup>6,8</sup> | Dimming Occ. Sensor for up to 40' MH, 120/277/347V                                                                                | TAFM3 <sup>12,13</sup> | Twin Arm mount for FM33 or FMSA33   |                     |                                                                                                                                                                 |  |  |
| PTSA23   | 3" Solo Arm Post Top Mount for 2-3/8" OD x 4" Long Tenon            | WHS             | White Gloss Smooth           | WSP-40F-2 <sup>6,8</sup> | Dimming Occ. Sensor for up to 40' MH, 208/240V                                                                                    | TAFM4 <sup>12,13</sup> | Twin Arm mount for FM44 or FMSA44   |                     |                                                                                                                                                                 |  |  |
| PTSA24   | 4" Solo Arm Post Top Mount for 2-3/8" OD x 4" Long Tenon            | WHT             | White Matte Textured         | WSP-40F-3 <sup>6,8</sup> | Dimming Occ. Sensor for up to 40' MH, 480V                                                                                        |                        |                                     |                     |                                                                                                                                                                 |  |  |
| PTSA24   | 4" Solo Arm Post Top Mount for 2-3/8" OD x 4" Long Tenon            | Color Option    |                              | NXWS16F <sup>6,7,8</sup> | NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming |                        |                                     |                     |                                                                                                                                                                 |  |  |
| PTSA34   | 4" Solo Arm Post Top Mount for 2-7/8" OD x 4" Long Tenon            | CC <sup>5</sup> | Custom Color                 | NXWS40F <sup>6,7,8</sup> | NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming |                        |                                     |                     |                                                                                                                                                                 |  |  |

1 Turtle Friendly.

2 Not available with 24L-65 and the 56L-140 configuration of the LED Engine

3 Not available with BC option

4 Not available with 5QM, 5QN, and 5W distributions.

5 Consult factory for custom color, marine and corrosive finish options.

6 Not available with other sensor or wireless control options.

7 Not available with Solo Arm Post Top (FMSA/PTSA)

8 24L and 56L only

9 Not available with HDL option.

10 IK08 rated. Consult factory for details

11 IK10 rated. Consult factory for details

12 Pole requires 2-3/8" x 4" Long tenon

13 Order one for each pair of fixtures per pole.

UR20 - Post Top

ARCHITECTURAL AREA/SITE

OUTDOOR LIGHTING CONTROLS OPTIONS  
CONTROLS FUNCTIONALITY

DATE:LOCATION:

TYPE:PROJECT:

CATALOG #:



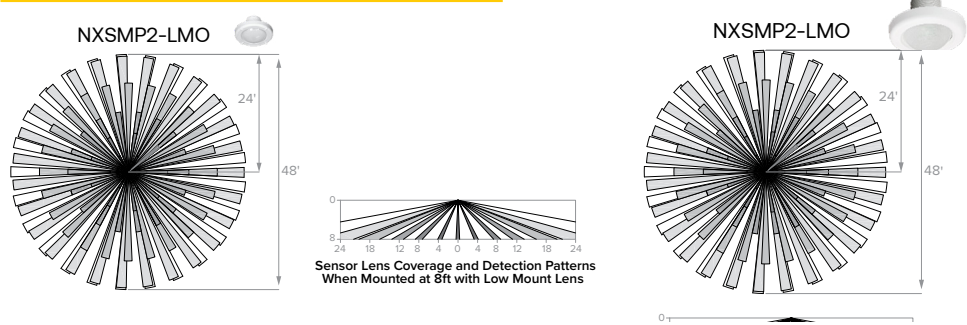
| Control Option Ordering<br>Logic & Description |               | Control Option Functionality                                                                                                                                    |          |            |                      |                              |               |                |                              |                  | Control Option<br>Components |                                                                                     |              |
|------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------|----------------------|------------------------------|---------------|----------------|------------------------------|------------------|------------------------------|-------------------------------------------------------------------------------------|--------------|
|                                                |               | Networkable                                                                                                                                                     | Grouping | Scheduling | Occupancy/<br>Motion | Daylight<br>Harvesting       | 0-10V Dimming | On/Off Control | Bluetooth App<br>Programming | Sensor<br>Height |                              |                                                                                     |              |
| NX Wireless                                    | NXOFM1RID-UNV | NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming | ✓        | ✓          | ✓                    | Paired with external control | ✓             | ✓              | ✓                            | ✓                | -                            |  | NXOFM1RID-UV |
|                                                | NXW           | NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor                                                                              | ✓        | ✓          | ✓                    | -                            | -             | ✓              | ✓                            | ✓                | -                            |  | NXRM2-H      |
|                                                | NXWS16F       | NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming                               | ✓        | ✓          | ✓                    | ✓                            | ✓             | ✓              | ✓                            | ✓                | 16ft                         |  | NXSMP2-LMO   |
|                                                | NXWS40F       | NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming                               | ✓        | ✓          | ✓                    | ✓                            | ✓             | ✓              | ✓                            | ✓                | 40ft                         |  | NXSMP2-HMO   |

DEFAULT SETTINGS

|                                       |                              |            |
|---------------------------------------|------------------------------|------------|
| NX Wireless                           | Occupancy Sensor             | Enabled    |
|                                       | Occupancy Sensor Sensitivity | 7          |
|                                       | Occupancy Sensor Timeout     | 15 Minutes |
|                                       | Occupied Dim Level           | 100%       |
|                                       | Unoccupied Dim Level         | 0%         |
|                                       | Daylight Sensor              | Disabled   |
|                                       | Bluetooth                    | Enabled    |
|                                       | 2.4GHz Wireless Mesh         | On         |
| "Passcode Factory Passcode: HubbN3T!" |                              | Enabled    |

|             |                              |           |
|-------------|------------------------------|-----------|
| Stand Alone | Occupancy Sensor             | Enabled   |
|             | Occupancy Sensor Sensitivity | 7         |
|             | Occupancy Sensor Timeout     | 8 Minutes |
|             | Occupied Dim Level           | 100%      |
|             | Unoccupied Dim Level         | 50%       |
|             | Daylight Sensor              | Disabled  |

NX WIRELESS COVERAGE PATTERNS



NX LIGHTING CONTROLS FREE APP      CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminaires and program NX system settings.

Apple App: <https://apps.apple.com/us/app/nx-lighting-controls/id962112904>

Google Play: [https://play.google.com/store/apps/details?id=io.cordova.NX8TR&hl=en\\_US&gl=US](https://play.google.com/store/apps/details?id=io.cordova.NX8TR&hl=en_US&gl=US)



Apple App



Google Play

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DATE:LOCATION:

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CATALOG #:

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

| Control Option Ordering<br>Logic & Description |        | Control Option Functionality       |          |            |                                    |                        |                                    |                |                                    |                  | Control Option<br>Components                                                        |                                                                                     |
|------------------------------------------------|--------|------------------------------------|----------|------------|------------------------------------|------------------------|------------------------------------|----------------|------------------------------------|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                |        | Networkable                        | Grouping | Scheduling | Occupancy/<br>Motion               | Daylight<br>Harvesting | 0-10V Dimming                      | On/Off Control | Bluetooth App<br>Programming       | Sensor<br>Height |                                                                                     |                                                                                     |
| Independent                                    | AD     | AutoDIM Time of Day Dimming        | -        | -          | ✓                                  | -                      | -                                  | -              | ✓                                  | -                | -                                                                                   | ADT                                                                                 |
|                                                | 7PR    | 7-Pin Receptacle                   | -        | -          | Paired with<br>external<br>control | -                      | Paired with<br>external<br>control | -              | Paired with<br>external<br>control | -                | -                                                                                   | 7PR                                                                                 |
|                                                | 7PR-SC | 7-Pin Receptacle with shorting cap | -        | -          | -                                  | -                      | -                                  | -              | -                                  | -                |  | 7PR-SC                                                                              |
|                                                | 7PR-TL | 7-Pin with photocontrol            | -        | -          | -                                  | -                      | ✓                                  | -              | ✓                                  | -                | -                                                                                   |  |

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ARCHITECTURAL AREA/SITE

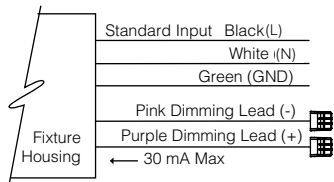
|            |           |
|------------|-----------|
| DATE:      | LOCATION: |
| TYPE:      | PROJECT:  |
| CATALOG #: |           |

## SPECIFICATIONS (CONTINUED)

### CONTROLS (CONTINUED)

#### DIMMING:

- Dimming range from 100% to 10% through the use of the standard 0-10V interface on the programmable driver.
- Modular wiring harness in the service area provides user access to the dimming circuitry.
- Dimming circuitry compatible with 0-10V, user-defined control devices.
- Optional factory programmed dimming profile.



#### WIRELESS CONTROLS

##### LightGRID+™

- LightGRID+™ wireless control modules allow an individual fixture to be managed, monitored and measured. The modules communicate securely over a robust certified meshed radio signal. The LightGRID+™ modules provide on/off/dim control, external device input, alerts and metering.

##### WIR-RME-L

- LightGRID+™ External Module, 120-480V, 1000ft range (LOS), Internal Photocell, 1 Digital Input, Compatible with the A-25-7H option

#### NX LIGHTING CONTROLS

- NX lighting controls platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity

#### POLE MOUNTED

##### ROUND POLE-MOUNTED OCCUPANCY

- Sensor up to 30'. Select voltage and finish color.

##### SCH-R

- Round Pole-Mounted Occupancy Sensor: up to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

- Ordering Example: SCH-R4<sup>4</sup>/277<sup>2</sup>/BL<sup>3</sup>

##### SQUARE POLE-MOUNTED OCCUPANCY

Sensor up to 30'. Select voltage and finish color.

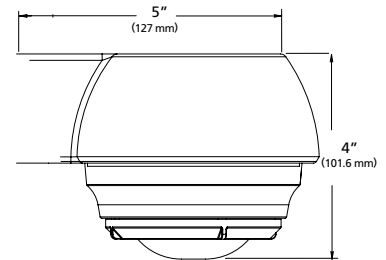
##### SCH-S

- Square Pole-Mounted Occupancy Sensor: up to 30' - an outdoor occupancy sensor with 0-10V interface dimming control that mounts directly to the pole. Wide 360° pattern. Module colors are available in Black, Gray, and White. Module is cut for round pole mounting. Pole diameter is needed upon order. Poles to be drilled in the field will be provided with installation instructions.

- Ordering Example: SCH-S/277<sup>2</sup>/BL<sup>3</sup>

#### ASTRODIM

- AstroDIM provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times.



#### OPTIONAL FUSING:

- SF for 120, 277, and 347 Line volts

#### CAUTION:

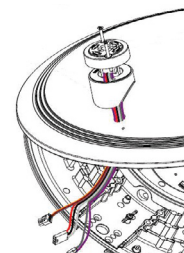
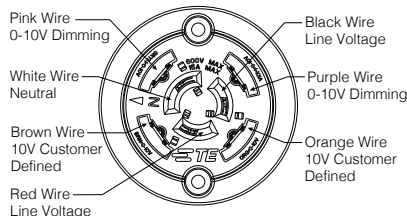
- Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

#### CERTIFICATIONS AND LISTINGS

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- ANSI C136.31-2010 Vibration tested and compliant 1.5G and 4G reference page 4
- IEC 66262 Mechanical Impact Code IK08, IK10
- IDA approved, 3000K and warmer CCTs only
- IP66 rated
- RoHS compliant

#### WARRANTY

- 5 year warranty

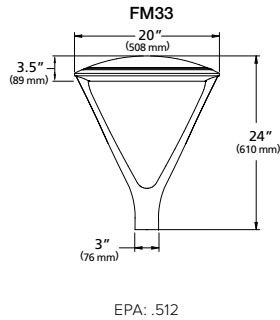


7-Pin receptacle placement

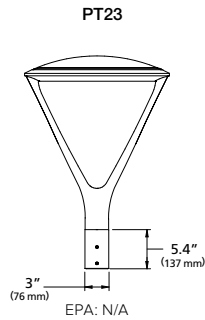
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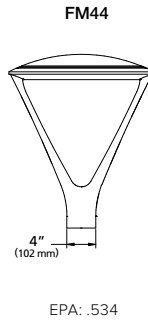
## DIMENSIONS



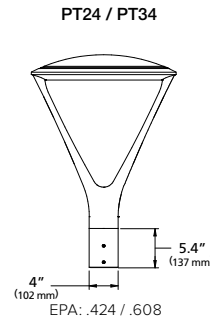
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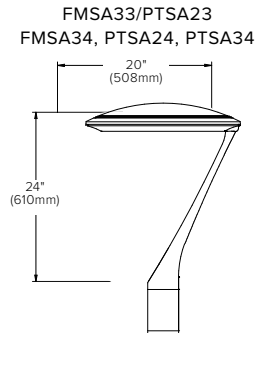
EPA: N/A



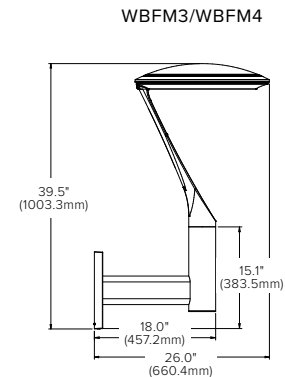
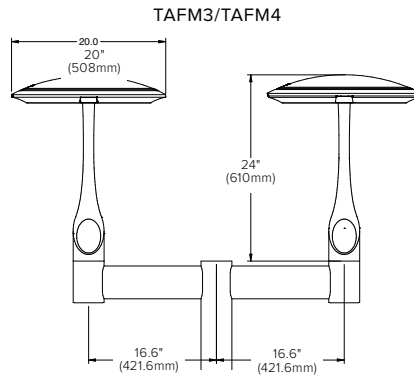
EPA: .534



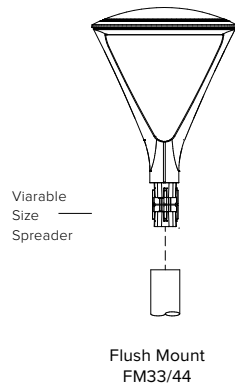
EPA: .424 / .608



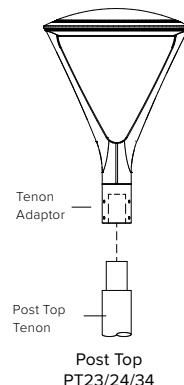
| ARM    | DIAMETER                     |
|--------|------------------------------|
| FMSA33 | 3" diameter                  |
| FMSA44 | 4" diameter                  |
| PTSA23 | 3" diameter with Tenon mount |
| PTSA24 | 4" diameter with Tenon mount |
| PTSA34 | 4" diameter with tenon mount |



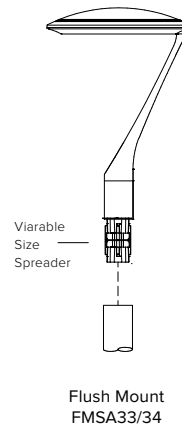
## MOUNTING INSTALLATION



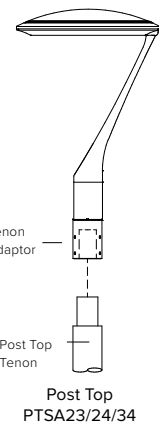
Flush Mount  
FM33/44



Post Top  
PT23/24/34

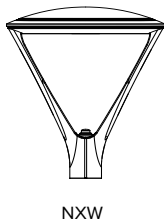


Flush Mount  
FMSA33/34

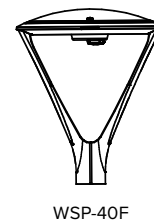


Post Top  
PTSA23/24/34

## SENSOR PLACEMENT



NXW



WSP-40F

## MOUNTING VIBRATION RATINGS

| UR 20 Arm     |        | UR28 Arm      |        | UR 20 Post Top |        | UR 28 Post Top |        | UR 20 Solo Arm |        |
|---------------|--------|---------------|--------|----------------|--------|----------------|--------|----------------|--------|
| Ordering Code | Rating | Ordering Code | Rating | Ordering Code  | Rating | Ordering Code  | Rating | Ordering Code  | Rating |
| ASQ           | 4G     | ASQ           | 4G     | FM33           | 4G     | FM44           | 1.5G   | FMSA33         | 1.5G   |
| A34           | 4G     | A34           | 4G     | FM44           | 1.5G   | FM45           | 1.5G   | FMSA44         | 1.5G   |
| A46           | 4G     | A46           | 4G     | PT23           | 4G     | PT24           | 1.5G   | PTSA23         | 1.5G   |
| MAF           | 4G     | MAF           | 4G     | PT24           | 4G     | PT34           | 1.5G   | PTSA24         | 1.5G   |
|               |        |               |        | PT34           | 1.5G   | PT25           | 1.5G   | PTSA34         | 1.5G   |

For the 4 G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Test Level 1 Normal Applications, Vibration Test Level 2 Bridge/Overpass Applications, and Vibration Test Level 3

For the 1.5G test, ANSI C136.31-2010 Vibration is tested to comply with Vibration Level 1 Bridge/Overpass Applications



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DELIVERED LUMENS

| LEDs # | Lumens Package | Drive Current | Nominal Watts | Lens Options | Distribution | 3000K 70CRI |            |   |   |      | 4000K 70CRI |            |   |   |      | 5000K 70CRI |            |   |   |      |
|--------|----------------|---------------|---------------|--------------|--------------|-------------|------------|---|---|------|-------------|------------|---|---|------|-------------|------------|---|---|------|
|        |                |               |               |              |              | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w |
|        |                |               |               |              |              |             | B          | U | G |      |             | B          | U | G |      |             | B          | U | G |      |
| 24L    | 3,000          | 298mA         | 25            | No lens      | FR           | 2932        | 0          | 0 | 1 | 115  | 3119        | 0          | 0 | 1 | 123  | 3098        | 0          | 0 | 1 | 124  |
|        |                |               |               |              | FR-BC        | 1994        | 0          | 0 | 0 | 78   | 2121        | 0          | 0 | 0 | 83   | 2107        | 0          | 0 | 0 | 83   |
|        |                |               |               |              | 2            | 2943        | 1          | 0 | 1 | 116  | 3099        | 1          | 0 | 1 | 122  | 3110        | 1          | 0 | 1 | 124  |
|        |                |               |               |              | 2-BC         | 1724        | 0          | 0 | 1 | 68   | 1834        | 0          | 0 | 1 | 72   | 1822        | 0          | 0 | 1 | 72   |
|        |                |               |               |              | 3            | 3007        | 1          | 0 | 1 | 118  | 3200        | 1          | 0 | 1 | 126  | 3178        | 1          | 0 | 1 | 127  |
|        |                |               |               |              | 3-BC         | 1830        | 0          | 0 | 1 | 73   | 1947        | 0          | 0 | 1 | 78   | 1934        | 0          | 0 | 1 | 77   |
|        |                |               |               |              | 4            | 3056        | 0          | 0 | 1 | 120  | 3251        | 0          | 0 | 1 | 128  | 3229        | 0          | 0 | 1 | 129  |
|        |                |               |               |              | 4-BC         | 2235        | 0          | 0 | 1 | 88   | 2377        | 0          | 0 | 1 | 93   | 2362        | 0          | 0 | 1 | 93   |
|        |                |               |               |              | 4W           | 3171        | 1          | 0 | 1 | 125  | 3374        | 1          | 0 | 1 | 133  | 3351        | 1          | 0 | 1 | 134  |
|        |                |               |               |              | 4W-BC        | 1912        | 0          | 0 | 1 | 75   | 2034        | 0          | 0 | 1 | 80   | 2020        | 0          | 0 | 1 | 79   |
|        |                |               |               |              | 5QM          | 2931        | 2          | 0 | 1 | 115  | 3119        | 2          | 0 | 1 | 123  | 3098        | 2          | 0 | 1 | 124  |
|        |                |               |               |              | 5QN          | 2694        | 2          | 0 | 1 | 106  | 2866        | 2          | 0 | 1 | 113  | 2847        | 2          | 0 | 1 | 114  |
|        |                |               |               |              | 5R           | 3054        | 2          | 0 | 2 | 120  | 3250        | 2          | 0 | 2 | 128  | 3228        | 2          | 0 | 2 | 129  |
|        |                |               |               |              | 5W           | 3043        | 2          | 0 | 1 | 120  | 3237        | 2          | 0 | 1 | 127  | 3216        | 2          | 0 | 1 | 129  |
|        |                |               |               | Clear lens   | FR           | 2773        | 0          | 0 | 1 | 109  | 2951        | 0          | 0 | 1 | 116  | 2930        | 0          | 0 | 1 | 117  |
|        |                |               |               |              | FR-BC        | 1886        | 0          | 0 | 1 | 74   | 2007        | 0          | 0 | 1 | 79   | 1993        | 0          | 0 | 1 | 78   |
|        |                |               |               |              | 2            | 2784        | 1          | 0 | 1 | 109  | 2963        | 1          | 0 | 1 | 116  | 2942        | 1          | 0 | 1 | 118  |
|        |                |               |               |              | 2-BC         | 1631        | 0          | 0 | 1 | 64   | 1736        | 0          | 0 | 1 | 68   | 1723        | 0          | 0 | 1 | 67   |
|        |                |               |               |              | 3            | 2845        | 1          | 0 | 1 | 111  | 3028        | 1          | 0 | 1 | 119  | 3007        | 1          | 0 | 1 | 120  |
|        |                |               |               |              | 3BC          | 1806        | 0          | 0 | 1 | 72   | 1922        | 0          | 0 | 1 | 77   | 1909        | 0          | 0 | 1 | 76   |
|        |                |               |               |              | 4            | 2891        | 0          | 0 | 1 | 113  | 3076        | 0          | 0 | 1 | 120  | 3055        | 0          | 0 | 1 | 122  |
|        |                |               |               |              | 4-BC         | 2114        | 0          | 0 | 1 | 83   | 2250        | 0          | 0 | 1 | 88   | 2234        | 0          | 0 | 1 | 88   |
|        |                |               |               |              | 4W           | 2999        | 1          | 0 | 1 | 117  | 3192        | 1          | 0 | 1 | 125  | 3169        | 1          | 0 | 1 | 127  |
|        |                |               |               |              | 4W-BC        | 1808        | 0          | 0 | 1 | 71   | 1924        | 0          | 0 | 1 | 75   | 1911        | 0          | 0 | 1 | 76   |
|        |                |               |               |              | 5QM          | 2773        | 1          | 0 | 1 | 109  | 2950        | 2          | 0 | 1 | 116  | 2931        | 2          | 0 | 1 | 117  |
|        |                |               |               |              | 5QN          | 2549        | 1          | 0 | 0 | 100  | 2712        | 2          | 0 | 1 | 106  | 2693        | 2          | 0 | 1 | 108  |
|        |                |               |               |              | 5R           | 2890        | 2          | 0 | 2 | 113  | 3075        | 2          | 0 | 2 | 120  | 3054        | 2          | 0 | 2 | 122  |
|        |                |               |               |              | 5W           | 2879        | 2          | 0 | 1 | 113  | 3064        | 2          | 0 | 1 | 120  | 3042        | 2          | 0 | 1 | 122  |
| 28L    |                | 298mA         | 30            | HDL lens     | 3            | 2816        | 1          | 0 | 1 | 96   | 2997        | 1          | 0 | 1 | 102  | 3020        | 1          | 0 | 1 | 101  |
|        |                |               |               |              | 5W           | 2917        | 1          | 0 | 1 | 100  | 3105        | 1          | 0 | 1 | 106  | 3084        | 1          | 0 | 1 | 103  |

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

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CATALOG #:

DELIVERED LUMENS (CONTINUED)

| LEDs # | Lumens Package | Drive Current | Nominal Watts | Lens Options | Distribution | 3000K 70CRI |            |   |   |      | 4000K 70CRI |            |   |   |      | 5000K 70CRI |            |   |   |      |
|--------|----------------|---------------|---------------|--------------|--------------|-------------|------------|---|---|------|-------------|------------|---|---|------|-------------|------------|---|---|------|
|        |                |               |               |              |              | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w |
|        |                |               |               |              |              |             | B          | U | G |      |             | B          | U | G |      |             | B          | U | G |      |
| 24L    | 7,000          | 800mA         | 65            | No lens      | FR           | 6754        | 1          | 0 | 1 | 104  | 7187        | 1          | 0 | 1 | 111  | 7138        | 1          | 0 | 1 | 110  |
|        |                |               |               |              | FR-BC        | 4392        | 0          | 0 | 1 | 68   | 4673        | 0          | 0 | 1 | 72   | 4641        | 0          | 0 | 1 | 71   |
|        |                |               |               |              | 2            | 6571        | 1          | 0 | 2 | 101  | 6992        | 1          | 0 | 2 | 108  | 6944        | 1          | 0 | 2 | 107  |
|        |                |               |               |              | 2-BC         | 3799        | 0          | 0 | 1 | 58   | 4042        | 0          | 0 | 1 | 62   | 4014        | 0          | 0 | 1 | 62   |
|        |                |               |               |              | 3            | 6625        | 1          | 0 | 2 | 102  | 7051        | 1          | 0 | 2 | 108  | 7002        | 1          | 0 | 2 | 108  |
|        |                |               |               |              | 3BC          | 4032        | 0          | 0 | 1 | 62   | 4291        | 0          | 0 | 1 | 66   | 4261        | 0          | 0 | 1 | 66   |
|        |                |               |               |              | 4            | 6788        | 1          | 0 | 2 | 104  | 7223        | 1          | 0 | 2 | 111  | 7174        | 1          | 0 | 2 | 110  |
|        |                |               |               |              | 4-BC         | 4924        | 0          | 0 | 2 | 76   | 5239        | 0          | 0 | 2 | 81   | 5203        | 0          | 0 | 2 | 80   |
|        |                |               |               |              | 4W           | 6900        | 1          | 0 | 2 | 106  | 7343        | 1          | 0 | 2 | 113  | 7291        | 1          | 0 | 2 | 112  |
|        |                |               |               |              | 4W-BC        | 4212        | 0          | 0 | 2 | 65   | 4482        | 0          | 0 | 2 | 69   | 4451        | 0          | 0 | 2 | 68   |
|        |                |               |               |              | 5QM          | 7025        | 3          | 0 | 1 | 108  | 7477        | 3          | 0 | 1 | 115  | 7425        | 3          | 0 | 1 | 114  |
|        |                |               |               |              | 5QN          | 6964        | 3          | 0 | 1 | 107  | 7410        | 3          | 0 | 1 | 114  | 7323        | 3          | 0 | 1 | 113  |
|        |                |               |               |              | 5R           | 7038        | 3          | 0 | 3 | 108  | 7489        | 3          | 0 | 3 | 115  | 7437        | 3          | 0 | 3 | 114  |
|        |                |               |               |              | 5W           | 7011        | 3          | 0 | 2 | 108  | 7460        | 3          | 0 | 2 | 115  | 7409        | 3          | 0 | 2 | 114  |
|        |                |               |               | Clear lens   | FR           | 6432        | 1          | 0 | 1 | 97   | 6844        | 1          | 0 | 1 | 104  | 6798        | 1          | 0 | 1 | 105  |
|        |                |               |               |              | FR-BC        | 4182        | 0          | 0 | 1 | 63   | 4450        | 0          | 0 | 1 | 67   | 4420        | 0          | 0 | 1 | 67   |
|        |                |               |               |              | 2            | 6258        | 1          | 0 | 1 | 95   | 6659        | 1          | 0 | 2 | 101  | 6613        | 1          | 0 | 2 | 102  |
|        |                |               |               |              | 2-BC         | 3617        | 0          | 0 | 1 | 55   | 3849        | 0          | 0 | 1 | 58   | 3823        | 0          | 0 | 1 | 58   |
|        |                |               |               |              | 3            | 6310        | 1          | 0 | 2 | 96   | 6714        | 1          | 0 | 2 | 102  | 6668        | 1          | 0 | 2 | 103  |
|        |                |               |               |              | 3-BC         | 3599        | 0          | 0 | 1 | 55   | 3829        | 0          | 0 | 1 | 59   | 3803        | 0          | 0 | 1 | 59   |
|        |                |               |               |              | 4            | 6465        | 1          | 0 | 2 | 98   | 6879        | 1          | 0 | 2 | 104  | 6832        | 1          | 0 | 2 | 105  |
|        |                |               |               |              | 4-BC         | 4688        | 0          | 0 | 2 | 71   | 4990        | 0          | 0 | 2 | 76   | 4955        | 0          | 0 | 2 | 75   |
|        |                |               |               |              | 4W           | 6572        | 1          | 0 | 2 | 100  | 6993        | 1          | 0 | 2 | 106  | 6944        | 1          | 0 | 2 | 107  |
|        |                |               |               |              | 4W-BC        | 4011        | 0          | 0 | 2 | 61   | 4268        | 0          | 0 | 2 | 65   | 4238        | 0          | 0 | 2 | 64   |
|        |                |               |               |              | 5QM          | 6691        | 3          | 0 | 1 | 101  | 7119        | 3          | 0 | 1 | 108  | 7070        | 3          | 0 | 1 | 109  |
|        |                |               |               |              | 5QN          | 6632        | 2          | 0 | 1 | 100  | 7058        | 3          | 0 | 1 | 107  | 7009        | 3          | 0 | 1 | 108  |
|        |                |               |               |              | 5R           | 6702        | 3          | 0 | 3 | 102  | 7131        | 3          | 0 | 3 | 108  | 7082        | 3          | 0 | 3 | 109  |
|        |                |               |               |              | 5W           | 6676        | 3          | 0 | 2 | 101  | 7104        | 3          | 0 | 2 | 108  | 7055        | 3          | 0 | 2 | 109  |
| 28L    |                | 700mA         | 70            | HDL lens     | 3            | 6047        | 2          | 0 | 2 | 92   | 6047        | 2          | 0 | 2 | 92   | 6236        | 2          | 0 | 2 | 89   |
|        |                |               |               |              | 5W           | 6221        | 2          | 0 | 1 | 94   | 6619        | 2          | 0 | 1 | 100  | 6525        | 2          | 0 | 1 | 93   |

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

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PROJECT:

CATALOG #:

DELIVERED LUMENS (CONTINUED)

| LEDs # | Lumens Package | Drive Current | Nominal Watts | Lens Options | Distribution | 3000K 70CRI |            |   |   |      | 4000K 70CRI |            |   |   |      | 5000K 70CRI |            |   |   |      |
|--------|----------------|---------------|---------------|--------------|--------------|-------------|------------|---|---|------|-------------|------------|---|---|------|-------------|------------|---|---|------|
|        |                |               |               |              |              | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w |
|        |                |               |               |              |              |             | B          | U | G |      |             | B          | U | G |      |             | B          | U | G |      |
| 56L    | 10,000         | 420mA         | 75            | No lens      | FR           | 9315        | 1          | 0 | 1 | 124  | 9913        | 1          | 0 | 1 | 132  | 9845        | 1          | 0 | 1 | 131  |
|        |                |               |               |              | FR-BC        | 6058        | 0          | 0 | 1 | 81   | 6445        | 0          | 0 | 1 | 86   | 6402        | 0          | 0 | 1 | 85   |
|        |                |               |               |              | 2            | 9063        | 2          | 0 | 2 | 120  | 9644        | 2          | 0 | 2 | 128  | 9578        | 2          | 0 | 2 | 128  |
|        |                |               |               |              | 2-BC         | 5239        | 0          | 0 | 1 | 70   | 5575        | 0          | 0 | 1 | 74   | 5536        | 0          | 0 | 1 | 74   |
|        |                |               |               |              | 3            | 9139        | 2          | 0 | 2 | 125  | 9725        | 2          | 0 | 2 | 134  | 9657        | 2          | 0 | 2 | 129  |
|        |                |               |               |              | 3-BC         | 5561        | 0          | 0 | 2 | 74   | 5877        | 0          | 0 | 2 | 78   | 5561        | 0          | 0 | 2 | 74   |
|        |                |               |               |              | 4            | 9362        | 1          | 0 | 2 | 124  | 9362        | 1          | 0 | 2 | 124  | 9876        | 1          | 0 | 2 | 132  |
|        |                |               |               |              | 4-BC         | 6791        | 0          | 0 | 2 | 90   | 7226        | 0          | 0 | 2 | 96   | 7168        | 0          | 0 | 2 | 96   |
|        |                |               |               |              | 4W           | 9518        | 1          | 0 | 2 | 126  | 10129       | 1          | 0 | 2 | 135  | 10058       | 1          | 0 | 2 | 134  |
|        |                |               |               |              | 4W-BC        | 5809        | 0          | 0 | 2 | 77   | 6181        | 0          | 0 | 2 | 82   | 6138        | 0          | 0 | 2 | 82   |
|        |                |               |               |              | 5QM          | 9691        | 3          | 0 | 1 | 129  | 10312       | 3          | 0 | 1 | 137  | 10240       | 3          | 0 | 1 | 137  |
|        |                |               |               |              | 5QN          | 9606        | 3          | 0 | 1 | 128  | 10222       | 3          | 0 | 1 | 136  | 10151       | 3          | 0 | 1 | 135  |
|        |                |               |               |              | 5R           | 9706        | 3          | 0 | 3 | 129  | 10328       | 3          | 0 | 3 | 137  | 10258       | 3          | 0 | 3 | 137  |
|        |                |               |               |              | 5W           | 9669        | 4          | 0 | 2 | 129  | 10289       | 4          | 0 | 2 | 137  | 10217       | 4          | 0 | 2 | 136  |
|        |                |               |               | Clear lens   | FR           | 8871        | 1          | 0 | 1 | 117  | 9760        | 1          | 0 | 1 | 129  | 9374        | 1          | 0 | 1 | 125  |
|        |                |               |               |              | FR-BC        | 5769        | 0          | 0 | 1 | 76   | 6138        | 0          | 0 | 1 | 81   | 6096        | 0          | 0 | 1 | 81   |
|        |                |               |               |              | 2            | 8631        | 2          | 0 | 2 | 114  | 9183        | 2          | 0 | 2 | 121  | 9121        | 2          | 0 | 2 | 122  |
|        |                |               |               |              | 2-BC         | 4989        | 0          | 0 | 1 | 67   | 5309        | 0          | 0 | 1 | 71   | 5272        | 0          | 0 | 1 | 62   |
|        |                |               |               |              | 3            | 8703        | 1          | 0 | 2 | 115  | 9260        | 2          | 0 | 2 | 122  | 9197        | 2          | 0 | 2 | 123  |
|        |                |               |               |              | 3-BC         | 4964        | 1          | 0 | 1 | 66   | 5282        | 1          | 0 | 2 | 70   | 5245        | 1          | 0 | 2 | 69   |
|        |                |               |               |              | 4            | 8916        | 1          | 0 | 2 | 118  | 9487        | 1          | 0 | 2 | 125  | 9423        | 1          | 0 | 2 | 126  |
|        |                |               |               |              | 4-BC         | 6467        | 0          | 0 | 2 | 85   | 6881        | 0          | 0 | 2 | 91   | 6834        | 0          | 0 | 2 | 90   |
|        |                |               |               |              | 4W           | 9065        | 1          | 0 | 2 | 120  | 9646        | 1          | 0 | 2 | 128  | 9579        | 1          | 0 | 2 | 128  |
|        |                |               |               |              | 4W-BC        | 5532        | 0          | 0 | 2 | 74   | 5887        | 0          | 0 | 2 | 78   | 5845        | 0          | 0 | 2 | 78   |
|        |                |               |               |              | 5QM          | 9228        | 3          | 0 | 1 | 122  | 9820        | 3          | 0 | 1 | 130  | 9752        | 3          | 0 | 1 | 130  |
|        |                |               |               |              | 5QN          | 9147        | 3          | 0 | 1 | 121  | 9734        | 3          | 0 | 1 | 129  | 9668        | 3          | 0 | 1 | 129  |
|        |                |               |               |              | 5R           | 9244        | 3          | 0 | 3 | 122  | 9836        | 3          | 0 | 3 | 130  | 9769        | 3          | 0 | 3 | 130  |
|        |                |               |               |              | 5W           | 9208        | 4          | 0 | 2 | 122  | 9798        | 4          | 0 | 2 | 130  | 9732        | 4          | 0 | 2 | 130  |
| 68L    |                | 350mA         | 80            | HDL lens     | 3            | 7853        | 2          | 0 | 2 | 99   | 8356        | 2          | 0 | 2 | 106  | 8299        | 2          | 0 | 2 | 104  |
|        |                |               |               |              | 5W           | 8080        | 2          | 0 | 2 | 102  | 8684        | 3          | 0 | 2 | 110  | 8684        | 3          | 0 | 2 | 109  |

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

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ARCHITECTURAL AREA/SITE

DATE:

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TYPE:

PROJECT:

CATALOG #:

DELIVERED LUMENS (CONTINUED)

| LEDs # | Lumens Package | Drive Current | Nominal Watts | Lens Options | Distribution | 3000K 70CRI |            |   |   |      | 4000K 70CRI |            |   |   |      | 5000K 70CRI |            |   |   |      |
|--------|----------------|---------------|---------------|--------------|--------------|-------------|------------|---|---|------|-------------|------------|---|---|------|-------------|------------|---|---|------|
|        |                |               |               |              |              | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w |
|        |                |               |               |              |              |             | B          | U | G |      |             | B          | U | G |      |             | B          | U | G |      |
| 56L    | 15,000         | 600mA         | 110           | No lens      | FR           | 13533       | 1          | 0 | 1 | 125  | 14399       | 1          | 0 | 2 | 133  | 14301       | 1          | 0 | 2 | 130  |
|        |                |               |               |              | FR-BC        | 8799        | 1          | 0 | 1 | 81   | 9363        | 1          | 0 | 1 | 86   | 9300        | 1          | 0 | 1 | 85   |
|        |                |               |               |              | 2            | 13165       | 2          | 0 | 2 | 121  | 14009       | 2          | 0 | 2 | 129  | 13913       | 2          | 0 | 2 | 126  |
|        |                |               |               |              | 2-BC         | 7611        | 1          | 0 | 2 | 70   | 8098        | 1          | 0 | 2 | 75   | 8042        | 1          | 0 | 2 | 74   |
|        |                |               |               |              | 3            | 13275       | 2          | 0 | 3 | 122  | 14126       | 2          | 0 | 3 | 130  | 14030       | 2          | 0 | 3 | 128  |
|        |                |               |               |              | 3-BC         | 8079        | 1          | 0 | 2 | 73   | 8596        | 1          | 0 | 2 | 78   | 8538        | 1          | 0 | 2 | 78   |
|        |                |               |               |              | 4            | 13601       | 1          | 0 | 3 | 125  | 14472       | 1          | 0 | 3 | 133  | 14373       | 1          | 0 | 3 | 131  |
|        |                |               |               |              | 4-BC         | 9865        | 1          | 0 | 2 | 91   | 10497       | 1          | 0 | 3 | 97   | 10425       | 1          | 0 | 3 | 96   |
|        |                |               |               |              | 4W           | 13827       | 2          | 0 | 3 | 127  | 14713       | 2          | 0 | 3 | 136  | 14611       | 2          | 0 | 3 | 133  |
|        |                |               |               |              | 4W-BC        | 8437        | 0          | 0 | 2 | 78   | 8978        | 0          | 0 | 2 | 83   | 8916        | 0          | 0 | 2 | 82   |
|        |                |               |               |              | 5QM          | 14077       | 4          | 0 | 2 | 130  | 14979       | 4          | 0 | 2 | 138  | 14876       | 4          | 0 | 2 | 135  |
|        |                |               |               |              | 5QN          | 13953       | 4          | 0 | 1 | 129  | 14848       | 4          | 0 | 1 | 137  | 14747       | 4          | 0 | 1 | 134  |
|        |                |               |               |              | 5R           | 14100       | 4          | 0 | 4 | 130  | 15004       | 4          | 0 | 4 | 138  | 14901       | 4          | 0 | 4 | 135  |
|        |                |               |               |              | 5W           | 14046       | 4          | 0 | 2 | 129  | 14946       | 4          | 0 | 2 | 138  | 14844       | 4          | 0 | 3 | 135  |
|        |                |               |               | Clear lens   | FR           | 12803       | 1          | 0 | 1 | 118  | 13624       | 1          | 0 | 1 | 126  | 13531       | 1          | 0 | 1 | 123  |
|        |                |               |               |              | FR-BC        | 9298        | 1          | 0 | 1 | 86   | 8325        | 1          | 0 | 1 | 77   | 8798        | 1          | 0 | 1 | 81   |
|        |                |               |               |              | 2            | 12455       | 2          | 0 | 2 | 115  | 13254       | 2          | 0 | 2 | 123  | 13164       | 2          | 0 | 2 | 120  |
|        |                |               |               |              | 2-BC         | 7200        | 1          | 0 | 1 | 67   | 7661        | 1          | 0 | 2 | 71   | 7610        | 1          | 0 | 2 | 70   |
|        |                |               |               |              | 3            | 12560       | 2          | 0 | 3 | 116  | 13365       | 2          | 0 | 3 | 124  | 13273       | 2          | 0 | 3 | 121  |
|        |                |               |               |              | 3-BC         | 7163        | 1          | 0 | 2 | 65   | 7622        | 1          | 0 | 2 | 69   | 7570        | 1          | 0 | 2 | 69   |
|        |                |               |               |              | 4            | 12868       | 1          | 0 | 3 | 119  | 13692       | 1          | 0 | 3 | 127  | 13599       | 1          | 0 | 3 | 124  |
|        |                |               |               |              | 4-BC         | 9333        | 1          | 0 | 2 | 86   | 9931        | 1          | 0 | 2 | 92   | 9864        | 1          | 0 | 2 | 90   |
|        |                |               |               |              | 4W           | 13081       | 2          | 0 | 3 | 121  | 13920       | 2          | 0 | 3 | 129  | 13823       | 2          | 0 | 3 | 126  |
|        |                |               |               |              | 4W-BC        | 7983        | 0          | 0 | 2 | 74   | 8495        | 0          | 0 | 2 | 79   | 8436        | 0          | 0 | 2 | 78   |
|        |                |               |               |              | 5QM          | 13318       | 3          | 0 | 2 | 123  | 14172       | 4          | 0 | 2 | 131  | 14075       | 4          | 0 | 2 | 128  |
|        |                |               |               |              | 5QN          | 13202       | 3          | 0 | 1 | 122  | 14048       | 4          | 0 | 1 | 130  | 13951       | 4          | 0 | 1 | 127  |
|        |                |               |               |              | 5R           | 13341       | 4          | 0 | 4 | 123  | 14195       | 4          | 0 | 4 | 131  | 14099       | 4          | 0 | 4 | 128  |
|        |                |               |               |              | 5W           | 13290       | 4          | 0 | 2 | 123  | 14141       | 4          | 0 | 2 | 131  | 14044       | 4          | 0 | 2 | 128  |
| 68L    |                | 500mA         | 115           | HDL lens     | 3            | 11577       | 2          | 0 | 2 | 102  | 12320       | 2          | 0 | 2 | 109  | 12236       | 2          | 0 | 2 | 106  |
|        |                |               |               |              | 5W           | 11912       | 3          | 0 | 2 | 105  | 12676       | 3          | 0 | 2 | 112  | 12588       | 3          | 0 | 2 | 109  |

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

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ARCHITECTURAL AREA/SITE

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PROJECT:

CATALOG #:

DELIVERED LUMENS (CONTINUED)

| LEDs # | Lumens Package | Drive Current | Nominal Watts | Lens Options | Distribution | 3000K 70CRI |            |   |   |      | 4000K 70CRI |            |   |   |      | 5000K 70CRI |            |   |   |      |
|--------|----------------|---------------|---------------|--------------|--------------|-------------|------------|---|---|------|-------------|------------|---|---|------|-------------|------------|---|---|------|
|        |                |               |               |              |              | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w | Lumen       | BUG Rating |   |   | lm/w |
|        |                |               |               |              |              |             | B          | U | G |      |             | B          | U | G |      |             | B          | U | G |      |
| 56L    | 17,000         | 750mA         | 140           | No lens      | FR           | 15323       | 2          | 0 | 2 | 111  | 16306       | 2          | 0 | 2 | 118  | 16194       | 2          | 0 | 2 | 116  |
|        |                |               |               |              | FR-BC        | 9964        | 1          | 0 | 1 | 72   | 10603       | 1          | 0 | 1 | 77   | 10530       | 1          | 0 | 1 | 76   |
|        |                |               |               |              | 2            | 14897       | 2          | 0 | 2 | 108  | 15852       | 2          | 0 | 2 | 115  | 15743       | 2          | 0 | 2 | 112  |
|        |                |               |               |              | 2-BC         | 8618        | 1          | 0 | 2 | 63   | 9169        | 1          | 0 | 2 | 67   | 9107        | 1          | 0 | 2 | 66   |
|        |                |               |               |              | 3            | 15032       | 2          | 0 | 3 | 109  | 15996       | 2          | 0 | 3 | 116  | 15886       | 2          | 0 | 3 | 113  |
|        |                |               |               |              | 3-BC         | 9147        | 1          | 0 | 2 | 65   | 9733        | 1          | 0 | 2 | 70   | 9667        | 1          | 0 | 2 | 69   |
|        |                |               |               |              | 4            | 15400       | 1          | 0 | 3 | 112  | 16387       | 1          | 0 | 4 | 119  | 16275       | 1          | 0 | 4 | 116  |
|        |                |               |               |              | 4-BC         | 11170       | 1          | 0 | 3 | 81   | 11886       | 1          | 0 | 3 | 86   | 11804       | 1          | 0 | 3 | 86   |
|        |                |               |               |              | 4W           | 15656       | 2          | 0 | 3 | 114  | 16660       | 2          | 0 | 4 | 121  | 16544       | 2          | 0 | 4 | 118  |
|        |                |               |               |              | 4W-BC        | 9554        | 0          | 0 | 2 | 69   | 10166       | 0          | 0 | 2 | 74   | 10095       | 0          | 0 | 2 | 73   |
|        |                |               |               |              | 5QM          | 15939       | 4          | 0 | 2 | 116  | 16962       | 4          | 0 | 2 | 123  | 16845       | 4          | 0 | 2 | 120  |
|        |                |               |               |              | 5QN          | 15801       | 4          | 0 | 1 | 115  | 16813       | 4          | 0 | 1 | 122  | 16698       | 4          | 0 | 1 | 119  |
|        |                |               |               |              | 5R           | 15966       | 4          | 0 | 4 | 116  | 16990       | 4          | 0 | 4 | 123  | 16874       | 4          | 0 | 4 | 121  |
|        |                |               |               |              | 5W           | 15906       | 4          | 0 | 3 | 115  | 16925       | 4          | 0 | 3 | 123  | 16808       | 4          | 0 | 3 | 120  |
|        |                |               |               | Clear lens   | FR           | 14541       | 1          | 0 | 2 | 105  | 15473       | 2          | 0 | 2 | 111  | 15367       | 2          | 0 | 2 | 110  |
|        |                |               |               |              | FR-BC        | 9456        | 1          | 0 | 1 | 68   | 10061       | 1          | 0 | 1 | 72   | 9993        | 1          | 0 | 1 | 72   |
|        |                |               |               |              | 2            | 14146       | 2          | 0 | 2 | 102  | 15053       | 2          | 0 | 2 | 108  | 14950       | 2          | 0 | 2 | 107  |
|        |                |               |               |              | 2-BC         | 8178        | 1          | 0 | 2 | 59   | 8702        | 1          | 0 | 2 | 63   | 8642        | 1          | 0 | 2 | 62   |
|        |                |               |               |              | 3            | 14265       | 2          | 0 | 3 | 103  | 15179       | 2          | 0 | 3 | 109  | 15076       | 2          | 0 | 3 | 108  |
|        |                |               |               |              | 3BC          | 8136        | 1          | 0 | 2 | 58   | 8657        | 1          | 0 | 2 | 62   | 8598        | 1          | 0 | 2 | 61   |
|        |                |               |               |              | 4            | 14614       | 1          | 0 | 3 | 105  | 15551       | 1          | 0 | 3 | 112  | 15445       | 1          | 0 | 3 | 110  |
|        |                |               |               |              | 4-BC         | 10600       | 1          | 0 | 3 | 76   | 11279       | 1          | 0 | 3 | 81   | 11203       | 1          | 0 | 3 | 81   |
|        |                |               |               |              | 4W           | 14858       | 2          | 0 | 3 | 107  | 15811       | 2          | 0 | 3 | 114  | 15700       | 2          | 0 | 3 | 112  |
|        |                |               |               |              | 4W-BC        | 9067        | 0          | 0 | 2 | 65   | 9649        | 0          | 0 | 2 | 70   | 9581        | 0          | 0 | 2 | 69   |
|        |                |               |               |              | 5QM          | 15126       | 4          | 0 | 2 | 109  | 16095       | 4          | 0 | 2 | 116  | 15985       | 4          | 0 | 2 | 114  |
|        |                |               |               |              | 5QN          | 14994       | 4          | 0 | 1 | 108  | 15955       | 4          | 0 | 1 | 115  | 15846       | 4          | 0 | 1 | 113  |
|        |                |               |               |              | 5R           | 15152       | 4          | 0 | 4 | 109  | 16122       | 4          | 0 | 4 | 116  | 16012       | 4          | 0 | 4 | 114  |
|        |                |               |               |              | 5W           | 15094       | 4          | 0 | 3 | 109  | 16061       | 4          | 0 | 3 | 116  | 15951       | 4          | 0 | 3 | 114  |
| 68L    |                | 625mA         | 150           | HDL lens     | 3            | 13240       | 2          | 0 | 2 | 89   | 13992       | 3          | 0 | 3 | 95   | 13897       | 3          | 0 | 3 | 93   |
|        |                |               |               |              | 5W           | 13623       | 3          | 0 | 2 | 92   | 14396       | 3          | 0 | 2 | 97   | 14298       | 3          | 0 | 2 | 95   |

Scaling factors 27K8 = 0.859, 35K8 = 0.906 of 5K7 lumen packages

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ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-FR-PT

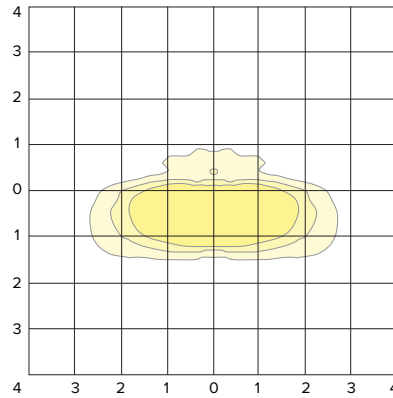
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16306        |
| Watts            | 140          |
| Efficacy         | 116.5        |
| IES Type         | II           |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 14198  | 87.1%       |
| Downward House Side  | 2108   | 12.9%       |
| Downward Total       | 16306  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16306  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-2-PT

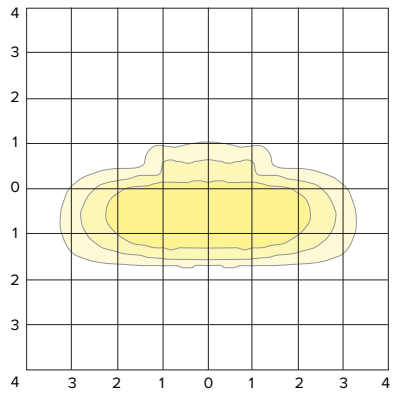
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 15852        |
| Watts            | 140          |
| Efficacy         | 113.2        |
| IES Type         | II           |
| BUG Rating       | B2-U0-G2     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 12851  | 81.1%       |
| Downward House Side  | 3001   | 18.9%       |
| Downward Total       | 15852  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 15852  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-3-PT

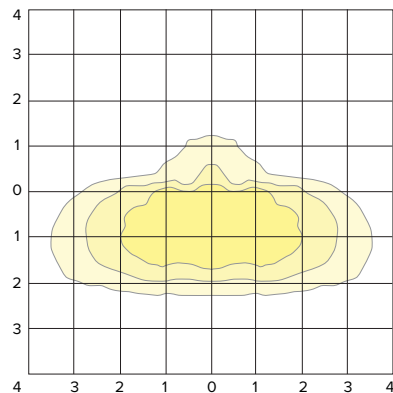
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 15996        |
| Watts            | 140          |
| Efficacy         | 114.3        |
| IES Type         | III          |
| BUG Rating       | B2-U0-G3     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 13422  | 83.9%       |
| Downward House Side  | 2574   | 16.1%       |
| Downward Total       | 15996  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 15996  | 100%        |

### ISOFOOT CANDLE PLOT



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ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-4-PT

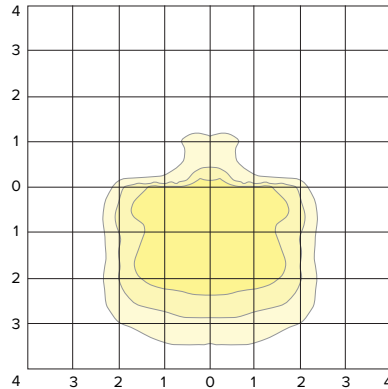
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16387        |
| Watts            | 140          |
| Efficacy         | 117.1        |
| IES Type         | IV           |
| BUG Rating       | B1-U0-G4     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 14697  | 89.7%       |
| Downward House Side  | 1690   | 10.3%       |
| Downward Total       | 16387  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16387  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-4W-PT

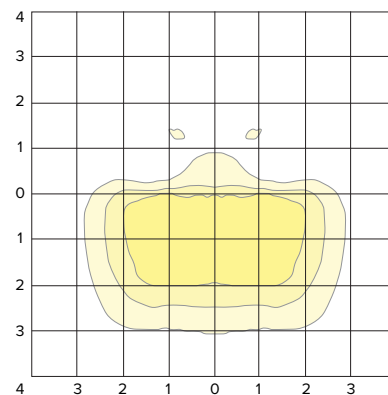
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16660        |
| Watts            | 138          |
| Efficacy         | 120.7        |
| IES Type         | IV           |
| BUG Rating       | B2-U0-G4     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 14955  | 89.8%       |
| Downward House Side  | 1705   | 10.2%       |
| Downward Total       | 16660  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16660  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5QM-PT

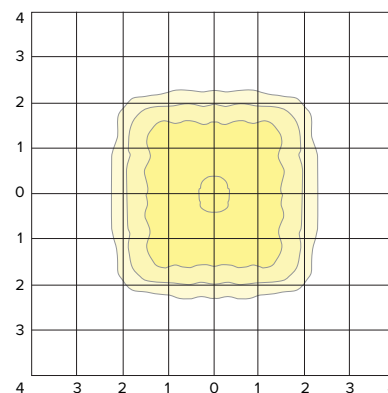
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16962        |
| Watts            | 140          |
| Efficacy         | 121.2        |
| IES Type         | VS           |
| BUG Rating       | B4-U0-G2     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 8481   | 50.0%       |
| Downward House Side  | 8481   | 50.0%       |
| Downward Total       | 16962  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16962  | 100%        |

### ISOFOOT CANDLE PLOT



# UR20 - Post Top

ARCHITECTURAL AREA/SITE

## PHOTOMETRY

UR20-56L-140-4K7-5QN-PT

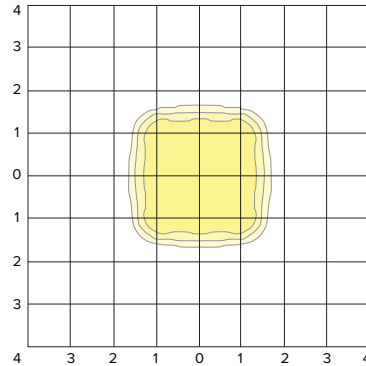
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16813        |
| Watts            | 140          |
| Efficacy         | 120.1        |
| IES Type         | VS           |
| BUG Rating       | B4-U0-G1     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 8407   | 50.0%       |
| Downward House Side  | 8407   | 50.0%       |
| Downward Total       | 16813  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16813  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5R-PT

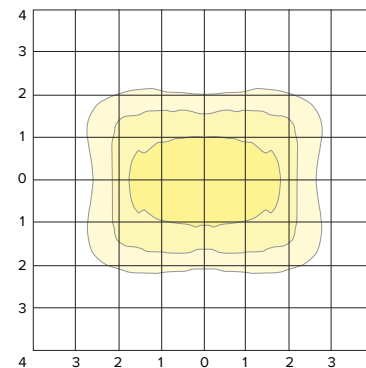
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16990        |
| Watts            | 140          |
| Efficacy         | 121.4        |
| IES Type         | III          |
| BUG Rating       | B4-U0-G4     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 8495   | 50.0%       |
| Downward House Side  | 8495   | 50.0%       |
| Downward Total       | 16990  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16990  | 100%        |

### ISOFOOT CANDLE PLOT



UR20-56L-140-4K7-5W-PT

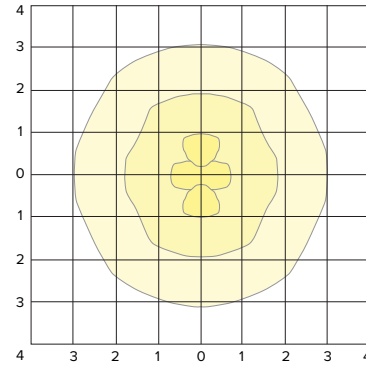
### LUMINAIRE DATA

|                  |              |
|------------------|--------------|
| Description      | 4000K, 70CRI |
| Delivered Lumens | 16925        |
| Watts            | 140          |
| Efficacy         | 120.9        |
| IES Type         | VS           |
| BUG Rating       | B4-U0-G3     |
| Mounting Height  | 30 ft        |
| Grid Scale       | 30 ft        |

### ZONAL LUMEN SUMMARY

| Zone                 | Lumens | % Luminaire |
|----------------------|--------|-------------|
| Downward Street Side | 8463   | 50.0%       |
| Downward House Side  | 8463   | 50.0%       |
| Downward Total       | 16925  | 100%        |
| Upward Street Side   | 0      | 0%          |
| Upward House Side    | 0      | 0%          |
| Upward Total         | 0      | 0%          |
| Total Flux           | 16925  | 100%        |

### ISOFOOT CANDLE PLOT



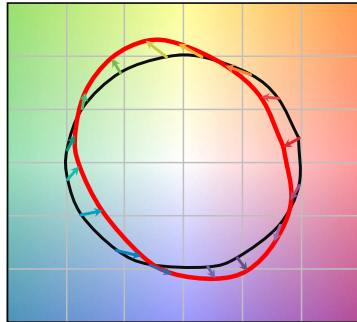


# UR20 - Post Top

ARCHITECTURAL AREA/SITE

## TM-30 DATA

### COLOR VECTOR GRAPHIC

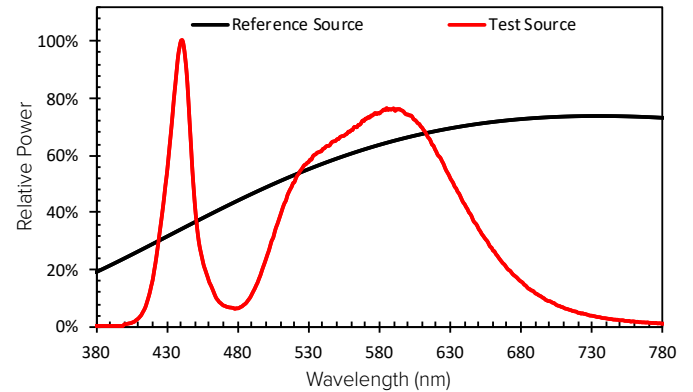


— Reference Illuminant — Test Source

### TEST SOURCE

|                    |        |
|--------------------|--------|
| R <sub>f</sub>     | 68     |
| R <sub>a</sub>     | 99     |
| CCT(K)             | 3947   |
| D <sub>uv</sub>    | 0.0004 |
| x                  | 0.3831 |
| y                  | 0.3793 |
| CIE R <sub>a</sub> | 72     |

### SPECTRAL POWER DISTRIBUTION COMPARISON



## ELECTRICAL DATA

| Drive Current | LED Count | System Watts | Line Voltage |       | Amps AC |      |      |      |      |      | Min. Power Factor | Max THD (%) | Dimming       |                             |     |                                     |     |
|---------------|-----------|--------------|--------------|-------|---------|------|------|------|------|------|-------------------|-------------|---------------|-----------------------------|-----|-------------------------------------|-----|
|               |           |              |              |       |         |      |      |      |      |      |                   |             | Dimming Range | Source current out of 0-10V |     | Absolute voltage range on 0-10V (+) |     |
|               |           |              | VAC          | Hz    | 120     | 208  | 240  | 277  | 347  | 480  |                   |             |               | Min                         | Max | Min                                 | Max |
| 298mA         | 24        | 25           | 120-480      | 50/60 | 0.21    | 0.12 | 0.10 | 0.09 | 0.07 | 0.05 | >0.9              | 20          | 10% to 100%   | 0mA                         | 1mA | 0V                                  | 10V |
| 298mA         | 28        | 30           |              |       | 0.25    | 0.14 | 0.13 | 0.11 | 0.09 | 0.06 |                   |             |               |                             |     |                                     |     |
| 800mA         | 24        | 65           |              |       | 0.54    | 0.31 | 0.27 | 0.23 | 0.19 | 0.14 |                   |             |               |                             |     |                                     |     |
| 700mA         | 28        | 70           |              |       | 0.58    | 0.34 | 0.29 | 0.25 | 0.20 | 0.15 |                   |             |               |                             |     |                                     |     |
| 420mA         | 56        | 75           |              |       | 0.63    | 0.36 | 0.31 | 0.27 | 0.22 | 0.16 |                   |             |               |                             |     |                                     |     |
| 350mA         | 68        | 80           |              |       | 0.67    | 0.38 | 0.33 | 0.29 | 0.23 | 0.17 |                   |             |               |                             |     |                                     |     |
| 600mA         | 56        | 110          |              |       | 0.92    | 0.53 | 0.46 | 0.40 | 0.32 | 0.23 |                   |             |               |                             |     |                                     |     |
| 500mA         | 68        | 115          |              |       | 0.96    | 0.55 | 0.48 | 0.42 | 0.33 | 0.24 |                   |             |               |                             |     |                                     |     |
| 850mA         | 56        | 140          |              |       | 1.17    | 0.67 | 0.58 | 0.51 | 0.40 | 0.29 |                   |             |               |                             |     |                                     |     |
| 675mA         | 68        | 150          |              |       | 1.25    | 0.72 | 0.63 | 0.54 | 0.43 | 0.31 |                   |             |               |                             |     |                                     |     |

### TM-21 Lifetime Calculation - Projected Lumen Maintenance (25°C / 77°C)

| Ambient Temp. | 0    | 25,000 | 36,000 | 50,000 | 100,000 | Reported L70 |
|---------------|------|--------|--------|--------|---------|--------------|
| 25°C / 77°F   | 100% | 97%    | 95%    | 93%    | 87%     | 60khrs       |

### CRI Lumen Multiplier

| CCT   | Amber   | 70 CRI | 80 CRI | 90 CRI |
|-------|---------|--------|--------|--------|
| Amber | 0.1727s | —      | —      | —      |
| 2700K | —       | —      | 0.859  | —      |
| 3000K | —       | 1      | 0.9119 | 0.7033 |
| 3500K | —       | —      | 0.906  | —      |
| 4000K | —       | 1      | 0.8941 | 0.734  |
| 5000K | —       | 1      | 0.879  | 0.7712 |

# THE EDGE® Series

LED Area/Flood Luminaire

Rev. Date: V14 06/24/2024

## Product Description

THE EDGE® Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment and high performance aluminum heat sinks. Various mounting choices: Adjustable Arm, Direct Arm, Direct Arm Long, or Side Arm (details on page 2). Includes a leaf/debris guard.

**Applications:** Parking lots, walkways, campuses, car dealerships, office complexes, and internal roadways

## Performance Summary

Patented NanoOptic® Product Technology

Assembled in the USA by Cree Lighting from US and imported parts

**Initial Delivered Lumens:** Up to 33,946 lumens

**Input Power:** 19 - 263 Watts

**CRI:** Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

**CCT:** Turtle Friendly Amber, 3000K (+/- 300K), 4000K (+/- 300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

**Limited Warranty\*:** 10 years for luminaire/10 years for Colorfast DeltaGuard® finish/5 years for PML sensors/1 year on accessories

\* See <https://www.creelighting.com/resources/warranties/> for warranty terms

## Accessories

| Field-Installed                                                                                                                                                                                   |                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bird Spikes</b><br>XA-BRDSKP<br><b>Hand-Held Remote</b><br>XA-SENSREM<br>- For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required | <b>Backlight Control Shields</b><br>XA-20BLS-4<br>- Four-pack<br>- Unpainted stainless steel<br><b>Shorting Cap</b><br>XA-XSLSHRT<br><b>NEMA® 3-Pin Photocell</b><br>C-ACC-A-PCCELL-NEMA3-LV<br>- On/off functionality only<br>- Available with UL voltage only |

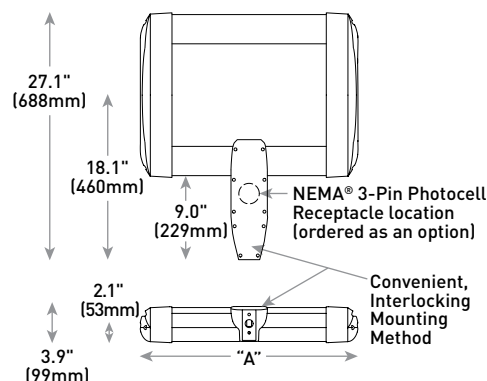
## Ordering Information

Example: ARE-EDG-2M-AA-12-E-UL-SV-350

|           |                               |                               |                              |                   |                 | E                  |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------|-------------------------------|-------------------------------|------------------------------|-------------------|-----------------|--------------------|---------|-----------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Family    | Optic                         |                               |                              | Mounting*         | LED Count (x10) | Series             | Voltage | Finish                      | Drive Current | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| ARE-EDG   | 2M                            | 3MB                           | 4MP                          | AA                | 02              | E                  | UL      | BK                          | 350           | <b>DIM 0-10V Dimming</b><br>- Control by others<br>- Refer to <a href="#">Dimming spec sheet</a> for details<br>- Can't exceed specified drive current<br>- Not available with PML options<br><b>F Fuse</b><br>- Compatible only with 120V, 277V or 347V (phase to neutral)<br>- Consult factory if fusing is required for 208V, 240V or 480V (phase to phase)<br>- Refer to <a href="#">PML spec sheet</a> for availability with PML options<br>- When code dictates fusing, use time delay fuse<br><b>HL Hi/Low (Dual Circuit Input)</b><br>- Refer to <a href="#">HL spec sheet</a> for details<br>- Sensor not included<br><b>P Button Photocell</b><br>- Refer to <a href="#">PML spec sheet</a> for availability with PML options<br>- Available with UL voltage only<br><b>PML Programmable Multi-Level, 20-40' Mounting Height</b><br>- Refer to <a href="#">PML spec sheet</a> for details<br>- Intended for downlight applications at 0° tilt | <b>PML2 Programmable Multi-Level, 10-30' Mounting Height</b><br>- Refer to <a href="#">PML spec sheet</a> for details<br>- Intended for downlight applications at 0° tilt<br><b>R NEMA® 3-Pin Photocell Receptacle</b><br>- 3-pin receptacle per ANSI C136.10<br>- Not available with SA mount<br>- Intended for downlight applications with maximum 45° tilt<br>- Requires photocell or shorting cap by others<br>- Refer to <a href="#">PML spec sheet</a> for availability with PML options<br><b>30K 3000K Color Temperature</b><br>- Minimum 80 CRI<br>- Color temperature per luminaire<br><b>40K 4000K Color Temperature</b><br>- Minimum 70 CRI<br>- Color temperature per luminaire<br><b>50K 5000K Color Temperature</b><br>- Minimum 90 CRI<br>- Color temperature per luminaire<br><b>TRL Amber Turtle Friendly LEDs</b><br>- Available only with 350mA<br>- 600nm dominant wavelength<br>- Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance |
|           | Type II Medium                | Type III Medium w/BLS         | Type IV Medium w/Partial BLS | Adjustable Arm    | 04              | Universal 120-277V | Black   | 350mA                       |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | 2MB                           | 3MP                           | 5M                           | DA                | 06              | UH                 | Bronze  | 525mA                       |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | Type II Medium w/BLS          | Type III Medium w/Partial BLS | Type V Medium                | Direct Arm        | 08              | Universal 347-480V | Silver  | 700mA                       |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | 2MP                           | 4M                            | 5S                           | DL                | 10              | SV                 | White   | - Available with 20-60 LEDs |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | Type II Medium w/ Partial BLS | Type IV Medium                | Type V Short                 | Direct Long Arm   | 12              | WH                 |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | 3M                            | 4MB                           |                              |                   | 14              |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           | Type III Medium w/BLS         | Type IV Medium w/BLS          |                              |                   | 16              |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           |                               |                               |                              |                   |                 |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           |                               |                               |                              |                   |                 |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| FLD-EDG   | 25° Flood                     | 70° Flood                     | N6 NEMA® 6                   | AA Adjustable Arm |                 |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 40° Flood | SN Sign                       |                               | SA Side Arm                  |                   |                 |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|           |                               |                               | - Available with 20-60 LEDs  |                   |                 |                    |         |                             |               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

\* Reference EPA and pole configuration suitability data beginning on page 19

## DA Mount



| LED Count (x10) | Dim. "A"      | Weight         |
|-----------------|---------------|----------------|
| 02              | 12.1" [306mm] | 21 lbs. (10kg) |
| 04              | 12.1" [306mm] | 24 lbs. (11kg) |
| 06              | 14.1" [357mm] | 27 lbs. (12kg) |
| 08              | 16.1" [408mm] | 28 lbs. (13kg) |
| 10              | 18.1" [459mm] | 32 lbs. (15kg) |
| 12              | 20.1" [510mm] | 34 lbs. (15kg) |
| 14              | 22.1" [560mm] | 37 lbs. (17kg) |
| 16              | 24.1" [611mm] | 41 lbs. (19kg) |

AA/DL/SA Mount - see page 22 for weight & dimensions



Website: [creelighting.com](https://www.creelighting.com)

US: (800) 236-6800 Canada: (800) 473-1234

**CREE** **LIGHTING®**

Product Specifications

CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment and high performance heat sinks
- DA and DL mount utilizes convenient interlocking mounting method. Mounting is rugged die cast aluminum, mounts to 3-6" (76-152mm) square or round pole and secures to pole with 5/16-18 UNC bolts spaced on 2" (51mm) centers
- AA and SA mounts are rugged die cast aluminum and mount to 2" (51mm) IP, 2.375" (60mm) O.D. tenons
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight Charts on pages 1 and 22

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- DA and DL mounts designed with integral weathertight electrical box with terminal strips (12Ga-20Ga) for easy power hookup
- Integral 10kV/5kA surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- **Maximum 10V Source Current:** 20 LED (350mA): 10mA; 20 LED (525 & 700mA) and 40-80 LED: 0.15mA; 100-160 LED: 0.30mA

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Enclosure rated IP66 per IEC 60529 when ordered without P or R options
- Consult factory for CE Certified products
- ANSI C136.2 10kV/5kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: [www.creelighting.com/BAA-BABA](http://www.creelighting.com/BAA-BABA)
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

| Electrical Data*   |                 |                          |                   |      |      |      |      |      |
|--------------------|-----------------|--------------------------|-------------------|------|------|------|------|------|
| LED Count<br>[x10] | CCT             | System Watts<br>120-480V | Total Current [A] |      |      |      |      |      |
|                    |                 |                          | 120V              | 208V | 240V | 277V | 347V | 480V |
| 350mA              |                 |                          |                   |      |      |      |      |      |
| 02                 | 30K/40K/50K/57K | 25                       | 0.21              | 0.13 | 0.11 | 0.10 | 0.08 | 0.07 |
|                    | TRL             | 19                       | 0.16              | 0.09 | 0.08 | 0.07 | 0.05 | 0.04 |
| 04                 | 30K/40K/50K/57K | 46                       | 0.36              | 0.23 | 0.21 | 0.20 | 0.15 | 0.12 |
|                    | TRL             | 35                       | 0.29              | 0.17 | 0.15 | 0.13 | 0.10 | 0.07 |
| 06                 | 30K/40K/50K/57K | 66                       | 0.52              | 0.31 | 0.28 | 0.26 | 0.20 | 0.15 |
|                    | TRL             | 50                       | 0.41              | 0.24 | 0.21 | 0.18 | 0.14 | 0.10 |
| 08                 | 30K/40K/50K/57K | 90                       | 0.75              | 0.44 | 0.38 | 0.34 | 0.26 | 0.20 |
|                    | TRL             | 68                       | 0.57              | 0.33 | 0.28 | 0.25 | 0.20 | 0.14 |
| 10                 | 30K/40K/50K/57K | 110                      | 0.92              | 0.53 | 0.47 | 0.41 | 0.32 | 0.24 |
|                    | TRL             | 83                       | 0.69              | 0.40 | 0.35 | 0.30 | 0.24 | 0.17 |
| 12                 | 30K/40K/50K/57K | 130                      | 1.10              | 0.63 | 0.55 | 0.48 | 0.38 | 0.28 |
|                    | TRL             | 99                       | 0.82              | 0.48 | 0.41 | 0.36 | 0.28 | 0.21 |
| 14                 | 30K/40K/50K/57K | 158                      | 1.32              | 0.77 | 0.68 | 0.62 | 0.47 | 0.35 |
|                    | TRL             | 120                      | 1.00              | 0.58 | 0.50 | 0.43 | 0.34 | 0.25 |
| 16                 | 30K/40K/50K/57K | 179                      | 1.49              | 0.87 | 0.77 | 0.68 | 0.53 | 0.39 |
|                    | TRL             | 136                      | 1.13              | 0.65 | 0.57 | 0.49 | 0.39 | 0.28 |
| 525mA              |                 |                          |                   |      |      |      |      |      |
| 02                 | 30K/40K/50K/57K | 37                       | 0.30              | 0.19 | 0.17 | 0.16 | 0.12 | 0.10 |
| 04                 | 30K/40K/50K/57K | 70                       | 0.58              | 0.34 | 0.31 | 0.28 | 0.21 | 0.16 |
| 06                 | 30K/40K/50K/57K | 101                      | 0.84              | 0.49 | 0.43 | 0.38 | 0.30 | 0.22 |
| 08                 | 30K/40K/50K/57K | 133                      | 1.13              | 0.66 | 0.58 | 0.51 | 0.39 | 0.28 |
| 10                 | 30K/40K/50K/57K | 171                      | 1.43              | 0.83 | 0.74 | 0.66 | 0.50 | 0.38 |
| 12                 | 30K/40K/50K/57K | 202                      | 1.69              | 0.98 | 0.86 | 0.77 | 0.59 | 0.44 |
| 14                 | 30K/40K/50K/57K | 232                      | 1.94              | 1.12 | 0.98 | 0.87 | 0.68 | 0.50 |
| 16                 | 30K/40K/50K/57K | 263                      | 2.21              | 1.27 | 1.11 | 0.97 | 0.77 | 0.56 |
| 700mA              |                 |                          |                   |      |      |      |      |      |
| 02                 | 30K/40K/50K/57K | 50                       | 0.41              | 0.25 | 0.22 | 0.20 | 0.15 | 0.12 |
| 04                 | 30K/40K/50K/57K | 93                       | 0.78              | 0.46 | 0.40 | 0.36 | 0.27 | 0.20 |
| 06                 | 30K/40K/50K/57K | 134                      | 1.14              | 0.65 | 0.57 | 0.50 | 0.39 | 0.29 |

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

| THE EDGE® Series Ambient Adjusted Lumen Maintenance¹ |                 |             |                      |                      |                                   |                                  |
|------------------------------------------------------|-----------------|-------------|----------------------|----------------------|-----------------------------------|----------------------------------|
| Ambient                                              | CCT             | Initial LMF | 25K hr Reported² LMF | 50K hr Reported² LMF | 75K hr Reported² / Estimated³ LMF | 100K hr Reported³ Estimated³ LMF |
| 5°C (41°F)                                           | 30K/40K/50K/57K | 1.04        | 1.03                 | 1.03                 | 1.03²                             | 1.03                             |
|                                                      | TRL             | 1.06        | 1.06                 | 1.06                 | 1.06³                             | 1.06                             |
| 10°C (50°F)                                          | 30K/40K/50K/57K | 1.03        | 1.02                 | 1.02                 | 1.02²                             | 1.02                             |
|                                                      | TRL             | 1.04        | 1.04                 | 1.04                 | 1.04³                             | 1.04                             |
| 15°C (59°F)                                          | 30K/40K/50K/57K | 1.02        | 1.01                 | 1.01                 | 1.01²                             | 1.01                             |
|                                                      | TRL             | 1.03        | 1.03                 | 1.03                 | 1.03³                             | 1.03                             |
| 20°C (68°F)                                          | 30K/40K/50K/57K | 1.01        | 0.99                 | 0.99                 | 0.99²                             | 0.99                             |
|                                                      | TRL             | 1.01        | 1.01                 | 1.01                 | 1.01³                             | 1.01                             |
| 25°C (77°F)                                          | 30K/40K/50K/57K | 1.00        | 0.98                 | 0.98                 | 0.98²                             | 0.98                             |
|                                                      | TRL             | 1.00        | 1.00                 | 1.00                 | 1.00³                             | 1.00                             |

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

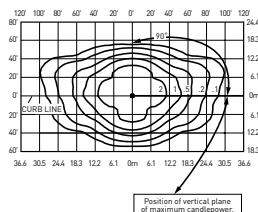
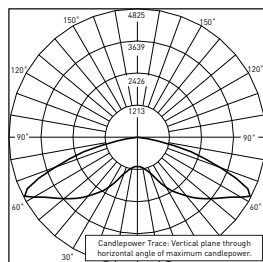
² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 2M



RESTL Test Report #: PL10270-004B  
ARE-EDG-2M-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 10,053

ARE-EDG-2M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 17,504  
Initial FC at grade

| Type II Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)          | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                             | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 2,072                           | B1 U0 G1                             | 2,501                           | B1 U0 G1                             | 1,902                           | B1 U0 G1                             | 2,551                           | B1 U0 G1                             | 816                             | B0 U0 G0                             |
| 04                          | 4,143                           | B2 U0 G1                             | 5,003                           | B2 U0 G2                             | 3,803                           | B1 U0 G1                             | 5,102                           | B2 U0 G2                             | 1,633                           | B1 U0 G1                             |
| 06                          | 6,144                           | B2 U0 G2                             | 7,418                           | B2 U0 G2                             | 5,640                           | B2 U0 G2                             | 7,565                           | B2 U0 G2                             | 2,421                           | B1 U0 G1                             |
| 08                          | 8,192                           | B2 U0 G2                             | 9,891                           | B3 U0 G3                             | 7,519                           | B2 U0 G2                             | 10,087                          | B3 U0 G3                             | 3,228                           | B1 U0 G1                             |
| 10                          | 10,215                          | B3 U0 G3                             | 12,334                          | B3 U0 G3                             | 9,377                           | B3 U0 G3                             | 12,578                          | B3 U0 G3                             | 4,025                           | B2 U0 G1                             |
| 12                          | 12,258                          | B3 U0 G3                             | 14,801                          | B3 U0 G3                             | 11,252                          | B3 U0 G3                             | 15,094                          | B3 U0 G3                             | 4,830                           | B2 U0 G2                             |
| 14                          | 14,211                          | B3 U0 G3                             | 17,158                          | B3 U0 G3                             | 13,044                          | B3 U0 G3                             | 17,498                          | B3 U0 G3                             | 5,599                           | B2 U0 G2                             |
| 16                          | 16,241                          | B3 U0 G3                             | 19,609                          | B3 U0 G3                             | 14,908                          | B3 U0 G3                             | 19,998                          | B4 U0 G3                             | 6,399                           | B2 U0 G2                             |
| 525mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 2,943                           | B1 U0 G1                             | 3,550                           | B1 U0 G1                             | 2,702                           | B1 U0 G1                             | 3,624                           | B1 U0 G1                             | N/A                             |                                      |
| 04                          | 5,886                           | B2 U0 G2                             | 7,099                           | B2 U0 G2                             | 5,403                           | B2 U0 G2                             | 7,248                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 8,729                           | B3 U0 G3                             | 10,527                          | B3 U0 G3                             | 8,012                           | B2 U0 G2                             | 10,748                          | B3 U0 G3                             | N/A                             |                                      |
| 08                          | 11,638                          | B3 U0 G3                             | 14,037                          | B3 U0 G3                             | 10,683                          | B3 U0 G3                             | 14,331                          | B3 U0 G3                             | N/A                             |                                      |
| 10                          | 14,513                          | B3 U0 G3                             | 17,504                          | B3 U0 G3                             | 13,322                          | B3 U0 G3                             | 17,870                          | B3 U0 G3                             | N/A                             |                                      |
| 12                          | 17,415                          | B3 U0 G3                             | 21,004                          | B4 U0 G4                             | 15,986                          | B3 U0 G3                             | 21,444                          | B4 U0 G4                             | N/A                             |                                      |
| 14                          | 20,189                          | B4 U0 G3                             | 24,350                          | B4 U0 G4                             | 18,532                          | B3 U0 G3                             | 24,860                          | B4 U0 G4                             | N/A                             |                                      |
| 16                          | 23,074                          | B4 U0 G4                             | 27,828                          | B4 U0 G4                             | 21,179                          | B4 U0 G4                             | 28,411                          | B4 U0 G4                             | N/A                             |                                      |
| 700mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 3,472                           | B1 U0 G1                             | 4,189                           | B2 U0 G1                             | 3,187                           | B1 U0 G1                             | 4,275                           | B2 U0 G2                             | N/A                             |                                      |
| 04                          | 6,943                           | B2 U0 G2                             | 8,379                           | B2 U0 G2                             | 6,373                           | B2 U0 G2                             | 8,549                           | B3 U0 G3                             | N/A                             |                                      |
| 06                          | 10,296                          | B3 U0 G3                             | 12,425                          | B3 U0 G3                             | 9,451                           | B3 U0 G3                             | 12,678                          | B3 U0 G3                             | N/A                             |                                      |

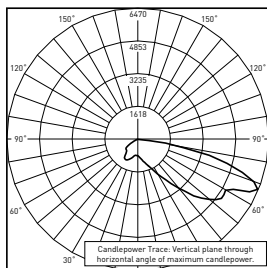
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

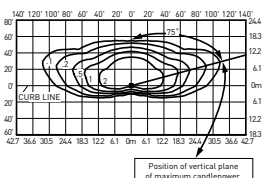
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 2MB



**RESTL Test Report #:** PL10023-003B  
**ARE-EDG-2MB-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 7,784



**ARE-EDG-2MB-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 13,185  
**Initial FC at grade**

| Type II Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                   | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 1,560                           | B0 U0 G1                             | 1,884                           | B0 U0 G1                             | 1,432                           | B0 U0 G1                             | 1,921                           | B0 U0 G1                             | 615                             | B0 U0 G0                             |
| 04                                | 3,121                           | B0 U0 G1                             | 3,768                           | B1 U0 G1                             | 2,865                           | B0 U0 G1                             | 3,843                           | B1 U0 G1                             | 1,230                           | B0 U0 G1                             |
| 06                                | 4,628                           | B1 U0 G1                             | 5,588                           | B1 U0 G1                             | 4,248                           | B1 U0 G1                             | 5,698                           | B1 U0 G1                             | 1,824                           | B0 U0 G1                             |
| 08                                | 6,170                           | B1 U0 G1                             | 7,450                           | B1 U0 G2                             | 5,664                           | B1 U0 G1                             | 7,598                           | B1 U0 G2                             | 2,431                           | B0 U0 G1                             |
| 10                                | 7,695                           | B1 U0 G2                             | 9,291                           | B1 U0 G2                             | 7,063                           | B1 U0 G2                             | 9,475                           | B1 U0 G2                             | 3,032                           | B0 U0 G1                             |
| 12                                | 9,233                           | B1 U0 G2                             | 11,149                          | B1 U0 G2                             | 8,476                           | B1 U0 G2                             | 11,370                          | B1 U0 G2                             | 3,638                           | B1 U0 G1                             |
| 14                                | 10,704                          | B1 U0 G2                             | 12,924                          | B1 U0 G2                             | 9,825                           | B1 U0 G2                             | 13,181                          | B1 U0 G2                             | 4,218                           | B1 U0 G1                             |
| 16                                | 12,233                          | B1 U0 G2                             | 14,771                          | B1 U0 G3                             | 11,229                          | B1 U0 G2                             | 15,063                          | B1 U0 G3                             | 4,820                           | B1 U0 G1                             |
| 525mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 2,217                           | B0 U0 G1                             | 2,674                           | B0 U0 G1                             | 2,035                           | B0 U0 G1                             | 2,730                           | B0 U0 G1                             | N/A                             |                                      |
| 04                                | 4,434                           | B1 U0 G1                             | 5,348                           | B1 U0 G1                             | 4,070                           | B1 U0 G1                             | 5,460                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                | 6,575                           | B1 U0 G2                             | 7,930                           | B1 U0 G2                             | 6,035                           | B1 U0 G1                             | 8,096                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                | 8,766                           | B1 U0 G2                             | 10,573                          | B1 U0 G2                             | 8,047                           | B1 U0 G2                             | 10,794                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                | 10,932                          | B1 U0 G2                             | 13,185                          | B1 U0 G2                             | 10,034                          | B1 U0 G2                             | 13,461                          | B1 U0 G2                             | N/A                             |                                      |
| 12                                | 13,118                          | B1 U0 G2                             | 15,821                          | B2 U0 G3                             | 12,041                          | B1 U0 G2                             | 16,153                          | B2 U0 G3                             | N/A                             |                                      |
| 14                                | 15,208                          | B1 U0 G3                             | 18,341                          | B2 U0 G3                             | 13,959                          | B1 U0 G2                             | 18,726                          | B2 U0 G3                             | N/A                             |                                      |
| 16                                | 17,380                          | B2 U0 G3                             | 20,962                          | B2 U0 G3                             | 15,953                          | B2 U0 G3                             | 21,401                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 2,615                           | B0 U0 G1                             | 3,156                           | B0 U0 G1                             | 2,400                           | B0 U0 G1                             | 3,220                           | B0 U0 G1                             | N/A                             |                                      |
| 04                                | 5,230                           | B1 U0 G1                             | 6,311                           | B1 U0 G2                             | 4,801                           | B1 U0 G1                             | 6,440                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                | 7,755                           | B1 U0 G2                             | 9,359                           | B1 U0 G2                             | 7,119                           | B1 U0 G2                             | 9,549                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

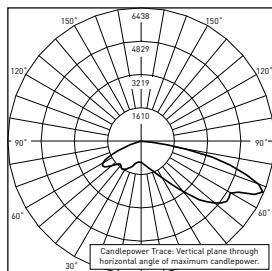
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

## THE EDGE® LED Area/Flood Luminaire

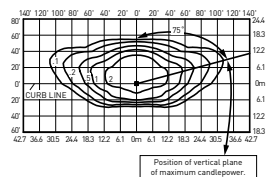
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

#### 2MP



RESTL Test Report #: PL10097-001B  
ARE-EDG-2MP-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 9,149



ARE-EDG-2MP-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 15,458  
Initial FC at grade

| Type II Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 1,829                           | B1 U0 G1                             | 2,209                           | B1 U0 G1                             | 1,679                           | B1 U0 G1                             | 2,253                           | B1 U0 G1                             | 721                             | B0 U0 G0                             |
| 04                                        | 3,659                           | B1 U0 G1                             | 4,418                           | B1 U0 G1                             | 3,359                           | B1 U0 G1                             | 4,505                           | B1 U0 G1                             | 1,442                           | B0 U0 G1                             |
| 06                                        | 5,426                           | B1 U0 G1                             | 6,551                           | B1 U0 G1                             | 4,980                           | B1 U0 G1                             | 6,681                           | B1 U0 G1                             | 2,138                           | B1 U0 G1                             |
| 08                                        | 7,234                           | B2 U0 G1                             | 8,735                           | B2 U0 G2                             | 6,640                           | B1 U0 G1                             | 8,908                           | B2 U0 G2                             | 2,851                           | B1 U0 G1                             |
| 10                                        | 9,021                           | B2 U0 G2                             | 10,892                          | B2 U0 G2                             | 8,281                           | B2 U0 G2                             | 11,108                          | B2 U0 G2                             | 3,555                           | B1 U0 G1                             |
| 12                                        | 10,825                          | B2 U0 G2                             | 13,071                          | B2 U0 G2                             | 9,937                           | B2 U0 G2                             | 13,330                          | B2 U0 G2                             | 4,266                           | B1 U0 G1                             |
| 14                                        | 12,550                          | B2 U0 G2                             | 15,153                          | B2 U0 G2                             | 11,520                          | B2 U0 G2                             | 15,453                          | B2 U0 G2                             | 4,945                           | B1 U0 G1                             |
| 16                                        | 14,343                          | B2 U0 G2                             | 17,317                          | B2 U0 G2                             | 13,165                          | B2 U0 G2                             | 17,661                          | B3 U0 G2                             | 5,651                           | B1 U0 G1                             |
| 525mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 2,599                           | B1 U0 G1                             | 3,135                           | B1 U0 G1                             | 2,386                           | B1 U0 G1                             | 3,200                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                        | 5,198                           | B1 U0 G1                             | 6,270                           | B1 U0 G1                             | 4,772                           | B1 U0 G1                             | 6,401                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                        | 7,708                           | B2 U0 G2                             | 9,297                           | B2 U0 G2                             | 7,076                           | B2 U0 G1                             | 9,492                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                        | 10,278                          | B2 U0 G2                             | 12,396                          | B2 U0 G2                             | 9,434                           | B2 U0 G2                             | 12,656                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                        | 12,817                          | B2 U0 G2                             | 15,458                          | B2 U0 G2                             | 11,764                          | B2 U0 G2                             | 15,782                          | B2 U0 G2                             | N/A                             |                                      |
| 12                                        | 15,380                          | B2 U0 G2                             | 18,549                          | B3 U0 G3                             | 14,117                          | B2 U0 G2                             | 18,938                          | B3 U0 G3                             | N/A                             |                                      |
| 14                                        | 17,830                          | B3 U0 G2                             | 21,504                          | B3 U0 G3                             | 16,366                          | B2 U0 G2                             | 21,954                          | B3 U0 G3                             | N/A                             |                                      |
| 16                                        | 20,377                          | B3 U0 G3                             | 24,576                          | B3 U0 G3                             | 18,704                          | B3 U0 G3                             | 25,091                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 3,066                           | B1 U0 G1                             | 3,700                           | B1 U0 G1                             | 2,814                           | B1 U0 G1                             | 3,775                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                        | 6,132                           | B1 U0 G1                             | 7,400                           | B2 U0 G1                             | 5,628                           | B1 U0 G1                             | 7,550                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                        | 9,092                           | B2 U0 G2                             | 10,973                          | B2 U0 G2                             | 8,346                           | B2 U0 G2                             | 11,196                          | B2 U0 G2                             | N/A                             |                                      |

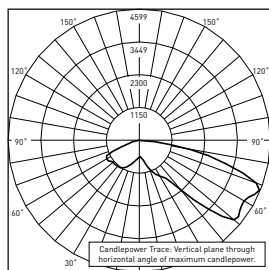
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

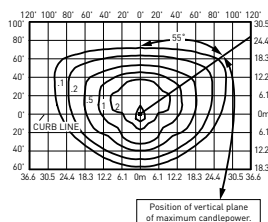
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 3M



RESTL Test Report #: PL09405-001A  
ARE-EDG-3M-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 9,460



ARE-EDG-3M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 16,594  
Initial FC at grade

| Type III Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)           | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                              | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                           | 1,964                           | B1 U0 G1                             | 2,371                           | B1 U0 G1                             | 1,803                           | B1 U0 G1                             | 2,418                           | B1 U0 G1                             | 774                             | B0 U0 G1                             |
| 04                           | 3,928                           | B1 U0 G1                             | 4,743                           | B1 U0 G1                             | 3,606                           | B1 U0 G1                             | 4,837                           | B1 U0 G1                             | 1,548                           | B1 U0 G1                             |
| 06                           | 5,825                           | B2 U0 G2                             | 7,033                           | B2 U0 G2                             | 5,347                           | B2 U0 G2                             | 7,172                           | B2 U0 G2                             | 2,295                           | B1 U0 G1                             |
| 08                           | 7,766                           | B2 U0 G2                             | 9,377                           | B2 U0 G2                             | 7,129                           | B2 U0 G2                             | 9,563                           | B2 U0 G2                             | 3,060                           | B1 U0 G1                             |
| 10                           | 9,685                           | B2 U0 G2                             | 11,693                          | B3 U0 G3                             | 8,890                           | B2 U0 G2                             | 11,925                          | B3 U0 G3                             | 3,816                           | B1 U0 G1                             |
| 12                           | 11,621                          | B3 U0 G3                             | 14,032                          | B3 U0 G3                             | 10,667                          | B3 U0 G3                             | 14,310                          | B3 U0 G3                             | 4,579                           | B1 U0 G1                             |
| 14                           | 13,472                          | B3 U0 G3                             | 16,267                          | B3 U0 G3                             | 12,367                          | B3 U0 G3                             | 16,589                          | B3 U0 G3                             | 5,309                           | B2 U0 G2                             |
| 16                           | 15,397                          | B3 U0 G3                             | 18,591                          | B3 U0 G3                             | 14,133                          | B3 U0 G3                             | 18,959                          | B3 U0 G3                             | 6,067                           | B2 U0 G2                             |
| 525mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                           | 2,790                           | B1 U0 G1                             | 3,365                           | B1 U0 G1                             | 2,561                           | B1 U0 G1                             | 3,436                           | B1 U0 G1                             | N/A                             |                                      |
| 04                           | 5,581                           | B2 U0 G2                             | 6,731                           | B2 U0 G2                             | 5,122                           | B2 U0 G2                             | 6,872                           | B2 U0 G2                             | N/A                             |                                      |
| 06                           | 8,275                           | B2 U0 G2                             | 9,981                           | B3 U0 G3                             | 7,596                           | B2 U0 G2                             | 10,190                          | B3 U0 G3                             | N/A                             |                                      |
| 08                           | 11,034                          | B3 U0 G3                             | 13,307                          | B3 U0 G3                             | 10,128                          | B3 U0 G3                             | 13,586                          | B3 U0 G3                             | N/A                             |                                      |
| 10                           | 13,759                          | B3 U0 G3                             | 16,594                          | B3 U0 G3                             | 12,630                          | B3 U0 G3                             | 16,942                          | B3 U0 G3                             | N/A                             |                                      |
| 12                           | 16,511                          | B3 U0 G3                             | 19,913                          | B3 U0 G3                             | 15,155                          | B3 U0 G3                             | 20,330                          | B3 U0 G3                             | N/A                             |                                      |
| 14                           | 19,141                          | B3 U0 G3                             | 23,085                          | B3 U0 G3                             | 17,569                          | B3 U0 G3                             | 23,569                          | B3 U0 G3                             | N/A                             |                                      |
| 16                           | 21,875                          | B3 U0 G3                             | 26,383                          | B4 U0 G4                             | 20,079                          | B3 U0 G3                             | 26,936                          | B4 U0 G4                             | N/A                             |                                      |
| 700mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                           | 3,291                           | B1 U0 G1                             | 3,972                           | B1 U0 G1                             | 3,021                           | B1 U0 G1                             | 4,053                           | B1 U0 G1                             | N/A                             |                                      |
| 04                           | 6,582                           | B2 U0 G2                             | 7,944                           | B2 U0 G2                             | 6,042                           | B2 U0 G2                             | 8,105                           | B2 U0 G2                             | N/A                             |                                      |
| 06                           | 9,761                           | B2 U0 G2                             | 11,779                          | B3 U0 G3                             | 8,960                           | B2 U0 G2                             | 12,019                          | B3 U0 G3                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

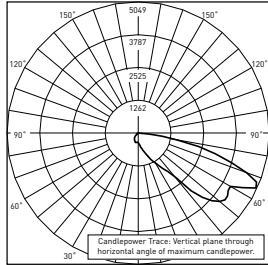
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## THE EDGE® LED Area/Flood Luminaire

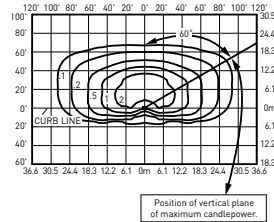
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

#### 3MB



RESTL Test Report #: PL10023-001B  
ARE-EDG-3MB-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 7,602



ARE-EDG-3MB-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 12,275  
Initial FC at grade

| Type III Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                 | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                    | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                 | 1,453                           | B0 U0 G1                             | 1,754                           | B0 U0 G1                             | 1,334                           | B0 U0 G1                             | 1,789                           | B0 U0 G1                             | 572                             | B0 U0 G0                             |
| 04                                 | 2,906                           | B0 U0 G1                             | 3,508                           | B1 U0 G1                             | 2,667                           | B0 U0 G1                             | 3,578                           | B1 U0 G1                             | 1,145                           | B0 U0 G1                             |
| 06                                 | 4,309                           | B1 U0 G1                             | 5,202                           | B1 U0 G1                             | 3,955                           | B1 U0 G1                             | 5,305                           | B1 U0 G1                             | 1,698                           | B0 U0 G1                             |
| 08                                 | 5,745                           | B1 U0 G2                             | 6,936                           | B1 U0 G2                             | 5,273                           | B1 U0 G1                             | 7,074                           | B1 U0 G2                             | 2,264                           | B0 U0 G1                             |
| 10                                 | 7,164                           | B1 U0 G2                             | 8,650                           | B1 U0 G2                             | 6,576                           | B1 U0 G2                             | 8,821                           | B1 U0 G2                             | 2,823                           | B0 U0 G1                             |
| 12                                 | 8,597                           | B1 U0 G2                             | 10,380                          | B1 U0 G2                             | 7,891                           | B1 U0 G2                             | 10,585                          | B1 U0 G2                             | 3,387                           | B1 U0 G1                             |
| 14                                 | 9,966                           | B1 U0 G2                             | 12,033                          | B1 U0 G2                             | 9,148                           | B1 U0 G2                             | 12,272                          | B1 U0 G2                             | 3,927                           | B1 U0 G1                             |
| 16                                 | 11,390                          | B1 U0 G2                             | 13,752                          | B2 U0 G3                             | 10,455                          | B1 U0 G2                             | 14,025                          | B2 U0 G3                             | 4,488                           | B1 U0 G1                             |
| 525mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                 | 2,064                           | B0 U0 G1                             | 2,489                           | B0 U0 G1                             | 1,895                           | B0 U0 G1                             | 2,542                           | B0 U0 G1                             | N/A                             |                                      |
| 04                                 | 4,128                           | B1 U0 G1                             | 4,979                           | B1 U0 G1                             | 3,789                           | B1 U0 G1                             | 5,083                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                 | 6,121                           | B1 U0 G2                             | 7,383                           | B1 U0 G2                             | 5,619                           | B1 U0 G2                             | 7,538                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                 | 8,162                           | B1 U0 G2                             | 9,844                           | B1 U0 G2                             | 7,492                           | B1 U0 G2                             | 10,050                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                 | 10,178                          | B1 U0 G2                             | 12,275                          | B1 U0 G2                             | 9,342                           | B1 U0 G2                             | 12,532                          | B1 U0 G2                             | N/A                             |                                      |
| 12                                 | 12,213                          | B1 U0 G2                             | 14,730                          | B2 U0 G3                             | 11,211                          | B1 U0 G2                             | 15,039                          | B2 U0 G3                             | N/A                             |                                      |
| 14                                 | 14,159                          | B2 U0 G3                             | 17,077                          | B2 U0 G3                             | 12,996                          | B1 U0 G2                             | 17,434                          | B2 U0 G3                             | N/A                             |                                      |
| 16                                 | 16,181                          | B2 U0 G3                             | 19,516                          | B2 U0 G3                             | 14,853                          | B2 U0 G3                             | 19,925                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                 | 2,435                           | B0 U0 G1                             | 2,938                           | B1 U0 G1                             | 2,235                           | B0 U0 G1                             | 2,998                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                 | 4,869                           | B1 U0 G1                             | 5,876                           | B1 U0 G2                             | 4,469                           | B1 U0 G1                             | 5,996                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                 | 7,220                           | B1 U0 G2                             | 8,714                           | B1 U0 G2                             | 6,628                           | B1 U0 G2                             | 8,891                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

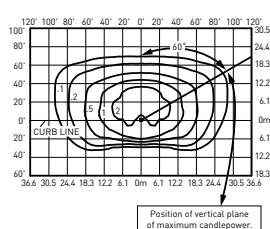
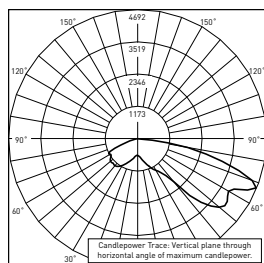
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 3MP



**RESTL Test Report #:** PL10097-002B  
**ARE-EDG-3MP-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 8,670

**ARE-EDG-3MP-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 14,548  
**Initial FC at grade**

| Type III Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|--------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                         | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                            | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                         | 1,722                           | B1 U0 G1                             | 2,079                           | B1 U0 G1                             | 1,581                           | B1 U0 G1                             | 2,120                           | B1 U0 G1                             | 678                             | B0 U0 G1                             |
| 04                                         | 3,444                           | B1 U0 G1                             | 4,158                           | B1 U0 G1                             | 3,161                           | B1 U0 G1                             | 4,240                           | B1 U0 G1                             | 1,357                           | B0 U0 G1                             |
| 06                                         | 5,107                           | B1 U0 G1                             | 6,166                           | B1 U0 G2                             | 4,687                           | B1 U0 G1                             | 6,288                           | B1 U0 G2                             | 2,012                           | B1 U0 G1                             |
| 08                                         | 6,809                           | B1 U0 G2                             | 8,221                           | B2 U0 G2                             | 6,250                           | B1 U0 G2                             | 8,384                           | B2 U0 G2                             | 2,683                           | B1 U0 G1                             |
| 10                                         | 8,491                           | B2 U0 G2                             | 10,252                          | B2 U0 G2                             | 7,794                           | B2 U0 G2                             | 10,455                          | B2 U0 G2                             | 3,346                           | B1 U0 G1                             |
| 12                                         | 10,189                          | B2 U0 G2                             | 12,302                          | B2 U0 G3                             | 9,352                           | B2 U0 G2                             | 12,546                          | B2 U0 G3                             | 4,015                           | B1 U0 G1                             |
| 14                                         | 11,812                          | B2 U0 G2                             | 14,261                          | B3 U0 G3                             | 10,842                          | B2 U0 G2                             | 14,544                          | B3 U0 G3                             | 4,654                           | B1 U0 G1                             |
| 16                                         | 13,499                          | B2 U0 G3                             | 16,299                          | B3 U0 G3                             | 12,391                          | B2 U0 G3                             | 16,622                          | B3 U0 G3                             | 5,319                           | B1 U0 G2                             |
| 525mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                         | 2,446                           | B1 U0 G1                             | 2,950                           | B1 U0 G1                             | 2,245                           | B1 U0 G1                             | 3,012                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                         | 4,893                           | B1 U0 G1                             | 5,901                           | B1 U0 G2                             | 4,491                           | B1 U0 G1                             | 6,024                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                         | 7,255                           | B2 U0 G2                             | 8,750                           | B2 U0 G2                             | 6,659                           | B1 U0 G2                             | 8,933                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                         | 9,673                           | B2 U0 G2                             | 11,667                          | B2 U0 G2                             | 8,879                           | B2 U0 G2                             | 11,911                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                         | 12,063                          | B2 U0 G3                             | 14,548                          | B3 U0 G3                             | 11,072                          | B2 U0 G2                             | 14,853                          | B3 U0 G3                             | N/A                             |                                      |
| 12                                         | 14,475                          | B3 U0 G3                             | 17,458                          | B3 U0 G3                             | 13,287                          | B2 U0 G3                             | 17,824                          | B3 U0 G3                             | N/A                             |                                      |
| 14                                         | 16,781                          | B3 U0 G3                             | 20,239                          | B3 U0 G3                             | 15,403                          | B3 U0 G3                             | 20,663                          | B3 U0 G3                             | N/A                             |                                      |
| 16                                         | 19,178                          | B3 U0 G3                             | 23,130                          | B3 U0 G3                             | 17,604                          | B3 U0 G3                             | 23,615                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                         | 2,885                           | B1 U0 G1                             | 3,482                           | B1 U0 G1                             | 2,649                           | B1 U0 G1                             | 3,553                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                         | 5,771                           | B1 U0 G2                             | 6,964                           | B1 U0 G2                             | 5,297                           | B1 U0 G1                             | 7,106                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                         | 8,557                           | B2 U0 G2                             | 10,327                          | B2 U0 G2                             | 7,855                           | B2 U0 G2                             | 10,537                          | B2 U0 G2                             | N/A                             |                                      |

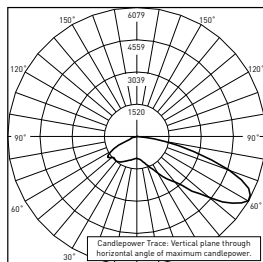
\* Initial delivered lumens at 25°C [77°F]. Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

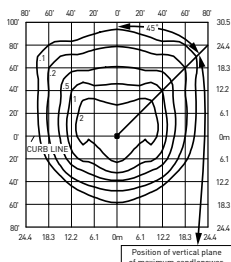
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 4M



RESTL Test Report #: PL10270-001B  
ARE-EDG-4M-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 10,483



ARE-EDG-4M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 17,504  
Initial FC at grade

| Type IV Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)          | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                             | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 2,072                           | B1 U0 G1                             | 2,501                           | B1 U0 G1                             | 1,902                           | B1 U0 G1                             | 2,551                           | B1 U0 G1                             | 816                             | B0 U0 G1                             |
| 04                          | 4,143                           | B1 U0 G1                             | 5,003                           | B2 U0 G1                             | 3,803                           | B1 U0 G1                             | 5,102                           | B2 U0 G1                             | 1,633                           | B1 U0 G1                             |
| 06                          | 6,144                           | B2 U0 G1                             | 7,418                           | B2 U0 G2                             | 5,640                           | B2 U0 G1                             | 7,565                           | B2 U0 G2                             | 2,421                           | B1 U0 G1                             |
| 08                          | 8,192                           | B2 U0 G2                             | 9,891                           | B2 U0 G2                             | 7,519                           | B2 U0 G2                             | 10,087                          | B2 U0 G2                             | 3,228                           | B1 U0 G1                             |
| 10                          | 10,215                          | B2 U0 G2                             | 12,334                          | B3 U0 G2                             | 9,377                           | B2 U0 G2                             | 12,578                          | B3 U0 G2                             | 4,025                           | B1 U0 G1                             |
| 12                          | 12,258                          | B2 U0 G2                             | 14,801                          | B3 U0 G3                             | 11,252                          | B2 U0 G2                             | 15,094                          | B3 U0 G3                             | 4,830                           | B1 U0 G1                             |
| 14                          | 14,211                          | B3 U0 G3                             | 17,158                          | B3 U0 G3                             | 13,044                          | B3 U0 G2                             | 17,498                          | B3 U0 G3                             | 5,599                           | B2 U0 G1                             |
| 16                          | 16,241                          | B3 U0 G3                             | 19,609                          | B3 U0 G3                             | 14,908                          | B3 U0 G3                             | 19,998                          | B3 U0 G3                             | 6,399                           | B2 U0 G1                             |
| 525mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 2,943                           | B1 U0 G1                             | 3,550                           | B1 U0 G1                             | 2,702                           | B1 U0 G1                             | 3,624                           | B1 U0 G1                             | N/A                             |                                      |
| 04                          | 5,886                           | B2 U0 G1                             | 7,099                           | B2 U0 G2                             | 5,403                           | B2 U0 G1                             | 7,248                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 8,729                           | B2 U0 G2                             | 10,527                          | B2 U0 G2                             | 8,012                           | B2 U0 G2                             | 10,748                          | B2 U0 G2                             | N/A                             |                                      |
| 08                          | 11,638                          | B2 U0 G2                             | 14,037                          | B3 U0 G2                             | 10,683                          | B2 U0 G2                             | 14,331                          | B3 U0 G2                             | N/A                             |                                      |
| 10                          | 14,513                          | B3 U0 G3                             | 17,504                          | B3 U0 G3                             | 13,322                          | B3 U0 G2                             | 17,870                          | B3 U0 G3                             | N/A                             |                                      |
| 12                          | 17,415                          | B3 U0 G3                             | 21,004                          | B3 U0 G3                             | 15,986                          | B3 U0 G3                             | 21,444                          | B3 U0 G3                             | N/A                             |                                      |
| 14                          | 20,189                          | B3 U0 G3                             | 24,350                          | B3 U0 G3                             | 18,532                          | B3 U0 G3                             | 24,860                          | B4 U0 G3                             | N/A                             |                                      |
| 16                          | 23,074                          | B3 U0 G3                             | 27,828                          | B4 U0 G3                             | 21,179                          | B3 U0 G3                             | 28,411                          | B4 U0 G3                             | N/A                             |                                      |
| 700mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                          | 3,472                           | B1 U0 G1                             | 4,189                           | B1 U0 G1                             | 3,187                           | B1 U0 G1                             | 4,275                           | B1 U0 G1                             | N/A                             |                                      |
| 04                          | 6,943                           | B2 U0 G1                             | 8,379                           | B2 U0 G2                             | 6,373                           | B2 U0 G1                             | 8,549                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 10,296                          | B2 U0 G2                             | 12,425                          | B3 U0 G2                             | 9,451                           | B2 U0 G2                             | 12,678                          | B3 U0 G2                             | N/A                             |                                      |

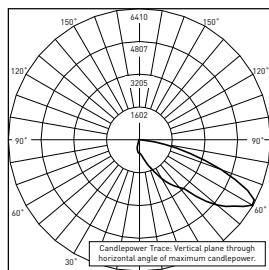
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

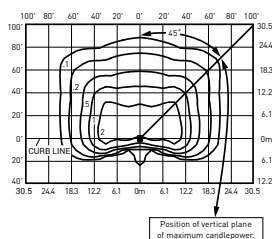
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 4MB



RESTL Test Report #: PL10023-002B  
ARE-EDG-4MB-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 7,985



ARE-EDG-4MB-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 13,185  
Initial FC at grade

| Type IV Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                   | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 1,560                           | B0 U0 G1                             | 1,884                           | B0 U0 G1                             | 1,432                           | B0 U0 G1                             | 1,921                           | B0 U0 G1                             | 615                             | B0 U0 G0                             |
| 04                                | 3,121                           | B1 U0 G1                             | 3,768                           | B1 U0 G1                             | 2,865                           | B0 U0 G1                             | 3,843                           | B1 U0 G1                             | 1,230                           | B0 U0 G1                             |
| 06                                | 4,628                           | B1 U0 G1                             | 5,588                           | B1 U0 G1                             | 4,248                           | B1 U0 G1                             | 5,698                           | B1 U0 G2                             | 1,824                           | B0 U0 G1                             |
| 08                                | 6,170                           | B1 U0 G2                             | 7,450                           | B1 U0 G2                             | 5,664                           | B1 U0 G2                             | 7,598                           | B1 U0 G2                             | 2,431                           | B0 U0 G1                             |
| 10                                | 7,695                           | B1 U0 G2                             | 9,291                           | B1 U0 G2                             | 7,063                           | B1 U0 G2                             | 9,475                           | B1 U0 G2                             | 3,032                           | B1 U0 G1                             |
| 12                                | 9,233                           | B1 U0 G2                             | 11,149                          | B1 U0 G2                             | 8,476                           | B1 U0 G2                             | 11,370                          | B1 U0 G2                             | 3,638                           | B1 U0 G1                             |
| 14                                | 10,704                          | B1 U0 G2                             | 12,924                          | B1 U0 G2                             | 9,825                           | B1 U0 G2                             | 13,181                          | B1 U0 G2                             | 4,218                           | B1 U0 G1                             |
| 16                                | 12,233                          | B1 U0 G2                             | 14,771                          | B2 U0 G2                             | 11,229                          | B1 U0 G2                             | 15,063                          | B2 U0 G2                             | 4,820                           | B1 U0 G1                             |
| 525mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 2,217                           | B1 U0 G1                             | 2,674                           | B1 U0 G1                             | 2,035                           | B1 U0 G1                             | 2,730                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                | 4,434                           | B1 U0 G1                             | 5,348                           | B1 U0 G1                             | 4,070                           | B1 U0 G1                             | 5,460                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                | 6,575                           | B1 U0 G2                             | 7,930                           | B1 U0 G2                             | 6,035                           | B1 U0 G2                             | 8,096                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                | 8,766                           | B1 U0 G2                             | 10,573                          | B1 U0 G2                             | 8,047                           | B1 U0 G2                             | 10,794                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                | 10,932                          | B1 U0 G2                             | 13,185                          | B1 U0 G2                             | 10,034                          | B1 U0 G2                             | 13,461                          | B2 U0 G2                             | N/A                             |                                      |
| 12                                | 13,118                          | B1 U0 G2                             | 15,821                          | B2 U0 G3                             | 12,041                          | B1 U0 G2                             | 16,153                          | B2 U0 G3                             | N/A                             |                                      |
| 14                                | 15,208                          | B2 U0 G2                             | 18,341                          | B2 U0 G3                             | 13,959                          | B2 U0 G2                             | 18,726                          | B2 U0 G3                             | N/A                             |                                      |
| 16                                | 17,380                          | B2 U0 G3                             | 20,962                          | B2 U0 G3                             | 15,953                          | B2 U0 G3                             | 21,401                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                | 2,615                           | B1 U0 G1                             | 3,156                           | B1 U0 G1                             | 2,400                           | B1 U0 G1                             | 3,220                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                | 5,230                           | B1 U0 G1                             | 6,311                           | B1 U0 G2                             | 4,801                           | B1 U0 G1                             | 6,440                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                | 7,755                           | B1 U0 G2                             | 9,359                           | B1 U0 G2                             | 7,119                           | B1 U0 G2                             | 9,549                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

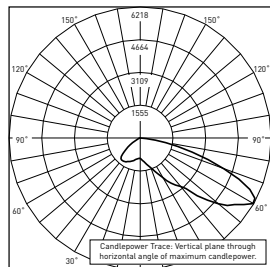
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## THE EDGE® LED Area/Flood Luminaire

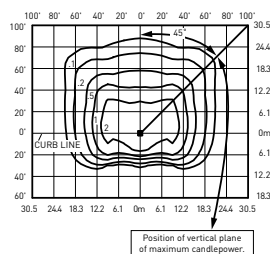
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

#### 4MP



RESTL Test Report #: PL10097-003B  
ARE-EDG-4MP-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 9,410



ARE-EDG-4MP-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 15,458  
Initial FC at grade

| Type IV Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>[x10]                        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 1,829                           | B1 U0 G1                             | 2,209                           | B1 U0 G1                             | 1,679                           | B1 U0 G1                             | 2,253                           | B1 U0 G1                             | 721                             | B0 U0 G0                             |
| 04                                        | 3,659                           | B1 U0 G1                             | 4,418                           | B1 U0 G1                             | 3,359                           | B1 U0 G1                             | 4,505                           | B1 U0 G1                             | 1,442                           | B1 U0 G1                             |
| 06                                        | 5,426                           | B1 U0 G1                             | 6,551                           | B2 U0 G1                             | 4,980                           | B1 U0 G1                             | 6,681                           | B2 U0 G1                             | 2,138                           | B1 U0 G1                             |
| 08                                        | 7,234                           | B2 U0 G2                             | 8,735                           | B2 U0 G2                             | 6,640                           | B2 U0 G1                             | 8,908                           | B2 U0 G2                             | 2,851                           | B1 U0 G1                             |
| 10                                        | 9,021                           | B2 U0 G2                             | 10,892                          | B2 U0 G2                             | 8,281                           | B2 U0 G2                             | 11,108                          | B2 U0 G2                             | 3,555                           | B1 U0 G1                             |
| 12                                        | 10,825                          | B2 U0 G2                             | 13,071                          | B2 U0 G2                             | 9,937                           | B2 U0 G2                             | 13,330                          | B2 U0 G2                             | 4,266                           | B1 U0 G1                             |
| 14                                        | 12,550                          | B2 U0 G2                             | 15,153                          | B2 U0 G2                             | 11,520                          | B2 U0 G2                             | 15,453                          | B3 U0 G2                             | 4,945                           | B1 U0 G1                             |
| 16                                        | 14,343                          | B2 U0 G2                             | 17,317                          | B3 U0 G2                             | 13,165                          | B2 U0 G2                             | 17,661                          | B3 U0 G2                             | 5,651                           | B1 U0 G1                             |
| 525mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 2,599                           | B1 U0 G1                             | 3,135                           | B1 U0 G1                             | 2,386                           | B1 U0 G1                             | 3,200                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                        | 5,198                           | B1 U0 G1                             | 6,270                           | B2 U0 G1                             | 4,772                           | B1 U0 G1                             | 6,401                           | B2 U0 G1                             | N/A                             |                                      |
| 06                                        | 7,708                           | B2 U0 G2                             | 9,297                           | B2 U0 G2                             | 7,076                           | B2 U0 G2                             | 9,492                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                        | 10,278                          | B2 U0 G2                             | 12,396                          | B2 U0 G2                             | 9,434                           | B2 U0 G2                             | 12,656                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                        | 12,817                          | B2 U0 G2                             | 15,458                          | B3 U0 G2                             | 11,764                          | B2 U0 G2                             | 15,782                          | B3 U0 G2                             | N/A                             |                                      |
| 12                                        | 15,380                          | B3 U0 G2                             | 18,549                          | B3 U0 G2                             | 14,117                          | B2 U0 G2                             | 18,938                          | B3 U0 G3                             | N/A                             |                                      |
| 14                                        | 17,830                          | B3 U0 G2                             | 21,504                          | B3 U0 G3                             | 16,366                          | B3 U0 G2                             | 21,954                          | B3 U0 G3                             | N/A                             |                                      |
| 16                                        | 20,377                          | B3 U0 G3                             | 24,576                          | B3 U0 G3                             | 18,704                          | B3 U0 G3                             | 25,091                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                                        | 3,066                           | B1 U0 G1                             | 3,700                           | B1 U0 G1                             | 2,814                           | B1 U0 G1                             | 3,775                           | B1 U0 G1                             | N/A                             |                                      |
| 04                                        | 6,132                           | B2 U0 G1                             | 7,400                           | B2 U0 G2                             | 5,628                           | B1 U0 G1                             | 7,550                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                        | 9,092                           | B2 U0 G2                             | 10,973                          | B2 U0 G2                             | 8,346                           | B2 U0 G2                             | 11,196                          | B2 U0 G2                             | N/A                             |                                      |

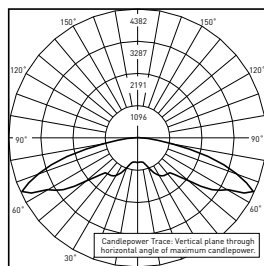
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

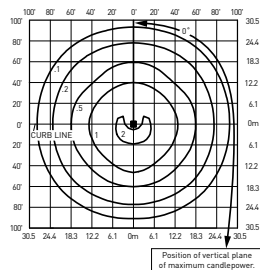
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

### 5M



RESTL Test Report #: PL09285-001  
ARE-EDG-5M-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 13,136



ARE-EDG-5M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 18,413  
Initial FC at grade

### Type V Medium Distribution

| LED Count<br>(x10) | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|--------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
|                    | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                 | 2,179                           | B2 U0 G1                             | 2,631                           | B2 U0 G1                             | 2,000                           | B1 U0 G1                             | 2,683                           | B2 U0 G1                             | 859                             | B1 U0 G1                             |
| 04                 | 4,358                           | B3 U0 G1                             | 5,262                           | B3 U0 G1                             | 4,001                           | B2 U0 G1                             | 5,367                           | B3 U0 G1                             | 1,717                           | B1 U0 G1                             |
| 06                 | 6,463                           | B3 U0 G1                             | 7,804                           | B3 U0 G2                             | 5,932                           | B3 U0 G1                             | 7,958                           | B3 U0 G2                             | 2,547                           | B2 U0 G1                             |
| 08                 | 8,617                           | B3 U0 G2                             | 10,405                          | B4 U0 G2                             | 7,910                           | B3 U0 G2                             | 10,611                          | B4 U0 G2                             | 3,395                           | B2 U0 G1                             |
| 10                 | 10,746                          | B4 U0 G2                             | 12,975                          | B4 U0 G2                             | 9,864                           | B3 U0 G2                             | 13,232                          | B4 U0 G2                             | 4,234                           | B3 U0 G1                             |
| 12                 | 12,895                          | B4 U0 G2                             | 15,570                          | B4 U0 G3                             | 11,836                          | B4 U0 G2                             | 15,878                          | B4 U0 G3                             | 5,081                           | B3 U0 G1                             |
| 14                 | 14,949                          | B4 U0 G3                             | 18,049                          | B4 U0 G3                             | 13,722                          | B4 U0 G2                             | 18,407                          | B4 U0 G3                             | 5,890                           | B3 U0 G1                             |
| 16                 | 17,085                          | B4 U0 G3                             | 20,628                          | B5 U0 G3                             | 15,682                          | B4 U0 G3                             | 21,037                          | B5 U0 G3                             | 6,732                           | B3 U0 G2                             |
| 525mA              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                 | 3,096                           | B2 U0 G1                             | 3,734                           | B3 U0 G1                             | 2,842                           | B2 U0 G1                             | 3,812                           | B3 U0 G1                             | N/A                             |                                      |
| 04                 | 6,192                           | B3 U0 G1                             | 7,468                           | B3 U0 G2                             | 5,684                           | B3 U0 G1                             | 7,625                           | B3 U0 G2                             | N/A                             |                                      |
| 06                 | 9,182                           | B3 U0 G2                             | 11,074                          | B4 U0 G2                             | 8,428                           | B3 U0 G2                             | 11,306                          | B4 U0 G2                             | N/A                             |                                      |
| 08                 | 12,243                          | B4 U0 G2                             | 14,766                          | B4 U0 G2                             | 11,238                          | B4 U0 G2                             | 15,075                          | B4 U0 G3                             | N/A                             |                                      |
| 10                 | 15,267                          | B4 U0 G3                             | 18,413                          | B4 U0 G3                             | 14,014                          | B4 U0 G2                             | 18,799                          | B4 U0 G3                             | N/A                             |                                      |
| 12                 | 18,320                          | B4 U0 G3                             | 22,096                          | B5 U0 G3                             | 16,816                          | B4 U0 G3                             | 22,558                          | B5 U0 G3                             | N/A                             |                                      |
| 14                 | 21,238                          | B5 U0 G3                             | 25,615                          | B5 U0 G3                             | 19,495                          | B4 U0 G3                             | 26,151                          | B5 U0 G3                             | N/A                             |                                      |
| 16                 | 24,272                          | B5 U0 G3                             | 29,274                          | B5 U0 G3                             | 22,280                          | B5 U0 G3                             | 29,887                          | B5 U0 G3                             | N/A                             |                                      |
| 700mA              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                 | 3,652                           | B3 U0 G1                             | 4,407                           | B3 U0 G1                             | 3,352                           | B2 U0 G1                             | 4,497                           | B3 U0 G1                             | N/A                             |                                      |
| 04                 | 7,304                           | B3 U0 G2                             | 8,814                           | B3 U0 G2                             | 6,704                           | B3 U0 G2                             | 8,993                           | B3 U0 G2                             | N/A                             |                                      |
| 06                 | 10,831                          | B4 U0 G2                             | 13,070                          | B4 U0 G2                             | 9,941                           | B3 U0 G2                             | 13,336                          | B4 U0 G2                             | N/A                             |                                      |

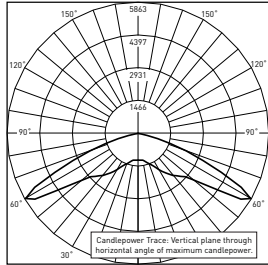
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

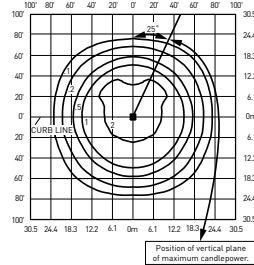
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

55



RESTL Test Report #: PL09286-001A  
ARE-EDG-5S-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 14,123



ARE-EDG-5S-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 20,459  
Initial FC at grade

| Type V Short Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|---------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                        | 2,421                           | B1 U0 G0                             | 2,924                           | B2 U0 G0                             | 2,223                           | B1 U0 G0                             | 2,982                           | B2 U0 G0                             | 954                             | B1 U0 G0                             |
| 04                        | 4,843                           | B2 U0 G1                             | 5,847                           | B3 U0 G1                             | 4,445                           | B2 U0 G1                             | 5,963                           | B3 U0 G1                             | 1,908                           | B1 U0 G0                             |
| 06                        | 7,181                           | B3 U0 G1                             | 8,671                           | B3 U0 G1                             | 6,592                           | B3 U0 G1                             | 8,842                           | B3 U0 G1                             | 2,830                           | B2 U0 G0                             |
| 08                        | 9,575                           | B3 U0 G1                             | 11,561                          | B3 U0 G2                             | 8,789                           | B3 U0 G1                             | 11,790                          | B3 U0 G2                             | 3,773                           | B2 U0 G1                             |
| 10                        | 11,940                          | B3 U0 G2                             | 14,416                          | B4 U0 G2                             | 10,960                          | B3 U0 G2                             | 14,702                          | B4 U0 G2                             | 4,705                           | B2 U0 G1                             |
| 12                        | 14,328                          | B4 U0 G2                             | 17,300                          | B4 U0 G2                             | 13,152                          | B3 U0 G2                             | 17,642                          | B4 U0 G2                             | 5,646                           | B3 U0 G1                             |
| 14                        | 16,610                          | B4 U0 G2                             | 20,055                          | B4 U0 G2                             | 15,246                          | B4 U0 G2                             | 20,453                          | B4 U0 G2                             | 6,545                           | B3 U0 G1                             |
| 16                        | 18,983                          | B4 U0 G2                             | 22,920                          | B4 U0 G2                             | 17,424                          | B4 U0 G2                             | 23,374                          | B4 U0 G2                             | 7,480                           | B3 U0 G1                             |
| 525mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                        | 3,440                           | B2 U0 G0                             | 4,149                           | B2 U0 G1                             | 3,158                           | B2 U0 G0                             | 4,236                           | B2 U0 G1                             | N/A                             |                                      |
| 04                        | 6,880                           | B3 U0 G1                             | 8,298                           | B3 U0 G1                             | 6,315                           | B3 U0 G1                             | 8,472                           | B3 U0 G1                             | N/A                             |                                      |
| 06                        | 10,202                          | B3 U0 G2                             | 12,305                          | B3 U0 G2                             | 9,365                           | B3 U0 G1                             | 12,563                          | B3 U0 G2                             | N/A                             |                                      |
| 08                        | 13,603                          | B3 U0 G2                             | 16,406                          | B4 U0 G2                             | 12,486                          | B3 U0 G2                             | 16,750                          | B4 U0 G2                             | N/A                             |                                      |
| 10                        | 16,963                          | B4 U0 G2                             | 20,459                          | B4 U0 G2                             | 15,571                          | B4 U0 G2                             | 20,887                          | B4 U0 G2                             | N/A                             |                                      |
| 12                        | 20,356                          | B4 U0 G2                             | 24,551                          | B4 U0 G2                             | 18,685                          | B4 U0 G2                             | 25,065                          | B4 U0 G2                             | N/A                             |                                      |
| 14                        | 23,598                          | B4 U0 G2                             | 28,461                          | B5 U0 G3                             | 21,661                          | B4 U0 G2                             | 29,057                          | B5 U0 G3                             | N/A                             |                                      |
| 16                        | 26,969                          | B4 U0 G2                             | 32,527                          | B5 U0 G3                             | 24,755                          | B4 U0 G2                             | 33,208                          | B5 U0 G3                             | N/A                             |                                      |
| 700mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 02                        | 4,058                           | B2 U0 G1                             | 4,897                           | B2 U0 G1                             | 3,725                           | B2 U0 G1                             | 4,996                           | B2 U0 G1                             | N/A                             |                                      |
| 04                        | 8,115                           | B3 U0 G1                             | 9,793                           | B3 U0 G1                             | 7,449                           | B3 U0 G1                             | 9,993                           | B3 U0 G2                             | N/A                             |                                      |
| 06                        | 12,034                          | B3 U0 G2                             | 14,523                          | B4 U0 G2                             | 11,046                          | B3 U0 G2                             | 14,818                          | B4 U0 G2                             | N/A                             |                                      |

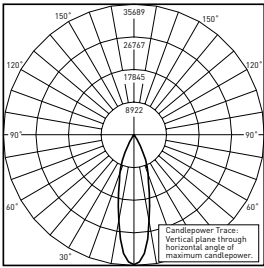
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

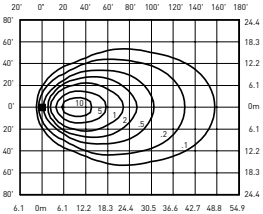
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

25°



RESTL Test Report #: PL09832-003B  
FLD-EDG-25-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 14,998



FLD-EDG-25-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
Initial Delivered Lumens: 20,913  
Initial FC at grade

| 25° Flood Distribution |                           |                           |                           |                           |                           |
|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| LED Count (x10)        | 3000K                     | 4000K                     | 5000K                     | 5700K                     | TRL                       |
|                        | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* | Initial Delivered Lumens* |
| 350mA                  |                           |                           |                           |                           |                           |
| 02                     | 2,475                     | 2,989                     | 2,272                     | 3,048                     | 975                       |
| 04                     | 4,950                     | 5,977                     | 4,544                     | 6,096                     | 1,951                     |
| 06                     | 7,341                     | 8,863                     | 6,738                     | 9,039                     | 2,892                     |
| 08                     | 9,788                     | 11,818                    | 8,984                     | 12,052                    | 3,857                     |
| 10                     | 12,205                    | 14,737                    | 11,203                    | 15,029                    | 4,809                     |
| 12                     | 14,646                    | 17,684                    | 13,444                    | 18,035                    | 5,771                     |
| 14                     | 16,979                    | 20,501                    | 15,585                    | 20,907                    | 6,690                     |
| 16                     | 19,405                    | 23,429                    | 17,812                    | 23,894                    | 7,646                     |
| 525mA                  |                           |                           |                           |                           |                           |
| 02                     | 3,516                     | 4,241                     | 3,228                     | 4,330                     | N/A                       |
| 04                     | 7,033                     | 8,482                     | 6,456                     | 8,660                     | N/A                       |
| 06                     | 10,429                    | 12,578                    | 9,573                     | 12,842                    | N/A                       |
| 08                     | 13,905                    | 16,771                    | 12,764                    | 17,122                    | N/A                       |
| 10                     | 17,340                    | 20,913                    | 15,917                    | 21,352                    | N/A                       |
| 12                     | 20,808                    | 25,096                    | 19,100                    | 25,622                    | N/A                       |
| 14                     | 24,122                    | 29,093                    | 22,142                    | 29,703                    | N/A                       |
| 16                     | 27,568                    | 33,250                    | 25,305                    | 33,946                    | N/A                       |
| 700mA                  |                           |                           |                           |                           |                           |
| 02                     | 4,148                     | 5,006                     | 3,807                     | 5,107                     | N/A                       |
| 04                     | 8,296                     | 10,011                    | 7,615                     | 10,215                    | N/A                       |
| 06                     | 12,301                    | 14,845                    | 11,292                    | 15,147                    | N/A                       |

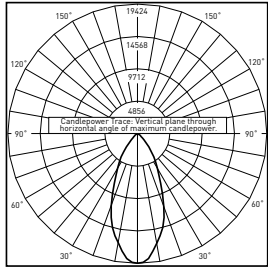
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

## THE EDGE® LED Area/Flood Luminaire

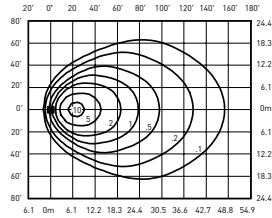
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

40°



RESTL Test Report #: PL09832-002B  
FLD-EDG-40-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 13,808



FLD-EDG-40-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
Initial Delivered Lumens: 20,459  
Initial FC at grade

| 40° Flood Distribution |                                 |                                 |                                 |                                 |                                 |
|------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| LED Count<br>(x10)     | 3000K                           | 4000K                           | 5000K                           | 5700K                           | TRL                             |
|                        | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* |
| 350mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 2,421                           | 2,924                           | 2,223                           | 2,982                           | 954                             |
| 04                     | 4,843                           | 5,847                           | 4,445                           | 5,963                           | 1,908                           |
| 06                     | 7,181                           | 8,671                           | 6,592                           | 8,842                           | 2,830                           |
| 08                     | 9,575                           | 11,561                          | 8,789                           | 11,790                          | 3,773                           |
| 10                     | 11,940                          | 14,416                          | 10,960                          | 14,702                          | 4,705                           |
| 12                     | 14,328                          | 17,300                          | 13,152                          | 17,642                          | 5,646                           |
| 14                     | 16,610                          | 20,055                          | 15,246                          | 20,453                          | 6,545                           |
| 16                     | 18,983                          | 22,920                          | 17,424                          | 23,374                          | 7,480                           |
| 525mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 3,440                           | 4,149                           | 3,158                           | 4,236                           | N/A                             |
| 04                     | 6,880                           | 8,298                           | 6,315                           | 8,472                           | N/A                             |
| 06                     | 10,202                          | 12,305                          | 9,365                           | 12,563                          | N/A                             |
| 08                     | 13,603                          | 16,406                          | 12,486                          | 16,750                          | N/A                             |
| 10                     | 16,963                          | 20,459                          | 15,571                          | 20,887                          | N/A                             |
| 12                     | 20,356                          | 24,551                          | 18,685                          | 25,065                          | N/A                             |
| 14                     | 23,598                          | 28,461                          | 21,661                          | 29,057                          | N/A                             |
| 16                     | 26,969                          | 32,527                          | 24,755                          | 33,208                          | N/A                             |
| 700mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 4,058                           | 4,897                           | 3,725                           | 4,996                           | N/A                             |
| 04                     | 8,115                           | 9,793                           | 7,449                           | 9,993                           | N/A                             |
| 06                     | 12,034                          | 14,523                          | 11,046                          | 14,818                          | N/A                             |

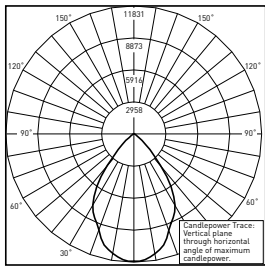
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens



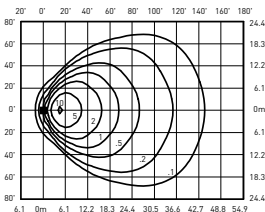
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

70°



RESTL Test Report #: PL09832-001B  
FLD-EDG-70-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 13,888



FLD-EDG-70-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
Initial Delivered Lumens: 18,640  
Initial FC at grade

| 70° Flood Distribution |                                 |                                 |                                 |                                 |                                 |
|------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| LED Count<br>(x10)     | 3000K                           | 4000K                           | 5000K                           | 5700K                           | TRL                             |
|                        | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* |
| 350mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 2,206                           | 2,664                           | 2,025                           | 2,716                           | 869                             |
| 04                     | 4,412                           | 5,327                           | 4,050                           | 5,433                           | 1,739                           |
| 06                     | 6,543                           | 7,900                           | 6,006                           | 8,056                           | 2,578                           |
| 08                     | 8,724                           | 10,533                          | 8,008                           | 10,742                          | 3,437                           |
| 10                     | 10,879                          | 13,135                          | 9,986                           | 13,395                          | 4,286                           |
| 12                     | 13,054                          | 15,762                          | 11,983                          | 16,074                          | 5,144                           |
| 14                     | 15,133                          | 18,272                          | 13,891                          | 18,635                          | 5,963                           |
| 16                     | 17,295                          | 20,883                          | 15,876                          | 21,297                          | 6,815                           |
| 525mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 3,134                           | 3,780                           | 2,877                           | 3,859                           | N/A                             |
| 04                     | 6,269                           | 7,560                           | 5,754                           | 7,719                           | N/A                             |
| 06                     | 9,295                           | 11,211                          | 8,532                           | 11,446                          | N/A                             |
| 08                     | 12,394                          | 14,948                          | 11,377                          | 15,261                          | N/A                             |
| 10                     | 15,455                          | 18,640                          | 14,187                          | 19,031                          | N/A                             |
| 12                     | 18,546                          | 22,368                          | 17,024                          | 22,837                          | N/A                             |
| 14                     | 21,500                          | 25,931                          | 19,735                          | 26,474                          | N/A                             |
| 16                     | 24,572                          | 29,636                          | 22,555                          | 30,256                          | N/A                             |
| 700mA                  |                                 |                                 |                                 |                                 |                                 |
| 02                     | 3,697                           | 4,461                           | 3,393                           | 4,552                           | N/A                             |
| 04                     | 7,394                           | 8,923                           | 6,787                           | 9,104                           | N/A                             |
| 06                     | 10,964                          | 13,232                          | 10,064                          | 13,501                          | N/A                             |

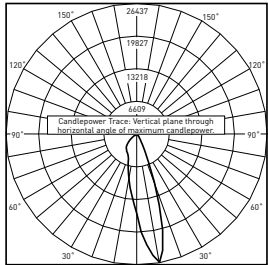
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

THE EDGE® LED Area/Flood Luminaire

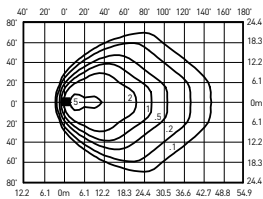
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

SN



RESTL Test Report #: PL10142-001B  
FLD-EDG-SN-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 13,701



FLD-EDG-SN-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
Initial Delivered Lumens: 18,868  
Initial FC at grade

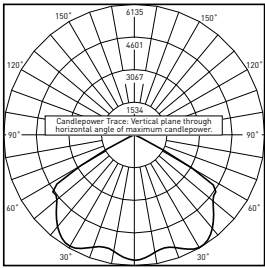
| SN Flood Distribution |                                 |                                 |                                 |                                 |                                 |
|-----------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| LED Count<br>(x10)    | 3000K                           | 4000K                           | 5000K                           | 5700K                           | TRL                             |
|                       | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* |
| 350mA                 |                                 |                                 |                                 |                                 |                                 |
| 02                    | 2,233                           | 2,696                           | 2,050                           | 2,750                           | 880                             |
| 04                    | 4,466                           | 5,392                           | 4,099                           | 5,499                           | 1,760                           |
| 06                    | 6,623                           | 7,996                           | 6,079                           | 8,155                           | 2,609                           |
| 08                    | 8,830                           | 10,662                          | 8,105                           | 10,873                          | 3,479                           |
| 10                    | 11,011                          | 13,295                          | 10,107                          | 13,559                          | 4,339                           |
| 12                    | 13,213                          | 15,954                          | 12,129                          | 16,270                          | 5,206                           |
| 14                    | 15,318                          | 18,495                          | 14,061                          | 18,862                          | 6,036                           |
| 16                    | 17,506                          | 21,137                          | 16,069                          | 21,556                          | 6,898                           |
| 525mA                 |                                 |                                 |                                 |                                 |                                 |
| 02                    | 3,172                           | 3,826                           | 2,912                           | 3,906                           | N/A                             |
| 04                    | 6,345                           | 7,653                           | 5,824                           | 7,813                           | N/A                             |
| 06                    | 9,409                           | 11,348                          | 8,636                           | 11,585                          | N/A                             |
| 08                    | 12,545                          | 15,130                          | 11,515                          | 15,447                          | N/A                             |
| 10                    | 15,644                          | 18,868                          | 14,360                          | 19,263                          | N/A                             |
| 12                    | 18,773                          | 22,641                          | 17,231                          | 23,115                          | N/A                             |
| 14                    | 21,763                          | 26,247                          | 19,976                          | 26,797                          | N/A                             |
| 16                    | 24,871                          | 29,997                          | 22,830                          | 30,625                          | N/A                             |
| 700mA                 |                                 |                                 |                                 |                                 |                                 |
| 02                    | 3,742                           | 4,516                           | 3,435                           | 4,608                           | N/A                             |
| 04                    | 7,484                           | 9,032                           | 6,870                           | 9,215                           | N/A                             |
| 06                    | 11,098                          | 13,393                          | 10,187                          | 13,665                          | N/A                             |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

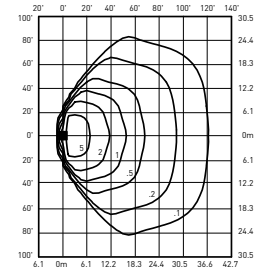
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <http://creelighting.com/products/outdoor/area/cree-edge-series-1>

N6



RESTL Test Report #: PL09832-004B  
FLD-EDG-N6-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 15,251



FLD-EDG-N6-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt  
Initial Delivered Lumens: 20,913  
Initial FC at grade

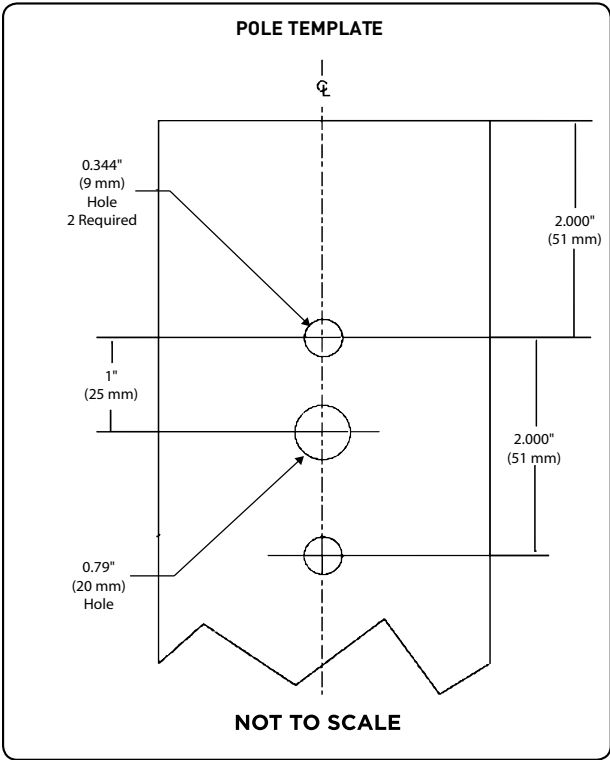
| NEMA® 6 Flood Distribution |                                 |                                 |                                 |                                 |                                 |
|----------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| LED Count<br>(x10)         | 3000K                           | 4000K                           | 5000K                           | 5700K                           | TRL                             |
|                            | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* | Initial<br>Delivered<br>Lumens* |
| 350mA                      |                                 |                                 |                                 |                                 |                                 |
| 02                         | 2,475                           | 2,989                           | 2,272                           | 3,048                           | 975                             |
| 04                         | 4,950                           | 5,977                           | 4,544                           | 6,096                           | 1,951                           |
| 06                         | 7,341                           | 8,863                           | 6,738                           | 9,039                           | 2,892                           |
| 08                         | 9,788                           | 11,818                          | 8,984                           | 12,052                          | 3,857                           |
| 10                         | 12,205                          | 14,737                          | 11,203                          | 15,029                          | 4,809                           |
| 12                         | 14,646                          | 17,684                          | 13,444                          | 18,035                          | 5,771                           |
| 14                         | 16,979                          | 20,501                          | 15,585                          | 20,907                          | 6,690                           |
| 16                         | 19,405                          | 23,429                          | 17,812                          | 23,894                          | 7,646                           |
| 525mA                      |                                 |                                 |                                 |                                 |                                 |
| 02                         | 3,516                           | 4,241                           | 3,228                           | 4,330                           | N/A                             |
| 04                         | 7,033                           | 8,482                           | 6,456                           | 8,660                           | N/A                             |
| 06                         | 10,429                          | 12,578                          | 9,573                           | 12,842                          | N/A                             |
| 08                         | 13,905                          | 16,771                          | 12,764                          | 17,122                          | N/A                             |
| 10                         | 17,340                          | 20,913                          | 15,917                          | 21,352                          | N/A                             |
| 12                         | 20,808                          | 25,096                          | 19,100                          | 25,622                          | N/A                             |
| 14                         | 24,122                          | 29,093                          | 22,142                          | 29,703                          | N/A                             |
| 16                         | 27,568                          | 33,250                          | 25,305                          | 33,946                          | N/A                             |
| 700mA                      |                                 |                                 |                                 |                                 |                                 |
| 02                         | 4,148                           | 5,006                           | 3,807                           | 5,107                           | N/A                             |
| 04                         | 8,296                           | 10,011                          | 7,615                           | 10,215                          | N/A                             |
| 06                         | 12,301                          | 14,845                          | 11,292                          | 15,147                          | N/A                             |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Luminaire EPA

| Fixed Arm Mount – ARE-EDG-DA |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| LED Count (x10)              | Single                                                                            | 2 @ 90°                                                                           | 2 @ 180°                                                                          | 3 @ 90°                                                                            | 3 @ 120°                                                                            | 4 @ 90°                                                                             |
|                              |  |  |  |  |  |  |
| 02                           | 0.60                                                                              | 0.87                                                                              | 1.20                                                                              | 1.47                                                                               | 1.47                                                                                | 1.75                                                                                |
| 04                           | 0.60                                                                              | 0.87                                                                              | 1.20                                                                              | 1.47                                                                               | 1.47                                                                                | 1.75                                                                                |
| 06                           | 0.60                                                                              | 0.92                                                                              | 1.20                                                                              | 1.51                                                                               | 1.51                                                                                | 1.83                                                                                |
| 08                           | 0.60                                                                              | 0.96<br>N/A with 3" poles                                                         | 1.20                                                                              | 1.55<br>N/A with 3" poles                                                          | 1.55                                                                                | 1.91<br>N/A with 3" poles                                                           |
| 10                           | 0.60                                                                              | 1.00<br>N/A with 3" poles                                                         | 1.20                                                                              | 1.60<br>N/A with 3" poles                                                          | 1.60                                                                                | 2.00<br>N/A with 3" poles                                                           |
| 12                           | 0.60                                                                              | 1.04<br>N/A with 3" poles                                                         | 1.20                                                                              | 1.64<br>N/A with 3" poles                                                          | 1.64                                                                                | 2.08<br>N/A with 3" poles                                                           |
| 14                           | 0.60                                                                              | 1.08<br>N/A with 3" or 4" poles                                                   | 1.20                                                                              | 1.68<br>N/A with 3" or 4" poles                                                    | 1.68                                                                                | 2.16<br>N/A with 3" or 4" poles                                                     |
| 16                           | 0.60                                                                              | 1.12<br>N/A with 3" or 4" poles                                                   | 1.20                                                                              | 1.72<br>N/A with 3" or 4" poles                                                    | 1.72                                                                                | 2.24<br>N/A with 3" or 4" poles                                                     |
| Fixed Arm Mount – ARE-EDG-DL |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |
| 02                           | 0.75                                                                              | 1.02                                                                              | 1.50                                                                              | 1.77                                                                               | 1.77                                                                                | 1.91                                                                                |
| 04                           | 0.75                                                                              | 1.02                                                                              | 1.50                                                                              | 1.77                                                                               | 1.77                                                                                | 1.91                                                                                |
| 06                           | 0.75                                                                              | 1.07                                                                              | 1.50                                                                              | 1.82                                                                               | 1.82                                                                                | 1.98                                                                                |
| 08                           | 0.75                                                                              | 1.11                                                                              | 1.50                                                                              | 1.86                                                                               | 1.86                                                                                | 2.04                                                                                |
| 10                           | 0.75                                                                              | 1.15                                                                              | 1.50                                                                              | 1.90                                                                               | 1.90                                                                                | 2.10                                                                                |
| 12                           | 0.75                                                                              | 1.19                                                                              | 1.50                                                                              | 1.94                                                                               | 1.94                                                                                | 2.16                                                                                |
| 14                           | 0.75                                                                              | 1.23                                                                              | 1.50                                                                              | 1.98                                                                               | 1.98                                                                                | 2.22                                                                                |
| 16                           | 0.75                                                                              | 1.27                                                                              | 1.50                                                                              | 2.02                                                                               | 2.02                                                                                | 2.28                                                                                |

Fixture Mounting Drill Pattern for DA and DL Mounts



## Luminaire EPA

| Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA                                                       |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| LED Count (x10)                                                                                       | Single                                                                            | 2 @ 90°                                                                             | 2 @ 180°                                                                              | In-Line 2 @ 180°                                                                  | 3 @ 90°                                                                           | 3 @ 120°                                                                           | In-Line 3 @ 180°                                                                    | 4 @ 90°                                                                             | In-Line 4 @ 180°                                                                    |
| <b>Tenon Configuration</b> If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
|                                                                                                       |  |    |      |  |  |  |  |  |  |
|                                                                                                       | Vertical: PB-1A*;<br>PT-1; PW-1A3**<br>Horizontal: By others                      | Vertical: PB-2A*;<br>PB-2R2.375;<br>PW-2A3**<br>Horizontal: PD-2A4(90);<br>PT-2(90) | Vertical: PB-2A*;<br>PB-2R2.375;<br>PW-2A3**<br>Horizontal: PD-2A4(180);<br>PT-2(180) | Vertical: PB-2A*;<br>PB-2R2.375                                                   | Vertical: PB-3A*;<br>PB-3R2.375<br>Horizontal: PD-3A4(90);<br>PT-3(90)            | Vertical: PB-3A*;<br>PB-3R2.375<br>Horizontal: PT-3(120)                           | Vertical: PB-3A*;<br>PB-3R2.375                                                     | Vertical: PB-4A*(90);<br>PB-4R2.375<br>Horizontal: PD-4A4(90)<br>PT-4(90)           | Vertical: PB-4A*(180);<br>PB-4R2.375                                                |
| <b>0° Tilt</b>                                                                                        |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 02                                                                                                    | 0.66                                                                              | 0.98                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.77                                                                              | 1.64                                                                               | 1.98                                                                                | 1.91                                                                                | 2.64                                                                                |
| 04                                                                                                    | 0.66                                                                              | 0.98                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.64                                                                              | 1.64                                                                               | 1.98                                                                                | 1.97                                                                                | 2.64                                                                                |
| 06                                                                                                    | 0.66                                                                              | 1.02                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.68                                                                              | 1.68                                                                               | 1.98                                                                                | 2.05                                                                                | 2.64                                                                                |
| 08                                                                                                    | 0.66                                                                              | 1.07                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.80                                                                              | 1.72                                                                               | 1.98                                                                                | 2.29                                                                                | 2.64                                                                                |
| 10                                                                                                    | 0.66                                                                              | 1.11                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.76                                                                              | 1.76                                                                               | 1.98                                                                                | 2.21                                                                                | 2.64                                                                                |
| 12                                                                                                    | 0.66                                                                              | 1.15                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.80                                                                              | 1.80                                                                               | 1.98                                                                                | 2.29                                                                                | 2.64                                                                                |
| 14                                                                                                    | 0.66                                                                              | 1.19                                                                                | 1.32                                                                                  | 1.32                                                                              | 1.84                                                                              | 1.84                                                                               | 1.98                                                                                | 2.38                                                                                | 2.64                                                                                |
| 16                                                                                                    | 0.66                                                                              | 1.23                                                                                | 1.32                                                                                  | N/A                                                                               | 1.89                                                                              | 1.89                                                                               | N/A                                                                                 | 2.46                                                                                | N/A                                                                                 |
| <b>30° Tilt</b>                                                                                       |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 02                                                                                                    | 0.71                                                                              | 1.37                                                                                | 1.42                                                                                  | 1.42                                                                              | 2.08                                                                              | 2.08                                                                               | 2.13                                                                                | 2.73                                                                                | 2.84                                                                                |
| 04                                                                                                    | 0.71                                                                              | 1.37                                                                                | 1.42                                                                                  | 1.42                                                                              | 2.08                                                                              | 2.08                                                                               | 2.13                                                                                | 2.73                                                                                | 2.84                                                                                |
| 06                                                                                                    | 0.82                                                                              | 1.48                                                                                | 1.64                                                                                  | 1.64                                                                              | 2.30                                                                              | 2.30                                                                               | 2.46                                                                                | 2.95                                                                                | 3.28                                                                                |
| 08                                                                                                    | 0.93                                                                              | 1.59                                                                                | 1.86                                                                                  | 1.86                                                                              | 2.52                                                                              | 2.52                                                                               | 2.79                                                                                | 3.17                                                                                | 3.72                                                                                |
| 10                                                                                                    | 1.04                                                                              | 1.70                                                                                | 2.08                                                                                  | 2.08                                                                              | 2.74                                                                              | 2.74                                                                               | 3.12                                                                                | 3.40                                                                                | 4.16                                                                                |
| 12                                                                                                    | 1.15                                                                              | 1.81                                                                                | 2.30                                                                                  | 2.30                                                                              | 2.96                                                                              | 2.96                                                                               | 3.45                                                                                | 3.62                                                                                | 4.60                                                                                |
| 14                                                                                                    | 1.26                                                                              | 1.92                                                                                | 2.52                                                                                  | 2.52                                                                              | 3.18                                                                              | 3.18                                                                               | 3.78                                                                                | 3.84                                                                                | 5.04                                                                                |
| 16                                                                                                    | 1.37                                                                              | 2.03                                                                                | 2.74                                                                                  | N/A                                                                               | 3.40                                                                              | 3.40                                                                               | N/A                                                                                 | 4.06                                                                                | N/A                                                                                 |
| <b>45° Tilt</b>                                                                                       |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 02                                                                                                    | 0.89                                                                              | 1.55                                                                                | 1.78                                                                                  | 1.78                                                                              | 2.45                                                                              | 2.45                                                                               | 2.67                                                                                | 3.10                                                                                | 3.56                                                                                |
| 04                                                                                                    | 0.89                                                                              | 1.55                                                                                | 1.78                                                                                  | 1.78                                                                              | 2.45                                                                              | 2.45                                                                               | 2.67                                                                                | 3.10                                                                                | 3.56                                                                                |
| 06                                                                                                    | 1.03                                                                              | 1.69                                                                                | 2.06                                                                                  | 2.06                                                                              | 2.72                                                                              | 2.72                                                                               | 3.09                                                                                | 3.38                                                                                | 4.12                                                                                |
| 08                                                                                                    | 1.17                                                                              | 1.83                                                                                | 2.34                                                                                  | 2.34                                                                              | 3.00                                                                              | 3.00                                                                               | 3.51                                                                                | 3.66                                                                                | 4.68                                                                                |
| 10                                                                                                    | 1.31                                                                              | 1.97                                                                                | 2.62                                                                                  | 2.62                                                                              | 3.28                                                                              | 3.28                                                                               | 3.93                                                                                | 3.94                                                                                | 5.24                                                                                |
| 12                                                                                                    | 1.45                                                                              | 2.11                                                                                | 2.90                                                                                  | 2.90                                                                              | 3.56                                                                              | 3.56                                                                               | 4.35                                                                                | 4.21                                                                                | 5.80                                                                                |
| 14                                                                                                    | 1.59                                                                              | 2.25                                                                                | 3.18                                                                                  | 3.18                                                                              | 3.83                                                                              | 3.83                                                                               | 4.77                                                                                | 4.49                                                                                | 6.36                                                                                |
| 16                                                                                                    | 1.73                                                                              | 2.38                                                                                | 3.46                                                                                  | N/A                                                                               | 4.11                                                                              | 4.11                                                                               | N/A                                                                                 | 4.77                                                                                | N/A                                                                                 |
| <b>60° Tilt</b>                                                                                       |                                                                                   |                                                                                     |                                                                                       |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |
| 02                                                                                                    | 1.20                                                                              | 1.86                                                                                | 2.40                                                                                  | 2.40                                                                              | 3.06                                                                              | 3.06                                                                               | 3.60                                                                                | 3.72                                                                                | 4.80                                                                                |
| 04                                                                                                    | 1.20                                                                              | 1.86                                                                                | 2.40                                                                                  | 2.40                                                                              | 3.06                                                                              | 3.06                                                                               | 3.60                                                                                | 3.72                                                                                | 4.80                                                                                |
| 06                                                                                                    | 1.39                                                                              | 2.05                                                                                | 2.78                                                                                  | 2.78                                                                              | 3.44                                                                              | 3.44                                                                               | 4.17                                                                                | 4.10                                                                                | 5.56                                                                                |
| 08                                                                                                    | 1.58                                                                              | 2.23                                                                                | 3.16                                                                                  | 3.16                                                                              | 3.81                                                                              | 3.81                                                                               | 4.74                                                                                | 4.47                                                                                | 6.32                                                                                |
| 10                                                                                                    | 1.77                                                                              | 2.42                                                                                | 3.54                                                                                  | 3.54                                                                              | 4.19                                                                              | 4.19                                                                               | 5.31                                                                                | 4.84                                                                                | 7.08                                                                                |
| 12                                                                                                    | 1.95                                                                              | 2.61                                                                                | 3.90                                                                                  | 3.90                                                                              | 4.56                                                                              | 4.56                                                                               | 5.85                                                                                | 5.22                                                                                | 7.80                                                                                |
| 14                                                                                                    | 2.14                                                                              | 2.80                                                                                | 4.28                                                                                  | 4.28                                                                              | 4.94                                                                              | 4.94                                                                               | 6.42                                                                                | 5.59                                                                                | 8.56                                                                                |
| 16                                                                                                    | 2.33                                                                              | 2.98                                                                                | 4.66                                                                                  | N/A                                                                               | 5.31                                                                              | 5.31                                                                               | N/A                                                                                 | 5.97                                                                                | N/A                                                                                 |

\* Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"] for single, double or triple luminaire orientation or 4 [4"], 5 [5"], or 6 [6"] for quad luminaire orientation

\*\* These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 [3"], 4 [4"], 5 [5"], or 6 [6"]

## Luminaire EPA

| Adjustable Arm Mount – ARE-EDG-AA/FLD-EDG-AA/SA                                                |                                                              |                                                                                     |                                                                                       |                                 |                                                                        |                                                          |                                 |                                                                           |                                      |
|------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------|------------------------------------------------------------------------|----------------------------------------------------------|---------------------------------|---------------------------------------------------------------------------|--------------------------------------|
| LED Count (x10)                                                                                | Single                                                       | 2 @ 90°                                                                             | 2 @ 180°                                                                              | In-Line 2 @ 180°                | 3 @ 90°                                                                | 3 @ 120°                                                 | In-Line 3 @ 180°                | 4 @ 90°                                                                   | In-Line 4 @ 180°                     |
| Tenon Configuration If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA |                                                              |                                                                                     |                                                                                       |                                 |                                                                        |                                                          |                                 |                                                                           |                                      |
|                                                                                                |                                                              |                                                                                     |                                                                                       |                                 |                                                                        |                                                          |                                 |                                                                           |                                      |
|                                                                                                | Vertical: PB-1A*;<br>PT-1; PW-1A3**<br>Horizontal: By others | Vertical: PB-2A*;<br>PB-2R2.375;<br>PW-2A3**<br>Horizontal: PD-2A4(90);<br>PT-2(90) | Vertical: PB-2A*;<br>PB-2R2.375;<br>PW-2A3**<br>Horizontal: PD-2A4(180);<br>PT-2(180) | Vertical: PB-2A*;<br>PB-2R2.375 | Vertical: PB-3A*;<br>PB-3R2.375<br>Horizontal: PD-3A4(90);<br>PT-3(90) | Vertical: PB-3A*;<br>PB-3R2.375<br>Horizontal: PT-3(120) | Vertical: PB-3A*;<br>PB-3R2.375 | Vertical: PB-4A*(90);<br>PB-4R2.375<br>Horizontal: PD-4A4(90)<br>PT-4(90) | Vertical: PB-4A*(180);<br>PB-4R2.375 |
| 90° Tilt                                                                                       |                                                              |                                                                                     |                                                                                       |                                 |                                                                        |                                                          |                                 |                                                                           |                                      |
| 02                                                                                             | 1.85                                                         | 2.51                                                                                | 3.70                                                                                  | 3.64                            | 4.36                                                                   | 4.36                                                     | 5.55                            | 5.02                                                                      | 7.40                                 |
| 04                                                                                             | 1.85                                                         | 2.51                                                                                | 3.70                                                                                  | 3.64                            | 4.36                                                                   | 4.36                                                     | 5.55                            | 5.02                                                                      | 7.40                                 |
| 06                                                                                             | 2.14                                                         | 2.80                                                                                | 4.28                                                                                  | 4.22                            | 4.94                                                                   | 4.94                                                     | 6.42                            | 5.59                                                                      | 8.56                                 |
| 08                                                                                             | 2.43                                                         | 3.09                                                                                | 4.86                                                                                  | 4.78                            | 5.51                                                                   | 5.51                                                     | 7.29                            | 6.17<br>N/A with horizontal tenon                                         | 9.72                                 |
| 10                                                                                             | 2.71                                                         | 3.37                                                                                | 5.42                                                                                  | 5.34                            | 6.08                                                                   | 6.08                                                     | 8.13                            | 6.74<br>N/A with horizontal tenon                                         | 10.84                                |
| 12                                                                                             | 3.00                                                         | 3.66                                                                                | 6.00                                                                                  | 5.90                            | 6.66                                                                   | 6.66                                                     | 9.00                            | 7.31<br>N/A with horizontal tenon                                         | 12.00                                |
| 14                                                                                             | 3.29                                                         | 3.95<br>N/A with PW-2A3**                                                           | 6.58                                                                                  | 6.48                            | 7.23                                                                   | 7.23                                                     | 9.87                            | 7.89<br>N/A with horizontal tenon                                         | 13.16                                |
| 16                                                                                             | 3.57                                                         | 4.23<br>N/A with PW-2A3**                                                           | 7.14                                                                                  | N/A                             | 7.81                                                                   | 7.81                                                     | N/A                             | 8.46<br>N/A with horizontal tenon                                         | N/A                                  |

\* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

\*\* These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

## Tenon EPA

| Part Number      | EPA  |
|------------------|------|
| PB-1A*           | None |
| PB-2A*           | 0.82 |
| PB-3A*           | 1.52 |
| PB-4A*(180)      | 2.22 |
| PB-4A*(90)       | 1.11 |
| PB-2R2.375       | 0.92 |
| PB-3R2.375       | 1.62 |
| PB-4R2.375       | 2.32 |
| PD Series Tenons | 0.09 |
| PT Series Tenons | 0.10 |
| PW-1A3**         | 0.47 |
| PW-2A3**         | 0.94 |
| WM-2             | 0.08 |
| WM-4             | 0.25 |
| WM-DM            | None |

\* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

\*\* These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

| Tenons and Brackets <sup>†</sup> (must specify color)                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Square Internal Mount Vertical Tenons (Steel)</b><br>- Mounts to 3-6" (76-152mm) square aluminum or steel poles<br>PB-1A* – Single PB-4A*(90) – 90° Quad<br>PB-2A* – 180° Twin PB-4A*(180) – 180° Quad<br>PB-3A* – 180° Triple | <b>Round External Mount Vertical Tenons (Steel)</b><br>- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons<br>PB-2R2.375 – Twin PB-4R2.375 – Quad<br>PB-3R2.375 – Triple                                                                                                                                   |
| <b>Square Internal Mount Horizontal Tenons (Aluminum)</b><br>- Mounts to 4" (102mm) square aluminum or steel poles<br>PD-2A4(90) – 90° Twin PD-3A4(90) – 90° Triple<br>PD-2A4(180) – 180° Twin PD-4A4(90) – 90° Quad              | <b>Round External Mount Horizontal Tenons (Aluminum)</b><br>- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons<br>- Mounts to square pole with PB-1A* tenon<br>PT-1 – Single (Vertical) PT-3(90) – 90° Triple<br>PT-2(90) – 90° Twin PT-3(120) – 120° Triple<br>PT-2(180) – 180° Twin PT-4(90) – 90° Quad |
| <b>Wall Mount Brackets</b><br>- Mounts to wall or roof<br>WM-2 – Horizontal for AA and SA mounts<br>WM-4 – L-Shape for AA and SA mounts<br>WM-DM – Plate for DA and DL mounts                                                     | <b>Mid-Pole Bracket</b><br>- Mounts to square pole<br>PW-1A3** – Single PW-2A3** – Double                                                                                                                                                                                                                                     |
|                                                                                                                                                                                                                                   | <b>Ground Mount Post</b><br>- For ground mounted flood luminaires<br>PGM-1<br>- For use with AA and SA mounts                                                                                                                                                                                                                 |

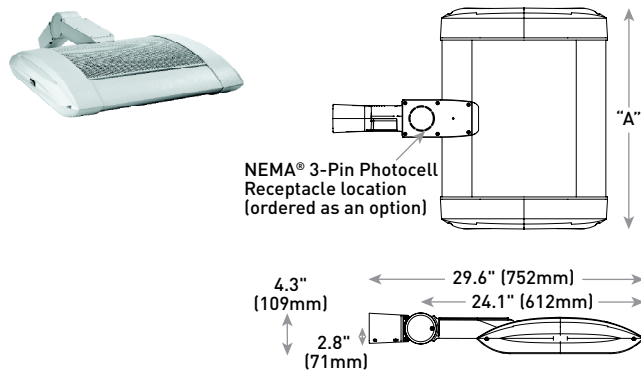
<sup>†</sup> Refer to the [Bracket and Tenons spec sheet](#) for more details

\* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation

\*\* Specify pole size: [3] for 3", [4] for 4", [5] for 5", or [6] for 6"

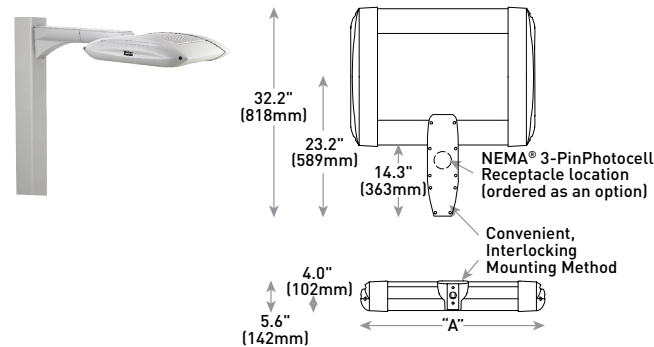
THE EDGE® LED Area/Flood Luminaire

AA Mount



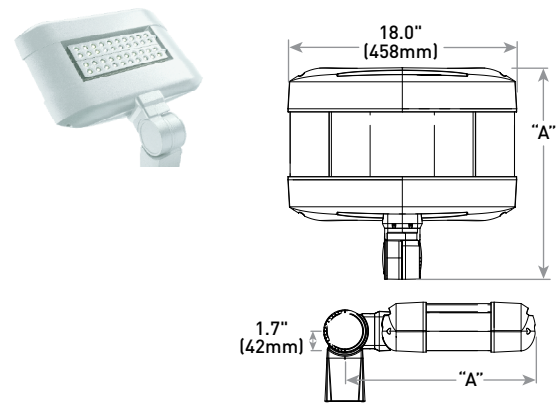
| LED Count (x10) | Dim. "A"      | Weight         |
|-----------------|---------------|----------------|
| 02              | 12.1" (306mm) | 21 lbs. (10kg) |
| 04              | 12.1" (306mm) | 24 lbs. (11kg) |
| 06              | 14.1" (357mm) | 27 lbs. (12kg) |
| 08              | 16.1" (408mm) | 28 lbs. (13kg) |
| 10              | 18.1" (459mm) | 32 lbs. (15kg) |
| 12              | 20.1" (510mm) | 34 lbs. (15kg) |
| 14              | 22.1" (560mm) | 37 lbs. (17kg) |
| 16              | 24.1" (611mm) | 41 lbs. (19kg) |

DL Mount



| LED Count (x10) | Dim. "A"      | Weight         |
|-----------------|---------------|----------------|
| 02              | 12.1" (306mm) | 23 lbs. (10kg) |
| 04              | 12.1" (306mm) | 26 lbs. (12kg) |
| 06              | 14.1" (357mm) | 29 lbs. (13kg) |
| 08              | 16.1" (408mm) | 30 lbs. (14kg) |
| 10              | 18.1" (459mm) | 34 lbs. (15kg) |
| 12              | 20.1" (510mm) | 36 lbs. (16kg) |
| 14              | 22.1" (560mm) | 42 lbs. (19kg) |
| 16              | 24.1" (611mm) | 44 lbs. (20kg) |

SA Mount



| LED Count (x10) | Dim. "A"      | Weight         |
|-----------------|---------------|----------------|
| 02              | 16.0" (406mm) | 25 lbs. (11kg) |
| 04              | 18.0" (457mm) | 26 lbs. (12kg) |
| 06              | 20.0" (508mm) | 28 lbs. (13kg) |

Replacement Kits

Hardware Bag (DA/DL Mounts)

XA-XALHRDWRBG

Universal Arm Mount Replacement (DA Mount only)

XA-ALPM\*

- Includes portion of arm that mounts to the pole and hardware bag
- Portion of arm that mounts to luminaire is not replaceable in the field

DA to DL Mount Conversion Kit

XA-XAL2AC167KT\*

- Includes universal arm mount to convert DA mount to DL mount and hardware bag

DL to DA Mount Conversion Kit

XA-XAL1AC166KT\*

- Includes universal arm mount to convert DL mount to DA mount and hardware bag

Lower Fitter Kit (AA Mount only)

XA-AL3FTRKT\*

- Includes portion of fitter that mounts to the pole/tenon and fitter/knuckle cover
- Portion of fitter that mounts to luminaire is not replaceable in the field

Light Bars & Driver Replacement Kits

- To ensure compatibility, please consult factory.

\* Must specify finish color: BT (Black), BZ (Bronze), SV (Silver) or WT (White).

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Job Name: _____                         | Client Name: _____                   |
| Job Location - City: _____ State: _____ | Created By: _____ Date: _____        |
| Product: DS96 ---- Quote: _____         | Customer Approval: _____ Date: _____ |

## SPECIFICATIONS

**Pole** - The pole shaft conforms to ASTM A595 Grade A with a constant linear taper of 0.14 in/ft.

**Davit Arm** - Davit arm shaft conforms to ASTM A595 Grade A with a constant linear taper of 0.14 in/ft. A single davit arm is either an integral part of the pole shaft or a separate section which slipfits the pole shaft. Double davit arms are a separate section which slipfits the pole shaft. Double luminaire arms can only be oriented 180° apart.

**Handhole** - A covered handhole and grounding provision with hardware is provided.

**Nut Covers** - Anchor bolt nut covers with hardware are provided.

**Full Base Cover** - Optional two-piece full base cover is fabricated from ABS plastic. Valmont reserves the right to provide an optional two-piece steel full base cover on some applications depending upon the finish requirement and/or pole base diameter.

**Anchor Base** - The anchor base (base plate) conforms to ASTM A36.

**Anchor Bolts** - Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two hex nuts and two flat washers. Bolts have an "L" bend on one end and are galvanized a minimum of 12" on the threaded end.

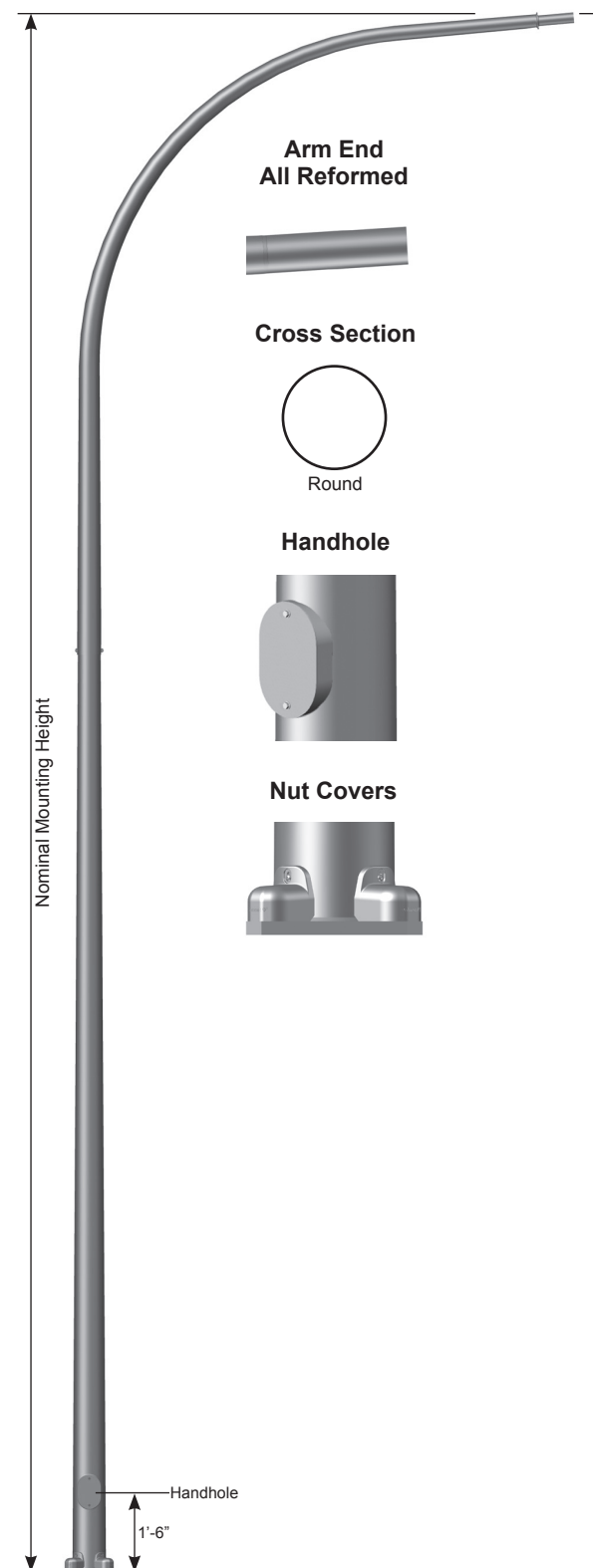
**Hardware** - All structural fasteners are galvanized high strength carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

**Finish** - Standard finishes are galvanized, prime painted or any of Valmont's V-PRO™ Protection Systems. Additional finish options available upon request.

**Design Criteria** - Please reference Design Criteria Specification for appropriate design conditions.

## ARM DATA

### Double Arm Arrangement





# ROUND TAPERED STEEL

## Smooth

### DS96

**valmont**

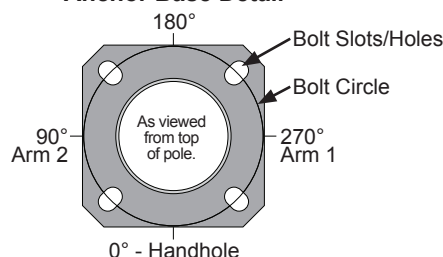
STRUCTURES

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Job Name: _____                         | Client Name: _____                   |
| Job Location - City: _____ State: _____ | Created By: _____ Date: _____        |
| Product: DS96 ---- Quote: _____         | Customer Approval: _____ Date: _____ |

## ANCHORAGE DATA

| POLE BASE<br>OD (IN) | BASE PLATE              |        |                |          | ANCHOR BOLTS                |                    |        |
|----------------------|-------------------------|--------|----------------|----------|-----------------------------|--------------------|--------|
|                      | BOLT CIRCLE<br>DIA (IN) | ± (IN) | SQUARE<br>(IN) | THK (IN) | DIA x LENGTH x HOOK<br>(IN) | PROJECTION<br>(IN) | ± (IN) |
| 6.38                 | 9.50                    | 0.50   | 10.50          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 6.63                 | 10.00                   | 0.50   | 10.88          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 6.62                 | 10.00                   | 0.50   | 10.88          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 7.08                 | 10.50                   | 0.50   | 11.25          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 7.33                 | 10.50                   | 0.50   | 11.25          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 7.32                 | 10.50                   | 0.50   | 11.25          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 7.78                 | 11.00                   | 0.50   | 11.50          | 0.875    | 1.00 x 36.00 x 4.00         | 4.13               | 0.25   |
| 8.03                 | 11.50                   | 0.50   | 12.00          | 1.000    | 1.00 x 36.00 x 4.00         | 4.25               | 0.25   |
| 8.00                 | 11.50                   | 0.50   | 12.00          | 1.000    | 1.00 x 36.00 x 4.00         | 4.25               | 0.25   |
| 8.48                 | 11.50                   | 0.50   | 12.00          | 1.000    | 1.00 x 36.00 x 4.00         | 4.25               | 0.25   |
| 8.73                 | 12.50                   | 0.50   | 12.38          | 1.000    | 1.00 x 36.00 x 4.00         | 4.25               | 0.25   |

### Anchor Base Detail



## LOAD AND DIMENSIONAL DATA

| DESIGN INFORMATION      |                  |                     |                                        |                                         | POLE DIMENSIONS |             |               |                                     |              |
|-------------------------|------------------|---------------------|----------------------------------------|-----------------------------------------|-----------------|-------------|---------------|-------------------------------------|--------------|
| NOMINAL MOUNTING HEIGHT | QUANTITY OF ARMS | MAX ARM LENGTH (FT) | 100 MPH w/1.3 GUST                     |                                         | BASE OD (IN)    | TOP OD (IN) | WALL THK (GA) | STRUCTURE WEIGHT <sup>2</sup> (LBS) | MODEL NUMBER |
|                         |                  |                     | MAX LUMINAIRE EPA <sup>1</sup> (SQ.FT) | MAX LUMINAIRE WEIGHT <sup>1</sup> (LBS) |                 |             |               |                                     |              |
| 25'-0"                  | Single           | 8                   | 2.0                                    | 75                                      | 6.62            | 2.40        | 11            | 210                                 | R662A302     |
|                         | Single           | 10                  | 2.0                                    | 75                                      | 6.63            | 2.40        | 11 & 11       | 220                                 | R663A320     |
|                         | Double           | 8                   | 2.0                                    | 75                                      | 6.38            | 2.40        | 11 & 11       | 265                                 | R638A301     |
|                         | Double           | 10                  | 2.0                                    | 75                                      | 6.63            | 2.40        | 11 & 11       | 290                                 | R663A320     |
| 30'-0"                  | Single           | 8                   | 2.0                                    | 75                                      | 7.32            | 2.40        | 11            | 260                                 | R732A352     |
|                         | Single           | 10                  | 2.0                                    | 75                                      | 7.33            | 2.40        | 11 & 11       | 270                                 | R733A370     |
|                         | Double           | 8                   | 2.0                                    | 75                                      | 7.08            | 2.40        | 11 & 11       | 310                                 | R708A351     |
|                         | Double           | 10                  | 2.0                                    | 75                                      | 7.33            | 2.40        | 11 & 11       | 340                                 | R733A370     |
| 35'-0"                  | Single           | 8                   | 2.0                                    | 75                                      | 8.00            | 2.40        | 11            | 300                                 | R800A400     |
|                         | Single           | 10                  | 2.0                                    | 75                                      | 8.03            | 2.40        | 11 & 11       | 325                                 | R803A420     |
|                         | Double           | 8                   | 2.0                                    | 75                                      | 7.78            | 2.40        | 11 & 11       | 360                                 | R778A401     |
|                         | Double           | 10                  | 2.0                                    | 75                                      | 8.03            | 2.40        | 11 & 11       | 395                                 | R803A420     |
| 40'-0"                  | Single           | 8                   | 2.0                                    | 75                                      | 8.48            | 2.40        | 11 & 11       | 370                                 | R848A452     |
|                         | Single           | 10                  | 2.0                                    | 75                                      | 8.73            | 2.40        | 11 & 11       | 385                                 | R873A470     |
|                         | Double           | 8                   | 2.0                                    | 75                                      | 8.48            | 2.40        | 11 & 11       | 420                                 | R848A451     |
|                         | Double           | 10                  | 2.0                                    | 75                                      | 8.73            | 2.40        | 11 & 11       | 455                                 | R873A470     |

- EPA represents the Effective Projected Area of each luminaire. Designs are limited to one luminaire per arm. Variations from sizes above are available upon inquiry at the factory. Satisfactory performance of poles is dependent upon the pole being properly attached to a supporting foundation of adequate design.
- Structure Weight is a nominal value which includes the pole shaft, base plate and luminaire arm(s) only.
- Designs showing two shaft gauges indicate structure is provided as a two-piece, field assembled unit.

## PRODUCT ORDERING CODES

| DESIGN SERIES | MODEL NUMBER                                                                                                                     | FIXTURE MOUNTING                                                         | FINISH                                                                                  | COLOR                                                                                                                                                                                                                                                                                                   | V-PRO™ PROTECTION SYSTEM                                                                                                                                                                                                                                                                                                            | OPTIONS                                                         |
|---------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| DS96          |                                                                                                                                  |                                                                          |                                                                                         | --                                                                                                                                                                                                                                                                                                      | --                                                                                                                                                                                                                                                                                                                                  |                                                                 |
|               | R662A302<br>R663A320<br>R638A301<br>R732A352<br>R733A370<br>R708A351<br>R800A400<br>R803A420<br>R778A401<br>R848A452<br>R873A470 | 8S = 8' Single<br>8D = 8' Double<br>10S = 10' Single<br>10D = 10' Double | GV = Galvanize<br>PP = Prime Paint<br>FP = Finish Paint<br>GF = Galvanized Finish Paint | -- = Galvanize<br>-- = Prime Paint<br>WH = White<br>BK = Black<br>SL = Silver<br>LG = Light Gray<br>SG = Slate Gray<br>DT = Dark Tan<br>MB = Medium Bronze<br>CB = Bronze<br>DB = Dark Bronze<br>BN = Brown<br>HG = Hunter Green<br>DG = Dark Green<br>RD = Red<br>SC = Special Color (Contact Factory) | -- = Galvanize<br>-- = Prime Paint<br>V1 = V-PRO 1<br>Basic 1 Coat Powder.<br>V2 = V-PRO 2<br>2 Coat Powder or Liquid.<br>Includes epoxy primer & top coat.<br>V3 = V-PRO 3<br>2 Coat Powder or Liquid.<br>Includes zinc primer & top coat.<br>V4 = V-PRO 4<br>2 Coat Powder or Liquid.<br>Includes zinc primer & premium top coat. | See Accessories at<br>valmontstructures.com<br>(Please Specify) |

# THE EDGE® Series

LED Area Luminaire – Round

Rev. Date: V14 06/25/2024

## Product Description

THE EDGE® Series has a slim, low profile design. Its rugged cast aluminum housing minimizes wind load requirements and features an integral, weathertight LED driver compartment, spun vented cover, high performance aluminum heat sinks and leaf/debris guard.

**Applications:** Auto Dealerships, parking lots, campuses, facade lighting and general site lighting applications

## Performance Summary

Patented NanoOptic® Product Technology

Assembled in the USA by Cree Lighting from US and imported parts

**Initial Delivered Lumens:** Up to 25,065

**CRI:** Minimum 70 CRI (4000K & 5700K); 80 CRI (3000K); 90 CRI (5000K)

**CCT:** Turtle Friendly Amber, 3000K (+/-300K), 4000K (+/-300K), 5000K (+/- 500K), 5700K (+/- 500K) standard

**Limited Warranty\*:** 10 years for luminaire/10 years for Colorfast DeltaGuard® finish / up to 5 years for Synapse® accessories/1 year for accessories

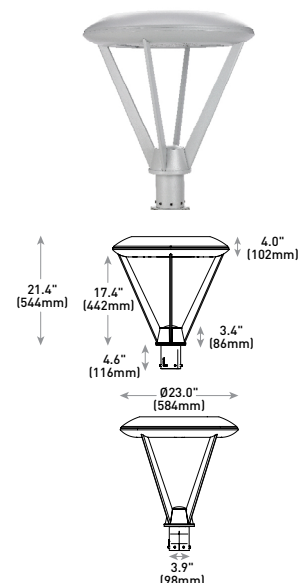
\* See <https://www.creelighting.com/resources/warranties/> for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

## Accessories

| Field-Installed                                                                                                                                                                                                                    |                                                                                                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Bird Spikes</b><br>XA-BRDSPK<br><b>Synapse® SimplySnap 10V Interface</b><br>DIM10-220F<br>- 120V-277V<br>- Requires other Synapse components to complete system<br>- Refer to <a href="#">DIM10-220F</a> spec sheet for details | <b>Backlight Control Shields</b><br>XA-20BLS-4<br>- Four-pack<br>- Unpainted stainless steel<br>- For use with 5M and 5S optics<br>- Consult factory for shielding for use with 2M, 3M, and 4M optics |

## R3 Mount

- Fits over 2-3/8" to 3" O.D. Tenon



| LED Count (x10) | Weight             |
|-----------------|--------------------|
| 04              | 33.8 lbs. (15.3kg) |
| 06              | 35.2 lbs. (15.9kg) |
| 08              | 37.0 lbs. (16.8kg) |
| 10              | 40.7 lbs. (18.5kg) |
| 12              | 42.4 lbs. (19.3kg) |

**R4/R5 Mount** - see page 14 for weight & dimensions

## Ordering Information

Example: ARE-EDR-2M-R3-12-E-UL-SV-350

| ARE-EDR |                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                              |                                                                     | E      |                                                              |                                                        |                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------|--------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Family  | Optic                                                                                                                                                                                                                                                                                                                                                                      | Mounting*                                                                                                                                                                                    | LED Count (x10)                                                     | Series | Voltage                                                      | Finish                                                 | Drive Current                                                                           | Options                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| ARE-EDR | <b>2M</b> Type II Medium<br><b>2MB</b> Type II Medium w/BLS<br><b>2MP</b> Type II Medium w/Partial BLS<br><b>3M</b> Type III Medium<br><b>3MB</b> Type III Medium w/BLS<br><b>3MP</b> Type III Medium w/BLS<br><b>4M</b> Type IV Medium<br><b>4MB</b> Type IV Medium w/BLS<br><b>4MP</b> Type IV Medium w/Partial BLS<br><b>5M</b> Type V Medium<br><b>5S</b> Type V Short | <b>R3</b> Spider, Center Tenon, Fits over 2-3/8" to 3" OD Tenon<br><b>R4</b> Spider, Center Direct, Fits inside 4" Square Pole<br><b>R5</b> Spider, Center Direct, Fits inside 5" Round Pole | <b>04**</b><br><b>06**</b><br><b>08**</b><br><b>10</b><br><b>12</b> | E      | <b>UL</b> Universal 120-277V<br><b>UH</b> Universal 347-480V | <b>BK</b> Black<br><b>SV</b> Silver<br><b>WH</b> White | <b>350</b> 350mA<br><b>525</b> 525mA<br><b>700</b> 700mA<br>- Available with 40-60 LEDs | <b>DIM 0-10V Dimming</b><br>- Control by others<br>- Refer to <a href="#">Dimming spec sheet</a> for details<br>- Can't exceed specified drive current<br><b>F Fuse</b><br>- Compatible only with 120V, 277V or 347V (phase to neutral)<br>- Consult factory if fusing is required for 208V, 240V or 480V (phase to phase)<br>- When code dictates fusing, use time delay fuse<br><b>HL Hi/Low (Dual Circuit Input)</b><br>- Refer to <a href="#">HL spec sheet</a> for details<br>- Sensor not included<br><b>P Button Photocell</b><br>- Available with UL voltage only<br><b>30K 3000K Color Temperature</b><br>- Minimum 80 CRI<br>- Color temperature per luminaire<br><b>40K 4000K Color Temperature</b><br>- Minimum 70 CRI<br>- Color temperature per luminaire<br><b>50K 5000K Color Temperature</b><br>- Minimum 90 CRI<br>- Color temperature per luminaire<br><b>TRL Amber Turtle Friendly LEDs</b><br>- Available only with 350mA<br>- 600nm dominant wavelength<br>- Additional shielding (by others) may be required for Florida Fish and Wildlife Conservation Commission compliance |

\* Reference EPA and pole configuration suitability data on page 14

\*\* Consists of multiple 20 LED light bars. 40, 60, and 80 LED units use blanks as needed in place of populated light bars



Website: [creelighting.com](https://www.creelighting.com)

US: (800) 236-6800 Canada: (800) 473-1234

**CREE** ⇨ **LIGHTING®**

## Product Specifications

### CONSTRUCTION & MATERIALS

- Slim, low profile, minimizing wind load requirements
- Luminaire sides are rugged die cast aluminum with integral, weathertight LED driver compartment, spun vented cover, and high performance aluminum heat sinks
- R3 spider mount hub slip-fits over a 2.375" (60mm) to 3" (76mm) O.D. minimum 4" (102mm) H steel or aluminum tenon or pole and secures with eight set screws
- R4 spider mount fits directly inside 4" (102mm) square pole and secures to pole with four set screws
- R5 spider mount fits directly inside of a 5" (127mm) round pole to provide a clean hardware-less outer appearance
- Includes leaf/debris guard
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Black, bronze, silver, and white are available
- **Weight:** See Dimensions and Weight charts on pages 1 and 14

### ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- **10V Source Current:** 40-80 LEDs: 0.15mA; 100-120 LEDs: 0.30mA
- Integral 10kV/5kA surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current

### REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Enclosure meets IP66 requirements per IEC 60529 when ordered without P option
- ANSI C136.2 10kV/5kA surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- RoHS compliant. Consult factory for additional details
- Assembled in the USA by Cree Lighting from US and imported parts
- Some configurations meet requirements of BAA and/or BABA. Consult factory when needed for a project: [www.creelighting.com/BAA-BABA](http://www.creelighting.com/BAA-BABA)
-  **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov)

| Electrical Data*   |                    |                                 |                   |      |      |      |      |      |
|--------------------|--------------------|---------------------------------|-------------------|------|------|------|------|------|
| LED Count<br>(x10) | CCT                | System<br>Watts<br>120-<br>480V | Total Current (A) |      |      |      |      |      |
|                    |                    |                                 | 120V              | 208V | 240V | 277V | 347V | 480V |
| 350mA              |                    |                                 |                   |      |      |      |      |      |
| 04                 | 30K, 40K, 50K, 57K | 46                              | 0.36              | 0.23 | 0.21 | 0.20 | 0.15 | 0.12 |
|                    | TRL                | 35                              | 0.29              | 0.17 | 0.15 | 0.13 | 0.10 | 0.07 |
| 06                 | 30K, 40K, 50K, 57K | 66                              | 0.52              | 0.31 | 0.28 | 0.26 | 0.20 | 0.15 |
|                    | TRL                | 50                              | 0.41              | 0.24 | 0.21 | 0.18 | 0.14 | 0.10 |
| 08                 | 30K, 40K, 50K, 57K | 90                              | 0.75              | 0.44 | 0.38 | 0.34 | 0.26 | 0.20 |
|                    | TRL                | 68                              | 0.57              | 0.33 | 0.28 | 0.25 | 0.20 | 0.14 |
| 10                 | 30K, 40K, 50K, 57K | 110                             | 0.92              | 0.53 | 0.47 | 0.41 | 0.32 | 0.24 |
|                    | TRL                | 83                              | 0.69              | 0.40 | 0.35 | 0.30 | 0.24 | 0.17 |
| 12                 | 30K, 40K, 50K, 57K | 130                             | 1.10              | 0.63 | 0.55 | 0.48 | 0.38 | 0.28 |
|                    | TRL                | 99                              | 0.82              | 0.48 | 0.41 | 0.36 | 0.28 | 0.21 |
| 525mA              |                    |                                 |                   |      |      |      |      |      |
| 04                 | 30K, 40K, 50K, 57K | 70                              | 0.58              | 0.34 | 0.31 | 0.28 | 0.21 | 0.16 |
| 06                 | 30K, 40K, 50K, 57K | 101                             | 0.84              | 0.49 | 0.43 | 0.38 | 0.30 | 0.22 |
| 08                 | 30K, 40K, 50K, 57K | 133                             | 1.13              | 0.66 | 0.58 | 0.51 | 0.39 | 0.28 |
| 10                 | 30K, 40K, 50K, 57K | 171                             | 1.43              | 0.83 | 0.74 | 0.66 | 0.50 | 0.38 |
| 12                 | 30K, 40K, 50K, 57K | 202                             | 1.69              | 0.98 | 0.86 | 0.77 | 0.59 | 0.44 |
| 700mA              |                    |                                 |                   |      |      |      |      |      |
| 04                 | 30K, 40K, 50K, 57K | 93                              | 0.78              | 0.46 | 0.40 | 0.36 | 0.27 | 0.20 |
| 06                 | 30K, 40K, 50K, 57K | 134                             | 1.14              | 0.65 | 0.57 | 0.50 | 0.39 | 0.29 |

\* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

| THE EDGE® Series Ambient Adjusted Lumen Maintenance <sup>1</sup> |                 |             |                                  |                                  |                                                           |                                    |
|------------------------------------------------------------------|-----------------|-------------|----------------------------------|----------------------------------|-----------------------------------------------------------|------------------------------------|
| Ambient                                                          | CCT             | Initial LMF | 25K hr Reported <sup>2</sup> LMF | 50K hr Reported <sup>2</sup> LMF | 75K hr Reported <sup>2</sup> / Estimated <sup>3</sup> LMF | 100K hr Estimated <sup>3</sup> LMF |
| 5°C (41°F)                                                       | 30K/40K/50K/57K | 1.04        | 1.03                             | 1.03                             | 1.03 <sup>2</sup>                                         | 1.03                               |
|                                                                  | TRL             | 1.06        | 1.06                             | 1.06                             | 1.06 <sup>3</sup>                                         | 1.06                               |
| 10°C (50°F)                                                      | 30K/40K/50K/57K | 1.03        | 1.02                             | 1.02                             | 1.02 <sup>2</sup>                                         | 1.02                               |
|                                                                  | TRL             | 1.04        | 1.04                             | 1.04                             | 1.04 <sup>3</sup>                                         | 1.04                               |
| 15°C (59°F)                                                      | 30K/40K/50K/57K | 1.02        | 1.01                             | 1.01                             | 1.01 <sup>2</sup>                                         | 1.01                               |
|                                                                  | TRL             | 1.03        | 1.03                             | 1.03                             | 1.03 <sup>3</sup>                                         | 1.03                               |
| 20°C (68°F)                                                      | 30K/40K/50K/57K | 1.01        | 0.99                             | 0.99                             | 0.99 <sup>2</sup>                                         | 0.99                               |
|                                                                  | TRL             | 1.01        | 1.01                             | 1.01                             | 1.01 <sup>3</sup>                                         | 1.01                               |
| 25°C (77°F)                                                      | 30K/40K/50K/57K | 1.00        | 0.98                             | 0.98                             | 0.98 <sup>2</sup>                                         | 0.98                               |
|                                                                  | TRL             | 1.00        | 1.00                             | 1.00                             | 1.00 <sup>3</sup>                                         | 1.00                               |

<sup>1</sup> Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

<sup>2</sup> In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

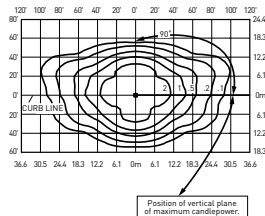
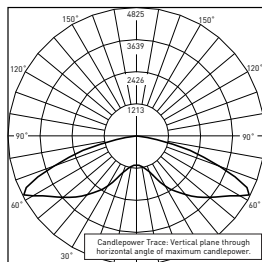
<sup>3</sup> Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED.

## THE EDGE® LED Area Luminaire – Round

### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

#### 2M



**RESTL Test Report #:** PL10270-004B  
**ARE-EDG-2M-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 10,053

**ARE-EDR-2M-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 17,504  
**Initial FC at grade**

| Type II Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)          | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                             | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 4,143                           | B2 U0 G1                             | 5,003                           | B2 U0 G2                             | 3,803                           | B1 U0 G1                             | 5,102                           | B2 U0 G2                             | 1,633                           | B1 U0 G1                             |
| 06                          | 6,144                           | B2 U0 G2                             | 7,418                           | B2 U0 G2                             | 5,640                           | B2 U0 G2                             | 7,565                           | B2 U0 G2                             | 2,421                           | B1 U0 G1                             |
| 08                          | 8,192                           | B2 U0 G2                             | 9,891                           | B3 U0 G3                             | 7,519                           | B2 U0 G2                             | 10,087                          | B3 U0 G3                             | 3,228                           | B1 U0 G1                             |
| 10                          | 10,215                          | B3 U0 G3                             | 12,334                          | B3 U0 G3                             | 9,377                           | B3 U0 G3                             | 12,578                          | B3 U0 G3                             | 4,025                           | B2 U0 G1                             |
| 12                          | 12,258                          | B3 U0 G3                             | 14,801                          | B3 U0 G3                             | 11,252                          | B3 U0 G3                             | 15,094                          | B3 U0 G3                             | 4,830                           | B2 U0 G2                             |
| 525mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 5,886                           | B2 U0 G2                             | 7,099                           | B2 U0 G2                             | 5,403                           | B2 U0 G2                             | 7,248                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 8,729                           | B3 U0 G3                             | 10,527                          | B3 U0 G3                             | 8,012                           | B2 U0 G2                             | 10,748                          | B3 U0 G3                             | N/A                             |                                      |
| 08                          | 11,638                          | B3 U0 G3                             | 14,037                          | B3 U0 G3                             | 10,683                          | B3 U0 G3                             | 14,331                          | B3 U0 G3                             | N/A                             |                                      |
| 10                          | 14,513                          | B3 U0 G3                             | 17,504                          | B3 U0 G3                             | 13,322                          | B3 U0 G3                             | 17,870                          | B3 U0 G3                             | N/A                             |                                      |
| 12                          | 17,415                          | B3 U0 G3                             | 21,004                          | B4 U0 G4                             | 15,986                          | B3 U0 G3                             | 21,444                          | B4 U0 G4                             | N/A                             |                                      |
| 700mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 6,943                           | B2 U0 G2                             | 8,379                           | B2 U0 G2                             | 6,373                           | B2 U0 G2                             | 8,549                           | B3 U0 G3                             | N/A                             |                                      |
| 06                          | 10,296                          | B3 U0 G3                             | 12,425                          | B3 U0 G3                             | 9,451                           | B3 U0 G3                             | 12,678                          | B3 U0 G3                             | N/A                             |                                      |

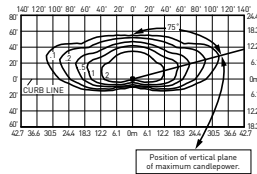
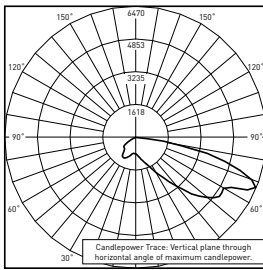
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

### 2MB



**RESTL Test Report #:** PL10023-003B  
**ARE-EDG-2MB-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 7,784

**ARE-EDR-2MB-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 13,185  
**Initial FC at grade**

| Type II Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                   | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 3,121                           | B0 U0 G1                             | 3,768                           | B1 U0 G1                             | 2,865                           | B0 U0 G1                             | 3,843                           | B1 U0 G1                             | 1,230                           | B0 U0 G1                             |
| 06                                | 4,628                           | B1 U0 G1                             | 5,588                           | B1 U0 G1                             | 4,248                           | B1 U0 G1                             | 5,698                           | B1 U0 G1                             | 1,824                           | B0 U0 G1                             |
| 08                                | 6,170                           | B1 U0 G1                             | 7,450                           | B1 U0 G2                             | 5,664                           | B1 U0 G1                             | 7,598                           | B1 U0 G2                             | 2,431                           | B0 U0 G1                             |
| 10                                | 7,695                           | B1 U0 G2                             | 9,291                           | B1 U0 G2                             | 7,063                           | B1 U0 G2                             | 9,475                           | B1 U0 G2                             | 3,032                           | B0 U0 G1                             |
| 12                                | 9,233                           | B1 U0 G2                             | 11,149                          | B1 U0 G2                             | 8,476                           | B1 U0 G2                             | 11,370                          | B1 U0 G2                             | 3,638                           | B1 U0 G1                             |
| 525mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 4,434                           | B1 U0 G1                             | 5,348                           | B1 U0 G1                             | 4,070                           | B1 U0 G1                             | 5,460                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                | 6,575                           | B1 U0 G2                             | 7,930                           | B1 U0 G2                             | 6,035                           | B1 U0 G1                             | 8,096                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                | 8,766                           | B1 U0 G2                             | 10,573                          | B1 U0 G2                             | 8,047                           | B1 U0 G2                             | 10,794                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                | 10,932                          | B1 U0 G2                             | 13,185                          | B1 U0 G2                             | 10,034                          | B1 U0 G2                             | 13,461                          | B1 U0 G2                             | N/A                             |                                      |
| 12                                | 13,118                          | B1 U0 G2                             | 15,821                          | B2 U0 G3                             | 12,041                          | B1 U0 G2                             | 16,153                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 5,230                           | B1 U0 G1                             | 6,311                           | B1 U0 G2                             | 4,801                           | B1 U0 G1                             | 6,440                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                | 7,755                           | B1 U0 G2                             | 9,359                           | B1 U0 G2                             | 7,119                           | B1 U0 G2                             | 9,549                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

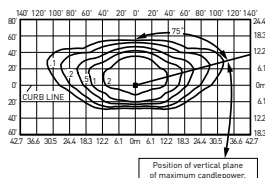
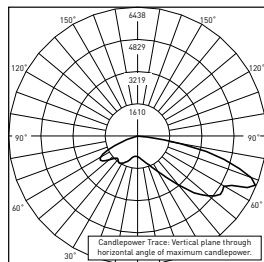
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## THE EDGE® LED Area Luminaire – Round

### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

#### 2MP



**RESTL Test Report #:** PL10097-001B  
**ARE-EDG-2MP-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 9,149

**ARE-EDR-2MP-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 15,458  
**Initial FC at grade**

| Type II Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 3,659                           | B1 U0 G1                             | 4,418                           | B1 U0 G1                             | 3,359                           | B1 U0 G1                             | 4,505                           | B1 U0 G1                             | 1,442                           | B0 U0 G1                             |
| 06                                        | 5,426                           | B1 U0 G1                             | 6,551                           | B1 U0 G1                             | 4,980                           | B1 U0 G1                             | 6,681                           | B1 U0 G1                             | 2,138                           | B1 U0 G1                             |
| 08                                        | 7,234                           | B2 U0 G1                             | 8,735                           | B2 U0 G2                             | 6,640                           | B1 U0 G1                             | 8,908                           | B2 U0 G2                             | 2,851                           | B1 U0 G1                             |
| 10                                        | 9,021                           | B2 U0 G2                             | 10,892                          | B2 U0 G2                             | 8,281                           | B2 U0 G2                             | 11,108                          | B2 U0 G2                             | 3,555                           | B1 U0 G1                             |
| 12                                        | 10,825                          | B2 U0 G2                             | 13,071                          | B2 U0 G2                             | 9,937                           | B2 U0 G2                             | 13,330                          | B2 U0 G2                             | 4,266                           | B1 U0 G1                             |
| 525mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 5,198                           | B1 U0 G1                             | 6,270                           | B1 U0 G1                             | 4,772                           | B1 U0 G1                             | 6,401                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                        | 7,708                           | B2 U0 G2                             | 9,297                           | B2 U0 G2                             | 7,076                           | B2 U0 G1                             | 9,492                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                        | 10,278                          | B2 U0 G2                             | 12,396                          | B2 U0 G2                             | 9,434                           | B2 U0 G2                             | 12,656                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                        | 12,817                          | B2 U0 G2                             | 15,458                          | B2 U0 G2                             | 11,764                          | B2 U0 G2                             | 15,782                          | B2 U0 G2                             | N/A                             |                                      |
| 12                                        | 15,380                          | B2 U0 G2                             | 18,549                          | B3 U0 G3                             | 14,117                          | B2 U0 G2                             | 18,938                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 6,132                           | B1 U0 G1                             | 7,400                           | B2 U0 G1                             | 5,628                           | B1 U0 G1                             | 7,550                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                        | 9,092                           | B2 U0 G2                             | 10,973                          | B2 U0 G2                             | 8,346                           | B2 U0 G2                             | 11,196                          | B2 U0 G2                             | N/A                             |                                      |

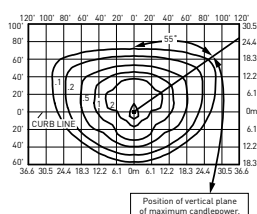
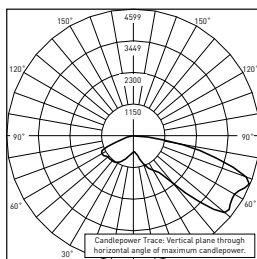
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## Photometry

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3M



RESTL Test Report #: PL09405-001A  
ARE-EDG-3M-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 9,460

ARE-EDR-3M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 16,594  
Initial FC at grade

| Type III Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)           | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                              | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                           | 3,928                           | B1 U0 G1                             | 4,743                           | B1 U0 G1                             | 3,606                           | B1 U0 G1                             | 4,837                           | B1 U0 G1                             | 1,548                           | B1 U0 G1                             |
| 06                           | 5,825                           | B2 U0 G2                             | 7,033                           | B2 U0 G2                             | 5,347                           | B2 U0 G2                             | 7,172                           | B2 U0 G2                             | 2,295                           | B1 U0 G1                             |
| 08                           | 7,766                           | B2 U0 G2                             | 9,377                           | B2 U0 G2                             | 7,129                           | B2 U0 G2                             | 9,563                           | B2 U0 G2                             | 3,060                           | B1 U0 G1                             |
| 10                           | 9,685                           | B2 U0 G2                             | 11,693                          | B3 U0 G3                             | 8,890                           | B2 U0 G2                             | 11,925                          | B3 U0 G3                             | 3,816                           | B1 U0 G1                             |
| 12                           | 11,621                          | B3 U0 G3                             | 14,032                          | B3 U0 G3                             | 10,667                          | B3 U0 G3                             | 14,310                          | B3 U0 G3                             | 4,579                           | B1 U0 G1                             |
| 525mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                           | 5,581                           | B2 U0 G2                             | 6,731                           | B2 U0 G2                             | 5,122                           | B2 U0 G2                             | 6,872                           | B2 U0 G2                             | N/A                             |                                      |
| 06                           | 8,275                           | B2 U0 G2                             | 9,981                           | B3 U0 G3                             | 7,596                           | B2 U0 G2                             | 10,190                          | B3 U0 G3                             | N/A                             |                                      |
| 08                           | 11,034                          | B3 U0 G3                             | 13,307                          | B3 U0 G3                             | 10,128                          | B3 U0 G3                             | 13,586                          | B3 U0 G3                             | N/A                             |                                      |
| 10                           | 13,759                          | B3 U0 G3                             | 16,594                          | B3 U0 G3                             | 12,630                          | B3 U0 G3                             | 16,942                          | B3 U0 G3                             | N/A                             |                                      |
| 12                           | 16,511                          | B3 U0 G3                             | 19,913                          | B3 U0 G3                             | 15,155                          | B3 U0 G3                             | 20,330                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                        |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                           | 6,582                           | B2 U0 G2                             | 7,944                           | B2 U0 G2                             | 6,042                           | B2 U0 G2                             | 8,105                           | B2 U0 G2                             | N/A                             |                                      |
| 06                           | 9,761                           | B2 U0 G2                             | 11,779                          | B3 U0 G3                             | 8,960                           | B2 U0 G2                             | 12,019                          | B3 U0 G3                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

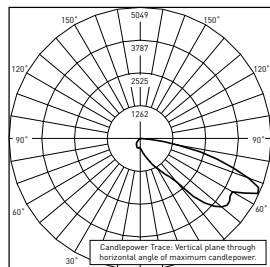
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

## THE EDGE® LED Area Luminaire – Round

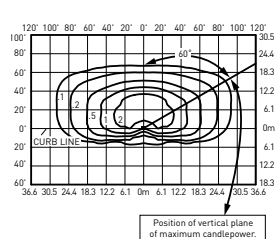
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

#### 3MB



**RESTL Test Report #:** PL10023-001B  
**ARE-EDG-3MB-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 7,602



**ARE-EDR-3MB-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 12,275  
**Initial FC at grade**

| Type III Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                 | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                    | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                 | 2,906                           | B0 U0 G1                             | 3,508                           | B1 U0 G1                             | 2,667                           | B0 U0 G1                             | 3,578                           | B1 U0 G1                             | 1,145                           | B0 U0 G1                             |
| 06                                 | 4,309                           | B1 U0 G1                             | 5,202                           | B1 U0 G1                             | 3,955                           | B1 U0 G1                             | 5,305                           | B1 U0 G1                             | 1,698                           | B0 U0 G1                             |
| 08                                 | 5,745                           | B1 U0 G2                             | 6,936                           | B1 U0 G2                             | 5,273                           | B1 U0 G1                             | 7,074                           | B1 U0 G2                             | 2,264                           | B0 U0 G1                             |
| 10                                 | 7,164                           | B1 U0 G2                             | 8,650                           | B1 U0 G2                             | 6,576                           | B1 U0 G2                             | 8,821                           | B1 U0 G2                             | 2,823                           | B0 U0 G1                             |
| 12                                 | 8,597                           | B1 U0 G2                             | 10,380                          | B1 U0 G2                             | 7,891                           | B1 U0 G2                             | 10,585                          | B1 U0 G2                             | 3,387                           | B1 U0 G1                             |
| 525mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                 | 4,128                           | B1 U0 G1                             | 4,979                           | B1 U0 G1                             | 3,789                           | B1 U0 G1                             | 5,083                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                 | 6,121                           | B1 U0 G2                             | 7,383                           | B1 U0 G2                             | 5,619                           | B1 U0 G2                             | 7,538                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                 | 8,162                           | B1 U0 G2                             | 9,844                           | B1 U0 G2                             | 7,492                           | B1 U0 G2                             | 10,050                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                 | 10,178                          | B1 U0 G2                             | 12,275                          | B1 U0 G2                             | 9,342                           | B1 U0 G2                             | 12,532                          | B1 U0 G2                             | N/A                             |                                      |
| 12                                 | 12,213                          | B1 U0 G2                             | 14,730                          | B2 U0 G3                             | 11,211                          | B1 U0 G2                             | 15,039                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                              |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                 | 4,869                           | B1 U0 G1                             | 5,876                           | B1 U0 G2                             | 4,469                           | B1 U0 G1                             | 5,996                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                 | 7,220                           | B1 U0 G2                             | 8,714                           | B1 U0 G2                             | 6,628                           | B1 U0 G2                             | 8,891                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

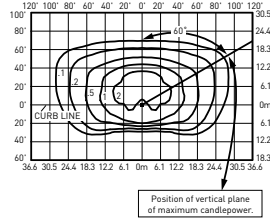
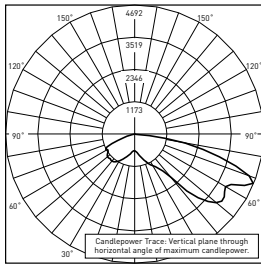
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>



## Photometry

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### 3MP



**RESTL Test Report #:** PL10097-002B  
**ARE-EDG-3MP-\*\*-06-E-UL-525-40K**  
**Initial Delivered Lumens:** 8,670

**ARE-EDR-3MP-\*\*-10-E-UL-525-40K**  
**Mounting Height:** 25' (7.6m) A.F.G.  
**Initial Delivered Lumens:** 14,548  
**Initial FC at grade**

| Type III Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|--------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                         | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                            | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                         | 3,444                           | B1 U0 G1                             | 4,158                           | B1 U0 G1                             | 3,161                           | B1 U0 G1                             | 4,240                           | B1 U0 G1                             | 1,357                           | B0 U0 G1                             |
| 06                                         | 5,107                           | B1 U0 G1                             | 6,166                           | B1 U0 G2                             | 4,687                           | B1 U0 G1                             | 6,288                           | B1 U0 G2                             | 2,012                           | B1 U0 G1                             |
| 08                                         | 6,809                           | B1 U0 G2                             | 8,221                           | B2 U0 G2                             | 6,250                           | B1 U0 G2                             | 8,384                           | B2 U0 G2                             | 2,683                           | B1 U0 G1                             |
| 10                                         | 8,491                           | B2 U0 G2                             | 10,252                          | B2 U0 G2                             | 7,794                           | B2 U0 G2                             | 10,455                          | B2 U0 G2                             | 3,346                           | B1 U0 G1                             |
| 12                                         | 10,189                          | B2 U0 G2                             | 12,302                          | B2 U0 G3                             | 9,352                           | B2 U0 G2                             | 12,546                          | B2 U0 G3                             | 4,015                           | B1 U0 G1                             |
| 525mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                         | 4,893                           | B1 U0 G1                             | 5,901                           | B1 U0 G2                             | 4,491                           | B1 U0 G1                             | 6,024                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                         | 7,255                           | B2 U0 G2                             | 8,750                           | B2 U0 G2                             | 6,659                           | B1 U0 G2                             | 8,933                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                         | 9,673                           | B2 U0 G2                             | 11,667                          | B2 U0 G2                             | 8,879                           | B2 U0 G2                             | 11,911                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                         | 12,063                          | B2 U0 G3                             | 14,548                          | B3 U0 G3                             | 11,072                          | B2 U0 G2                             | 14,853                          | B3 U0 G3                             | N/A                             |                                      |
| 12                                         | 14,475                          | B3 U0 G3                             | 17,458                          | B3 U0 G3                             | 13,287                          | B2 U0 G3                             | 17,824                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                         | 5,771                           | B1 U0 G2                             | 6,964                           | B1 U0 G2                             | 5,297                           | B1 U0 G1                             | 7,106                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                         | 8,557                           | B2 U0 G2                             | 10,327                          | B2 U0 G2                             | 7,855                           | B2 U0 G2                             | 10,537                          | B2 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

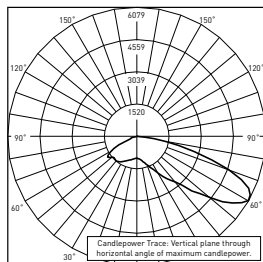
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

## THE EDGE® LED Area Luminaire – Round

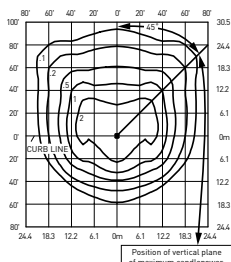
### Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

#### 4M



RESTL Test Report #: PL10270-001B  
ARE-EDG-4M-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 10,483



ARE-EDR-4M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 17,504  
Initial FC at grade

| Type IV Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)          | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                             | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 4,143                           | B1 U0 G1                             | 5,003                           | B2 U0 G1                             | 3,803                           | B1 U0 G1                             | 5,102                           | B2 U0 G1                             | 1,633                           | B1 U0 G1                             |
| 06                          | 6,144                           | B2 U0 G1                             | 7,418                           | B2 U0 G2                             | 5,640                           | B2 U0 G1                             | 7,565                           | B2 U0 G2                             | 2,421                           | B1 U0 G1                             |
| 08                          | 8,192                           | B2 U0 G2                             | 9,891                           | B2 U0 G2                             | 7,519                           | B2 U0 G2                             | 10,087                          | B2 U0 G2                             | 3,228                           | B1 U0 G1                             |
| 10                          | 10,215                          | B2 U0 G2                             | 12,334                          | B3 U0 G2                             | 9,377                           | B2 U0 G2                             | 12,578                          | B3 U0 G2                             | 4,025                           | B1 U0 G1                             |
| 12                          | 12,258                          | B2 U0 G2                             | 14,801                          | B3 U0 G3                             | 11,252                          | B2 U0 G2                             | 15,094                          | B3 U0 G3                             | 4,830                           | B1 U0 G1                             |
| 525mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 5,886                           | B2 U0 G1                             | 7,099                           | B2 U0 G2                             | 5,403                           | B2 U0 G1                             | 7,248                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 8,729                           | B2 U0 G2                             | 10,527                          | B2 U0 G2                             | 8,012                           | B2 U0 G2                             | 10,748                          | B2 U0 G2                             | N/A                             |                                      |
| 08                          | 11,638                          | B2 U0 G2                             | 14,037                          | B3 U0 G2                             | 10,683                          | B2 U0 G2                             | 14,331                          | B3 U0 G2                             | N/A                             |                                      |
| 10                          | 14,513                          | B3 U0 G3                             | 17,504                          | B3 U0 G3                             | 13,322                          | B3 U0 G2                             | 17,870                          | B3 U0 G3                             | N/A                             |                                      |
| 12                          | 17,415                          | B3 U0 G3                             | 21,004                          | B3 U0 G3                             | 15,986                          | B3 U0 G3                             | 21,444                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                       |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                          | 6,943                           | B2 U0 G1                             | 8,379                           | B2 U0 G2                             | 6,373                           | B2 U0 G1                             | 8,549                           | B2 U0 G2                             | N/A                             |                                      |
| 06                          | 10,296                          | B2 U0 G2                             | 12,425                          | B3 U0 G2                             | 9,451                           | B2 U0 G2                             | 12,678                          | B3 U0 G2                             | N/A                             |                                      |

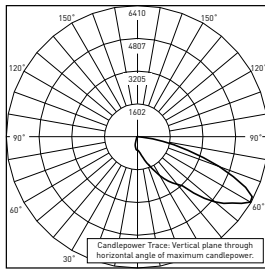
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

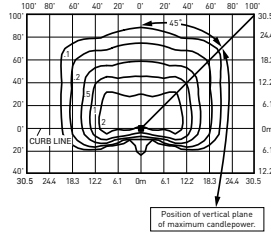
## Photometry

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### 4MB



RESTL Test Report #: PL10023-002B  
ARE-EDG-4MB-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 7,985



ARE-EDR-4MB-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 13,185  
Initial FC at grade

| Type IV Medium Distribution w/BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-----------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                   | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 3,121                           | B1 U0 G1                             | 3,768                           | B1 U0 G1                             | 2,865                           | B0 U0 G1                             | 3,843                           | B1 U0 G1                             | 1,230                           | B0 U0 G1                             |
| 06                                | 4,628                           | B1 U0 G1                             | 5,588                           | B1 U0 G1                             | 4,248                           | B1 U0 G1                             | 5,698                           | B1 U0 G2                             | 1,824                           | B0 U0 G1                             |
| 08                                | 6,170                           | B1 U0 G2                             | 7,450                           | B1 U0 G2                             | 5,664                           | B1 U0 G2                             | 7,598                           | B1 U0 G2                             | 2,431                           | B0 U0 G1                             |
| 10                                | 7,695                           | B1 U0 G2                             | 9,291                           | B1 U0 G2                             | 7,063                           | B1 U0 G2                             | 9,475                           | B1 U0 G2                             | 3,032                           | B1 U0 G1                             |
| 12                                | 9,233                           | B1 U0 G2                             | 11,149                          | B1 U0 G2                             | 8,476                           | B1 U0 G2                             | 11,370                          | B1 U0 G2                             | 3,638                           | B1 U0 G1                             |
| 525mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 4,434                           | B1 U0 G1                             | 5,348                           | B1 U0 G1                             | 4,070                           | B1 U0 G1                             | 5,460                           | B1 U0 G1                             | N/A                             |                                      |
| 06                                | 6,575                           | B1 U0 G2                             | 7,930                           | B1 U0 G2                             | 6,035                           | B1 U0 G2                             | 8,096                           | B1 U0 G2                             | N/A                             |                                      |
| 08                                | 8,766                           | B1 U0 G2                             | 10,573                          | B1 U0 G2                             | 8,047                           | B1 U0 G2                             | 10,794                          | B1 U0 G2                             | N/A                             |                                      |
| 10                                | 10,932                          | B1 U0 G2                             | 13,185                          | B1 U0 G2                             | 10,034                          | B1 U0 G2                             | 13,461                          | B2 U0 G2                             | N/A                             |                                      |
| 12                                | 13,118                          | B1 U0 G2                             | 15,821                          | B2 U0 G3                             | 12,041                          | B1 U0 G2                             | 16,153                          | B2 U0 G3                             | N/A                             |                                      |
| 700mA                             |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                | 5,230                           | B1 U0 G1                             | 6,311                           | B1 U0 G2                             | 4,801                           | B1 U0 G1                             | 6,440                           | B1 U0 G2                             | N/A                             |                                      |
| 06                                | 7,755                           | B1 U0 G2                             | 9,359                           | B1 U0 G2                             | 7,119                           | B1 U0 G2                             | 9,549                           | B1 U0 G2                             | N/A                             |                                      |

\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

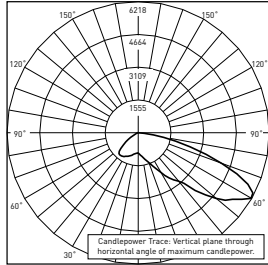
\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>.

## THE EDGE® LED Area Luminaire – Round

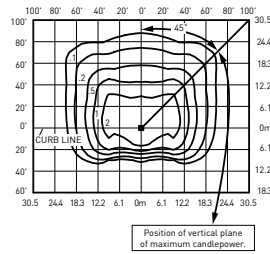
### Photometry

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#### 4MP



RESTL Test Report #: PL10097-003B  
ARE-EDG-4MP-\*\*-06-E-UL-525-40K  
Initial Delivered Lumens: 9,410



ARE-EDR-4MP-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 15,458  
Initial FC at grade

| Type IV Medium Distribution w/Partial BLS |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|-------------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)                        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 3,659                           | B1 U0 G1                             | 4,418                           | B1 U0 G1                             | 3,359                           | B1 U0 G1                             | 4,505                           | B1 U0 G1                             | 1,442                           | B1 U0 G1                             |
| 06                                        | 5,426                           | B1 U0 G1                             | 6,551                           | B2 U0 G1                             | 4,980                           | B1 U0 G1                             | 6,681                           | B2 U0 G1                             | 2,138                           | B1 U0 G1                             |
| 08                                        | 7,234                           | B2 U0 G2                             | 8,735                           | B2 U0 G2                             | 6,640                           | B2 U0 G1                             | 8,908                           | B2 U0 G2                             | 2,851                           | B1 U0 G1                             |
| 10                                        | 9,021                           | B2 U0 G2                             | 10,892                          | B2 U0 G2                             | 8,281                           | B2 U0 G2                             | 11,108                          | B2 U0 G2                             | 3,555                           | B1 U0 G1                             |
| 12                                        | 10,825                          | B2 U0 G2                             | 13,071                          | B2 U0 G2                             | 9,937                           | B2 U0 G2                             | 13,330                          | B2 U0 G2                             | 4,266                           | B1 U0 G1                             |
| 525mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 5,198                           | B1 U0 G1                             | 6,270                           | B2 U0 G1                             | 4,772                           | B1 U0 G1                             | 6,401                           | B2 U0 G1                             | N/A                             |                                      |
| 06                                        | 7,708                           | B2 U0 G2                             | 9,297                           | B2 U0 G2                             | 7,076                           | B2 U0 G2                             | 9,492                           | B2 U0 G2                             | N/A                             |                                      |
| 08                                        | 10,278                          | B2 U0 G2                             | 12,396                          | B2 U0 G2                             | 9,434                           | B2 U0 G2                             | 12,656                          | B2 U0 G2                             | N/A                             |                                      |
| 10                                        | 12,817                          | B2 U0 G2                             | 15,458                          | B3 U0 G2                             | 11,764                          | B2 U0 G2                             | 15,782                          | B3 U0 G2                             | N/A                             |                                      |
| 12                                        | 15,380                          | B3 U0 G2                             | 18,549                          | B3 U0 G2                             | 14,117                          | B2 U0 G2                             | 18,938                          | B3 U0 G3                             | N/A                             |                                      |
| 700mA                                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                                        | 6,132                           | B2 U0 G1                             | 7,400                           | B2 U0 G2                             | 5,628                           | B1 U0 G1                             | 7,550                           | B2 U0 G2                             | N/A                             |                                      |
| 06                                        | 9,092                           | B2 U0 G2                             | 10,973                          | B2 U0 G2                             | 8,346                           | B2 U0 G2                             | 11,196                          | B2 U0 G2                             | N/A                             |                                      |

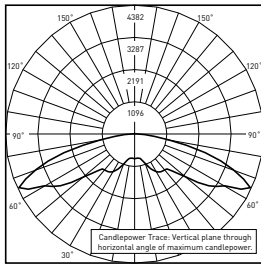
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

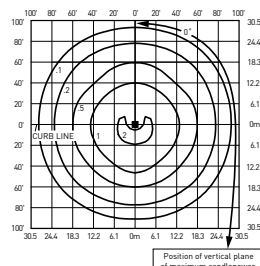
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

### 5M



RESTL Test Report #: PL09285-001  
ARE-EDG-5M-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 13,136



ARE-EDR-5M-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 18,413  
Initial FC at grade

| Type V Medium Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|----------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)         | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                            | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                         | 4,358                           | B3 U0 G1                             | 5,262                           | B3 U0 G1                             | 4,001                           | B2 U0 G1                             | 5,367                           | B3 U0 G1                             | 1,717                           | B1 U0 G1                             |
| 06                         | 6,463                           | B3 U0 G1                             | 7,804                           | B3 U0 G2                             | 5,932                           | B3 U0 G1                             | 7,958                           | B3 U0 G2                             | 2,547                           | B2 U0 G1                             |
| 08                         | 8,617                           | B3 U0 G2                             | 10,405                          | B4 U0 G2                             | 7,910                           | B3 U0 G2                             | 10,611                          | B4 U0 G2                             | 3,395                           | B2 U0 G1                             |
| 10                         | 10,746                          | B4 U0 G2                             | 12,975                          | B4 U0 G2                             | 9,864                           | B3 U0 G2                             | 13,232                          | B4 U0 G2                             | 4,234                           | B3 U0 G1                             |
| 12                         | 12,895                          | B4 U0 G2                             | 15,570                          | B4 U0 G3                             | 11,836                          | B4 U0 G2                             | 15,878                          | B4 U0 G3                             | 5,081                           | B3 U0 G1                             |
| 525mA                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                         | 6,192                           | B3 U0 G1                             | 7,468                           | B3 U0 G2                             | 5,684                           | B3 U0 G1                             | 7,625                           | B3 U0 G2                             | N/A                             |                                      |
| 06                         | 9,182                           | B3 U0 G2                             | 11,074                          | B4 U0 G2                             | 8,428                           | B3 U0 G2                             | 11,306                          | B4 U0 G2                             | N/A                             |                                      |
| 08                         | 12,243                          | B4 U0 G2                             | 14,766                          | B4 U0 G2                             | 11,238                          | B4 U0 G2                             | 15,075                          | B4 U0 G3                             | N/A                             |                                      |
| 10                         | 15,267                          | B4 U0 G3                             | 18,413                          | B4 U0 G3                             | 14,014                          | B4 U0 G2                             | 18,799                          | B4 U0 G3                             | N/A                             |                                      |
| 12                         | 18,320                          | B4 U0 G3                             | 22,096                          | B5 U0 G3                             | 16,816                          | B4 U0 G3                             | 22,558                          | B5 U0 G3                             | N/A                             |                                      |
| 700mA                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                         | 7,304                           | B3 U0 G2                             | 8,814                           | B3 U0 G2                             | 6,704                           | B3 U0 G2                             | 8,993                           | B3 U0 G2                             | N/A                             |                                      |
| 06                         | 10,831                          | B4 U0 G2                             | 13,070                          | B4 U0 G2                             | 9,941                           | B3 U0 G2                             | 13,336                          | B4 U0 G2                             | N/A                             |                                      |

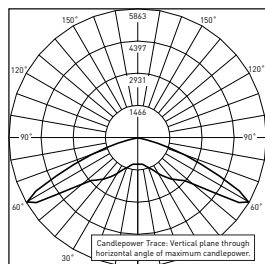
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

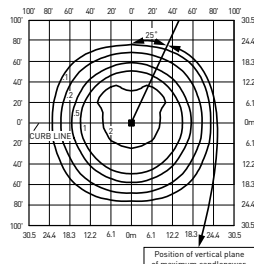
## Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: <https://www.creelighting.com/products/outdoor/area/the-edge-round-series/>

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RESTL Test Report #: PL09286-001A  
ARE-EDG-5S-\*\*-06-E-UL-700-40K  
Initial Delivered Lumens: 14,123



ARE-EDR-5S-\*\*-10-E-UL-525-40K  
Mounting Height: 25' (7.6m) A.F.G.  
Initial Delivered Lumens: 20,459  
Initial FC at grade

| Type V Short Distribution |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
|---------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|
| LED Count<br>(x10)        | 3000K                           |                                      | 4000K                           |                                      | 5000K                           |                                      | 5700K                           |                                      | TRL                             |                                      |
|                           | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 | Initial<br>Delivered<br>Lumens* | BUG<br>Ratings**<br>Per TM-<br>15-20 |
| 350mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                        | 4,843                           | B2 U0 G1                             | 5,847                           | B3 U0 G1                             | 4,445                           | B2 U0 G1                             | 5,963                           | B3 U0 G1                             | 1,908                           | B1 U0 G0                             |
| 06                        | 7,181                           | B3 U0 G1                             | 8,671                           | B3 U0 G1                             | 6,592                           | B3 U0 G1                             | 8,842                           | B3 U0 G1                             | 2,830                           | B2 U0 G0                             |
| 08                        | 9,575                           | B3 U0 G1                             | 11,561                          | B3 U0 G2                             | 8,789                           | B3 U0 G1                             | 11,790                          | B3 U0 G2                             | 3,773                           | B2 U0 G1                             |
| 10                        | 11,940                          | B3 U0 G2                             | 14,416                          | B4 U0 G2                             | 10,960                          | B3 U0 G2                             | 14,702                          | B4 U0 G2                             | 4,705                           | B2 U0 G1                             |
| 12                        | 14,328                          | B4 U0 G2                             | 17,300                          | B4 U0 G2                             | 13,152                          | B3 U0 G2                             | 17,642                          | B4 U0 G2                             | 5,646                           | B3 U0 G1                             |
| 525mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                        | 6,880                           | B3 U0 G1                             | 8,298                           | B3 U0 G1                             | 6,315                           | B3 U0 G1                             | 8,472                           | B3 U0 G1                             | N/A                             |                                      |
| 06                        | 10,202                          | B3 U0 G2                             | 12,305                          | B3 U0 G2                             | 9,365                           | B3 U0 G1                             | 12,563                          | B3 U0 G2                             | N/A                             |                                      |
| 08                        | 13,603                          | B3 U0 G2                             | 16,406                          | B4 U0 G2                             | 12,486                          | B3 U0 G2                             | 16,750                          | B4 U0 G2                             | N/A                             |                                      |
| 10                        | 16,963                          | B4 U0 G2                             | 20,459                          | B4 U0 G2                             | 15,571                          | B4 U0 G2                             | 20,887                          | B4 U0 G2                             | N/A                             |                                      |
| 12                        | 20,356                          | B4 U0 G2                             | 24,551                          | B4 U0 G2                             | 18,685                          | B4 U0 G2                             | 25,065                          | B4 U0 G2                             | N/A                             |                                      |
| 700mA                     |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |                                 |                                      |
| 04                        | 8,115                           | B3 U0 G1                             | 9,793                           | B3 U0 G1                             | 7,449                           | B3 U0 G1                             | 9,993                           | B3 U0 G2                             | N/A                             |                                      |
| 06                        | 12,034                          | B3 U0 G2                             | 14,523                          | B4 U0 G2                             | 11,046                          | B3 U0 G2                             | 14,818                          | B4 U0 G2                             | N/A                             |                                      |

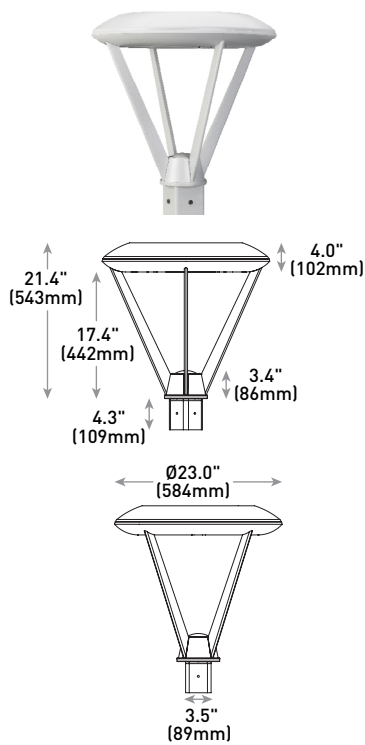
\* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

\*\* For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>

Luminaire EPA

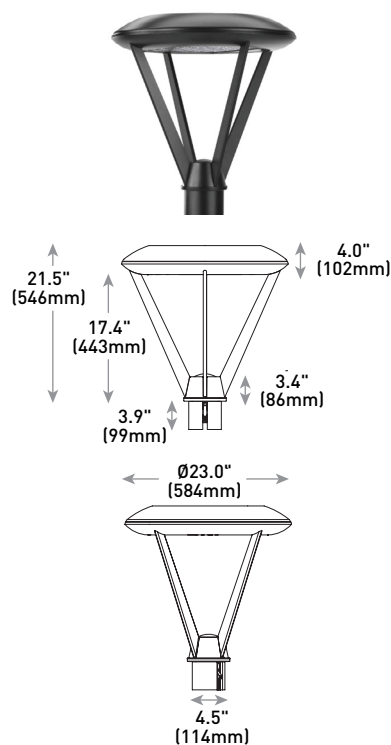
| Post Top Mount – ARE-EDR-R3/R4/R5 |           |              |
|-----------------------------------|-----------|--------------|
| LED Count (x10)                   | Single R3 | Single R4/R5 |
| 04                                | 1.81      | 1.67         |
| 06                                | 1.81      | 1.67         |
| 08                                | 1.81      | 1.67         |
| 10                                | 1.81      | 1.67         |
| 12                                | 1.81      | 1.67         |

R4 Mount  
- Fits inside 4" Square Pole



| LED Count (x10) | Weight             |
|-----------------|--------------------|
| 04              | 36.2 lbs. (16.4kg) |
| 06              | 37.6 lbs. (17.0kg) |
| 08              | 39.3 lbs. (17.8kg) |
| 10              | 43.0 lbs. (19.5kg) |
| 12              | 44.8 lbs. (20.3kg) |

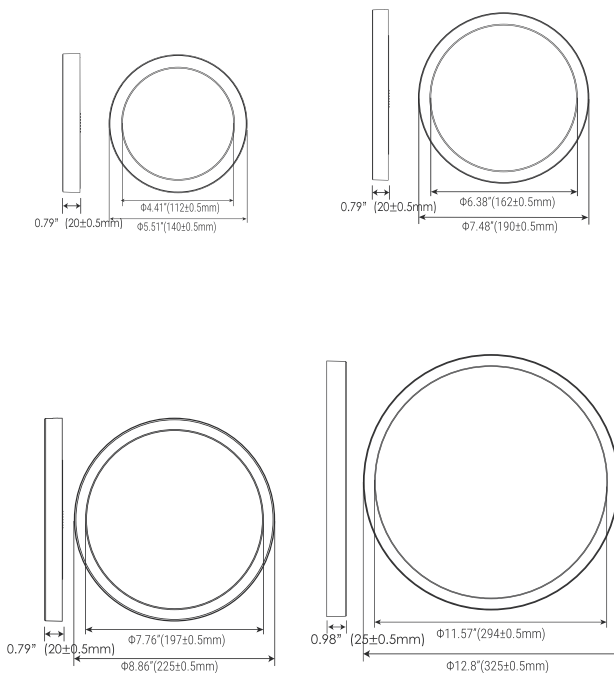
R5 Mount  
- Fits inside 5" Round Pole



| LED Count (x10) | Weight             |
|-----------------|--------------------|
| 04              | 33.3 lbs. (15.1kg) |
| 06              | 34.6 lbs. (15.7kg) |
| 08              | 36.4 lbs. (16.5kg) |
| 10              | 40.1 lbs. (18.2kg) |
| 12              | 41.9 lbs. (19.0kg) |

Replacement Kits

Light Bars & Driver Replacement Kits  
- To ensure compatibility, please consult factory.

**CSP4 Series**FIXTURE TYPE:  
PROJECT NAME:  
LOCATION:  
DATE:**5CCT LED FLUSH MOUNT DOWNLIGHT****13inch****9inch****7inch****5inch****Dimensions****Specification**

|                               |                                          |
|-------------------------------|------------------------------------------|
| Material                      | Aluminum                                 |
| Lens                          | Polycarbonate Lens                       |
| Beam angle                    | 120 degree                               |
| Color Temp                    | 5CCT 2700K/3000K/3500K/4000K /5000K      |
| CRI                           | 90                                       |
| Input Voltage                 | 120V                                     |
| Installation                  | Flush Mount                              |
| Efficacy                      | Up to 90 lm/W                            |
| LED Life Span                 | 50,000 hours                             |
| Dimmable                      | Triac Dimming                            |
| Lumen Package                 | 5" 693lm/7" 1215lm/9" 1426lm /13" 2173lm |
| Warranty                      | 5 Years                                  |
| Ambient Operation Temperature | -20°C (-4°F) ~ 45° C(113°F)              |
| Listing                       | ETL, Wet Location, Energy Star           |



|               |  |
|---------------|--|
| FIXTURE TYPE: |  |
| PROJECT NAME: |  |
| LOCATION:     |  |
| DATE:         |  |

## 5CCT LED FLUSH MOUNT DOWNLIGHT

### Features

- Ultra-bright LED flush mount downlights available in 5", 7", 9", and 13" sizes for versatile lighting solutions.
- Wet location suitable. Designed to withstand moisture and water exposure, making it ideal for outdoor spaces, bathrooms, kitchens, and other moisture-prone areas.
- With a sleek 0.79/0.98(13") inch thickness, this light is not only stylish but also incredibly energy-efficient, offering a remarkable 80% more energy savings compared to traditional halogen lamps.
- Equipped with high-quality LEDs, this downlight provides brilliant lighting, make it ideal for both residential and commercial space.
- Design for easy flush mount installation, this downlight is suitable for J-box with a diameter of 2.75 inch or 3.5 inch, ensuring a hassle-free installation process.
- 5CCT color temperatures adjustable, allowing you to adjust the color temperatures according to your preference and create the perfect ambiance for any occasion.
- Optional brushed nickel or black color rings easily clip on for a customizable look to match any application.

### Ordering Guide Example: CSP4-5IN10W-5CCT

| Fixture Type | Size & Wattage                                                                                                               | Color Temp                   | Voltage         |
|--------------|------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------|
| CSP4         | 5IN10W<br>= 5 Inch 10Watt<br><br>7IN15W<br>= 7 Inch 15Watt<br><br>9IN18W<br>= 9Inch 18Watt<br><br>13IN24W<br>= 13Inch 24Watt | 5CCT<br>=27K/30K/35K/40K/50K | Blank<br>= 120V |

### Optional Accessories

#### <sup>1</sup>Color Trim

|                                 |                                        |
|---------------------------------|----------------------------------------|
| CSP4-7IN-BK<br>=7" Black trim   | CSP4-7IN-BN<br>=7" Brush Nickel trim   |
| CSP4-9IN-BK<br>=9" Black trim   | CSP4-9IN-BN<br>=9" Brush Nickel trim   |
| CSP4-13IN-BK<br>=13" Black trim | CSP4-13IN-BN<br>=13" Brush Nickel trim |

Note:1: Black and brush nickel trim only available for 7: ", 9" and 13".

## CSP4 Series

FIXTURE TYPE:   
 PROJECT NAME:   
 LOCATION:   
 DATE:

### 5CCT LED FLUSH MOUNT DOWNLIGHT

## Performance Data

| 5inch   | 2700K | 3000K | 3500K | 4000K | 5000K |
|---------|-------|-------|-------|-------|-------|
| WATTAGE | LUMEN | LUMEN | LUMEN | LUMEN | LUMEN |
| 10W     | 668lm | 671lm | 688lm | 710lm | 693lm |

| 7inch   | 2700K  | 3000K  | 3500K  | 4000K  | 5000K  |
|---------|--------|--------|--------|--------|--------|
| WATTAGE | LUMEN  | LUMEN  | LUMEN  | LUMEN  | LUMEN  |
| 15W     | 1186lm | 1201lm | 1223lm | 1241lm | 1215lm |

| 9inch   | 2700K  | 3000K  | 3500K  | 4000K  | 5000K  |
|---------|--------|--------|--------|--------|--------|
| WATTAGE | LUMEN  | LUMEN  | LUMEN  | LUMEN  | LUMEN  |
| 18W     | 1389lm | 1409lm | 1437lm | 1460lm | 1426lm |

| 13inch  | 2700K  | 3000K  | 3500K  | 4000K  | 5000K  |
|---------|--------|--------|--------|--------|--------|
| WATTAGE | LUMEN  | LUMEN  | LUMEN  | LUMEN  | LUMEN  |
| 24W     | 1917lm | 2159lm | 2159lm | 2205lm | 2173lm |

## 5CCT LED FLUSH MOUNT DOWNLIGHT

### Installation

#### INSTALLATION STEPS



1. Remove the bracket from the fixture by twisting in anticlockwise direction, see Fig1.



2. Refer to the hole position on the bracket and do the matching to J-Box. Attach them with screws, see Fig2.



3. Connect supply wires to wires on fixture/bracket with wire nuts. Attach white to white, black to black, and copper wire to green wire as grounding connection, select lamp color desired with the CCT switch, see Fig3.



4. Arrange the wires into the J-Box. Align the 2 screw points on fixture to the wider side of long holes on the bracket, twist in clockwise direction until fixing stable. Turn on the power after installation, check the fixture can work well, see Fig4.

### Accessories



Black Trim



Brush Nickel Trim



# MIST

## 1225BZ

### LARGE WALL MOUNT LANTERN

The sleek design of the Mist collection discreetly emphasizes its contemporary heritage. Featuring a prominent interior panel of clear seeded glass captured on both ends and encased in a protective clear acrylic cylinder. Its solid aluminum construction is underscored by bold Satin Black, Bronze or Titanium finish options. Mist is both Dark Sky and ADA compliant.

| DETAILS   |                                                           |
|-----------|-----------------------------------------------------------|
| FINISH:   | Bronze                                                    |
| MATERIAL: | Aluminum                                                  |
| GLASS:    | Clear Acrylic Outside Cylinder & Seedy Glass Inside Panel |
| DIMMABLE: | YES - WITH DIMMABLE LAMP (NOT INCLUDED)                   |

| DIMENSIONS     |           |
|----------------|-----------|
| WIDTH:         | 4.8"      |
| HEIGHT:        | 28.5"     |
| WEIGHT:        | 6lb       |
| BACK PLATE:    | 4.75" Sq. |
| EXTENSION:     | 4"        |
| TOP TO OUTLET: | 14.25"    |

| LIGHT SOURCE  |                           |
|---------------|---------------------------|
| LIGHT SOURCE: | Socketed                  |
| WATTAGE:      | 1-7w GU10 LED, 50w Equiv. |
| VOLTAGE:      | 120v                      |

| SHIPPING       |      |
|----------------|------|
| CARTON LENGTH: | 8    |
| CARTON WIDTH:  | 8    |
| CARTON HEIGHT: | 32.5 |
| CARTON WEIGHT: | 7    |



PRODUCT DETAILS:

- Aluminum material ensures this piece can withstand strenuous outdoor conditions
- For LED lamping, a 6.5w GU10 LED bulb is recommended: GU10LED-3K
- Wet Rated
- Mounted at a point of entry, wall mount lights provide safety and security with a welcoming element
- Outdoor finishes carry a 2-year warranty
- ADA compliant design provides added accessibility and maximum clearance
- Bold lines and a clean, minimalist style complement contemporary architecture
- Invisimount hardware is hidden on the backplate for a clean silhouette



## 100 SERIES



**A MODERN LOOK  
THAT'S EASY ON THE BUDGET**



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For warranty information, visit [andersenwindows.com/warranty](https://andersenwindows.com/warranty).



Throughout this product guide, when you see the arrow icon, click for more information.



Andersen Corporation, including its subsidiaries, has been named a 2023 ENERGY STAR® Partner of the Year – Sustained Excellence Award winner, the highest honor given by ENERGY STAR, for continued leadership in protecting the environment through superior energy efficiency achievements.



“ENERGY STAR” is a registered trademark of the U.S. Environmental Protection Agency.



# AMERICA'S MOST LOVED BRAND OF WINDOWS & DOORS\*

You want to give your customers a home they love, and we're here to make that easy for you. That's why we're proud to offer you products that rate #1 in quality and performance,\*\* and to be the #1 trusted and recommended window and door brand\*\* by pros.

## 100 SERIES PRODUCTS

The best way to give your customers a modern look that's within budget and lasts†. The 100 Series product line is made from our proprietary Fibrex® material that's energy efficient, environmentally responsible and stronger than vinyl.

\*2022 Andersen brand surveys of U.S. realtors, contractors, builders and homeowners.

\*\*2022 Andersen brand surveys of U.S. contractors, builders, architects and homeowners.

†Visit [andersenwindows.com/warranty](https://andersenwindows.com/warranty) for details.

# PERFORMANCE

100 Series products simply perform like modern windows and doors should. They're made from our proprietary Fibrex® material, which is extremely low maintenance and blocks thermal transfer 700 times better than aluminum to help your customers save money on heating and cooling costs.

## ATTRACTIVE CORNER SEAMS

Low-visibility corner seams for a cleaner and more modern look.

## COLORS THAT LAST

Durable factory-finished interiors and exteriors never need painting and won't fade, flake, blister or peel,\* even in extreme cold or heat.

## ATTRACTIVE MATTE INTERIORS

Premium matte finish isn't shiny like vinyl and is available in white, Sandtone, dark bronze and black.\*\*

## ENERGY EFFICIENT IN EVERY CLIMATE

Energy-efficient 100 Series products are available with options that make them ENERGY STAR® v. 7.0 certified throughout the U.S. so they can help reduce heating and cooling bills.

Visit [andersenwindows.com/energystar](http://andersenwindows.com/energystar) for more information and to verify that the product with your glass option is certified in your area.



## DESIGNED FOR PERFORMANCE

100 Series products are designed to meet or exceed performance requirements in all 50 states†. See pages 112-113 for details.

**PG50**<sup>††</sup>

**PERFORMANCE**  
OPTIONAL PERFORMANCE UPGRADE  
100SHS4066 PGUP +50/-50  
(AAMA/WDMA/CSA 101/I.S.2/A440-08 & -11)

## EASY TO OPERATE FOR YEARS TO COME

All 100 Series products are tested to the extreme to deliver years\* of smooth, reliable operation.

## SUPERIOR WEATHER RESISTANCE

Our weather-resistant construction seals out drafts, wind and water so well that your reputation is protected whatever the weather.

## QUALITY SO SOLID, THE WARRANTY IS TRANSFERABLE\*

Many other window and door warranties end when a home is sold, but our coverage – 20 years on glass, 10 years on non-glass parts – transfers from each owner to the next. And because it's not prorated, the coverage offers full benefits year after year, owner after owner. So it can add real value when you decide to sell your home.

**OWNER2OWNER®**  
**LIMITED WARRANTY**

\*Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) for details.

\*\*Products with Sandtone, dark bronze and black interiors have matching exteriors.

†See your local code official for code requirements in your area.

††100SHS4066 PGUP +50/-50 (AAMA/WDMA/CSA 101/I.S.2/A440-08 & -11). Optional PG50 performance grade upgrade is available for most sizes. For more information, visit [andersenwindows.com/100series](http://andersenwindows.com/100series).

"ENERGY STAR" is a registered trademark of the U.S. Environmental Protection Agency.



# DURABILITY

Think vinyl, only stronger. The proprietary Fibrex® material in our 100 Series products has all the benefits of vinyl while holding up better to weather and wear. This way your customers' windows and doors are better protected from warping and cracking, even in tough climates\*.



The finish on 100 Series products has superior scratch resistance compared to painted vinyl windows\*\* so they'll look beautiful for years to come.



Fibrex material retains its stability and rigidity in all climates, delivering exceptional durability. It makes our 100 Series products rigid and strong so the weathertight seals stay weathertight.



100 Series products can withstand temperatures up to 150°F, even for dark colors, meaning they won't warp due to sun exposure.

\*Visit [andersenwindows.com/warranty](https://andersenwindows.com/warranty) for details.

\*\*When 100 Series products were tested against five leading competitors' painted vinyl window products.



# FIBREX® MATERIAL

Developed by Andersen, Fibrex material is a revolutionary structural composite material that blends the very best attributes of vinyl and wood. Fibrex material saves on natural resources because it's composed of 40% reclaimed wood fiber by weight. Special polymer formulations surround and fill each wood fiber, enabling top performance. The result is a material that provides uncommon value and enhances the quality of any project. In use for over two decades in Andersen® products, Fibrex material has proven its strength and durability in all types of climates.

## REVOLUTIONARY BUILDING MATERIAL

- Twice as strong as vinyl so weathertight seals stay weathertight
- Blocks thermal transfer nearly 700 times better than aluminum to help reduce heating and cooling bills
- Retains its stability and rigidity in all climates for exceptional durability
- Offers superior scratch resistance compared to painted vinyl\*

## ENVIRONMENTALLY RESPONSIBLE

- Since Andersen developed the highly sustainable Fibrex material, reuse of waste wood fiber has prevented the harvesting of nearly 90 million board feet of timber
- 100 Series products can help builders earn LEED® points in three key categories: Energy & Atmosphere, Materials & Resources and Indoor Environmental Quality
- 100 Series products meet or exceed California Section 01350 Specification, a California indoor emission standard – one of the toughest in the country
- Like all Andersen products, 100 Series products are designed to last\*\* and help reduce future waste streams



See how Andersen created Fibrex material at [andersenwindows.com/fibrex](http://andersenwindows.com/fibrex).

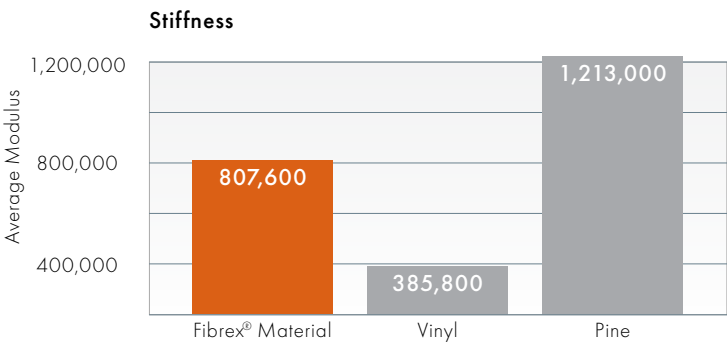


\*Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) for details.

\*\*When tested against five leading competitors' painted vinyl window products.

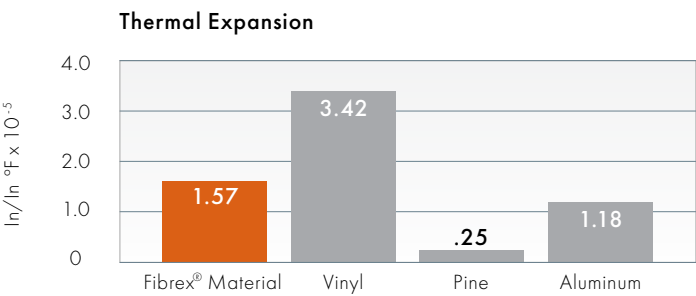
**STABLE & PREDICTABLE**

Fibrex® material is twice as stiff as vinyl. This strength makes it a better choice over time.



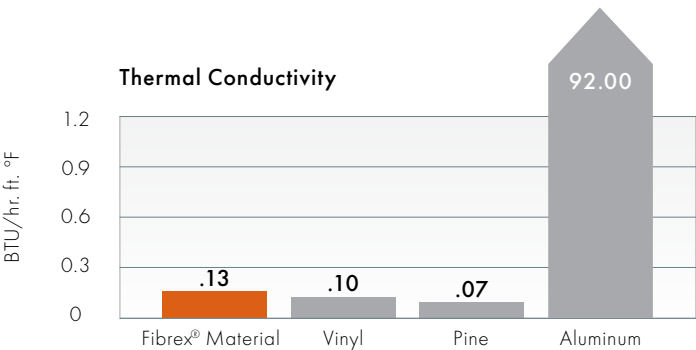
**DURABLE & RELIABLE**

All materials expand and contract when exposed to extreme temperatures. In these types of conditions, Fibrex material performs twice as well as vinyl, which can bow and crack over time.



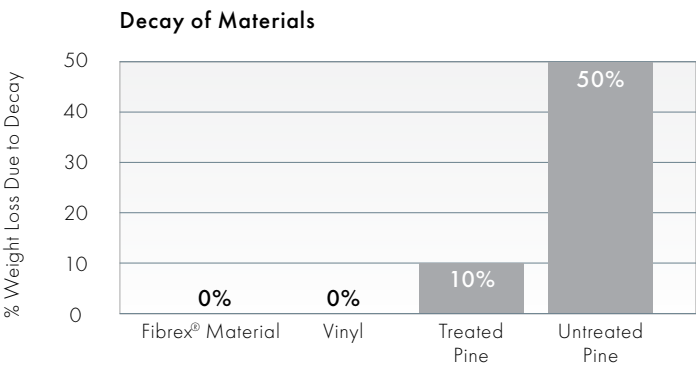
**EXCELLENT INSULATOR**

The built-in thermal qualities of Fibrex material mean that less heat and cold get transferred through the product into your customers’ homes. As an insulator, it’s on par with vinyl and far superior to aluminum.



**MOISTURE RESISTANT**

Because Fibrex material combines wood fiber and a special polymer formula, water has a tough time penetrating. The result is an increased resistance to rot.



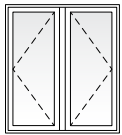
**HEAT RESISTANT**

Fibrex material can withstand temperatures in excess of 150°F, even for dark colors, making it a great fit for your projects in hot climates.

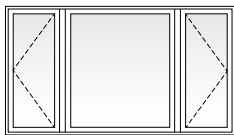
# WINDOW & DOOR TYPES

## CASEMENT & AWNING WINDOWS

Casement windows are hinged on the side and open outward to the left or right, while awning windows are hinged at the top and open outward. Both are also available as non-operating stationary windows.



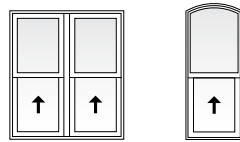
Twin Casement



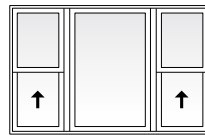
Picture With Flanking Casements

## SINGLE-HUNG WINDOWS

Single-hung windows feature a fixed upper sash with an operable lower sash that slides up and down. For convenience, the hardware locks automatically when the window is closed. An arch single-hung is also available to add architectural interest.



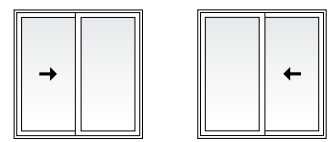
Twin Single-Hung Arch Single-Hung



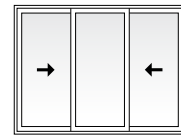
Picture With Flanking Single-Hungs

## GLIDING WINDOWS

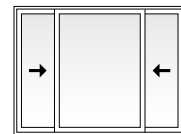
Gliding windows have one stationary sash and one operating sash that glides horizontally. A three-sash configuration, where two sash glide past a fixed center sash, is also available.



Gliding Active-Stationary Gliding Stationary-Active



Gliding Active-Stationary-Active, 1:1:1 Sash Ratio



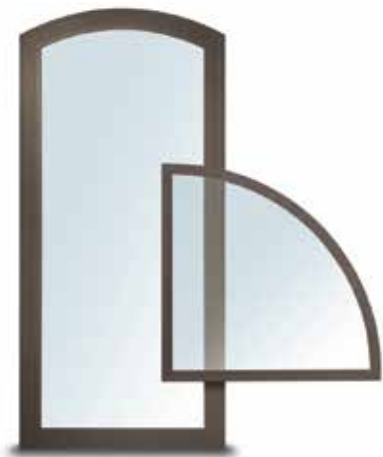
Gliding Active-Stationary-Active, 1:2:1 Sash Ratio



Available in custom sizes to fit all projects.

### PICTURE, TRANSOM & SPECIALTY WINDOWS

Choose from a variety of shapes to make a signature statement or provide a delicate lighting accent. Shapes include picture, transom, half circle, quarter circle, circle, Springline™ and arch windows. Custom shapes are also available, including unequal leg arch, trapezoid, pentagon, octagon and triangle windows.



### GLIDING PATIO DOORS

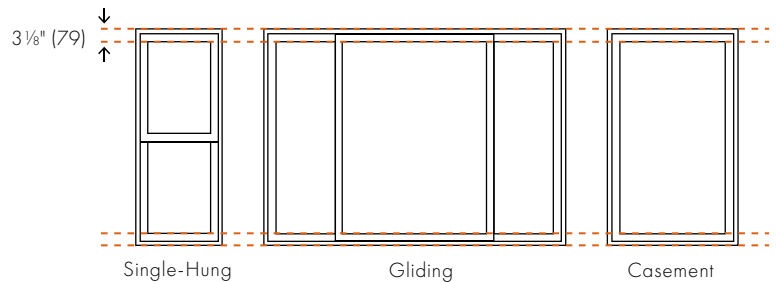
Patio doors feature one stationary panel and one operating panel that glides smoothly on adjustable rollers. They feature a multi-point locking system for enhanced security and an optional exterior keyed lock for convenience. Sidelights and transoms are also available.



# WINDOW FRAME OPTIONS

You'll find a 100 Series window to match any project from commercial to residential, no matter the location. And with uniform sight lines, it's easy to specify 100 Series products for the entire project. Additionally, 100 Series window frame options offer the flexibility needed to complete everything from new construction to home improvement, and they're available in 1/8" (3) increments when custom sizing is required.

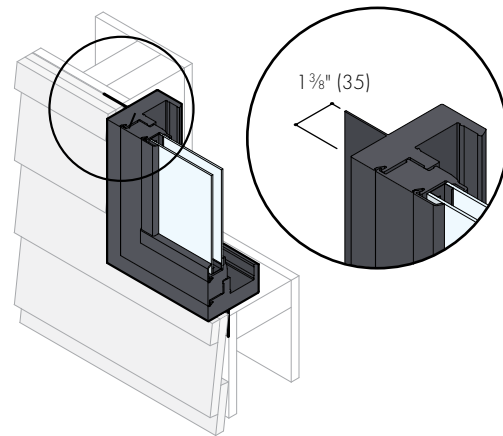
- 3 1/8" (79) uniform sight lines allow for easy specification
- An extension jamb attachment flange is available for easy application of extension jambs on the job site
- Single-hung drywall pass-through windows have an upper sash that can be easily removed on the job site after the window is installed\*. With both sash removed, drywall can easily fit through upper-floor windows.



## NEW CONSTRUCTION WINDOW FRAME OPTIONS

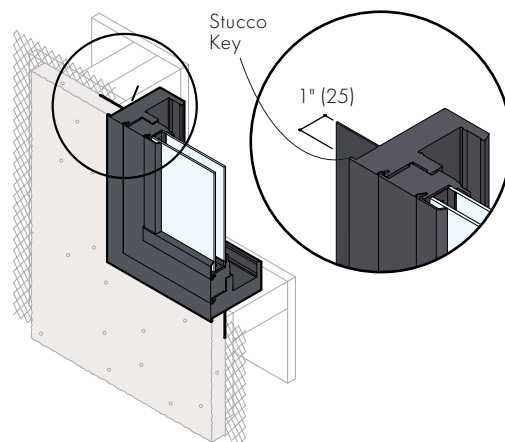
### 1 3/8" (35) Flange Setback

- Designed for new construction
- Integral installation flange makes installation into a new opening easy and helps make sure the windows and doors are weathertight



### 1" (25) Flange Setback With Stucco Key

- For new construction with stucco exteriors
- Stucco key eliminates gaps that can result from the natural contraction of the exterior stucco
- Integral installation flange makes installation into a new opening easy and helps make sure the windows and doors are weathertight



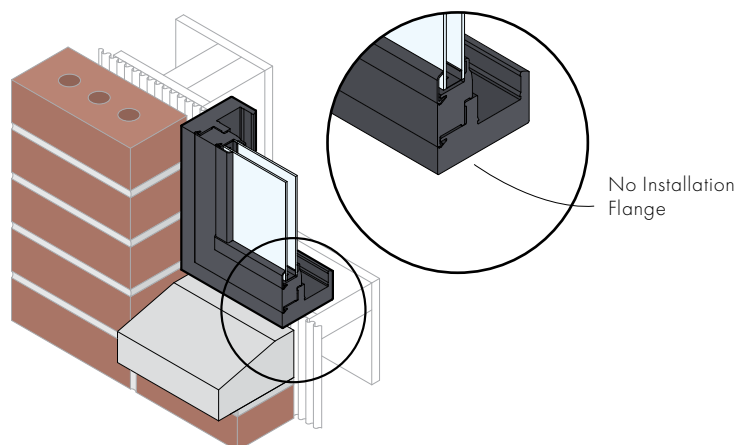
\*Optional drywall pass-through window is not available with flush fin frame.  
Dimensions in parentheses are in millimeters.



## REPLACEMENT WINDOW FRAME OPTIONS

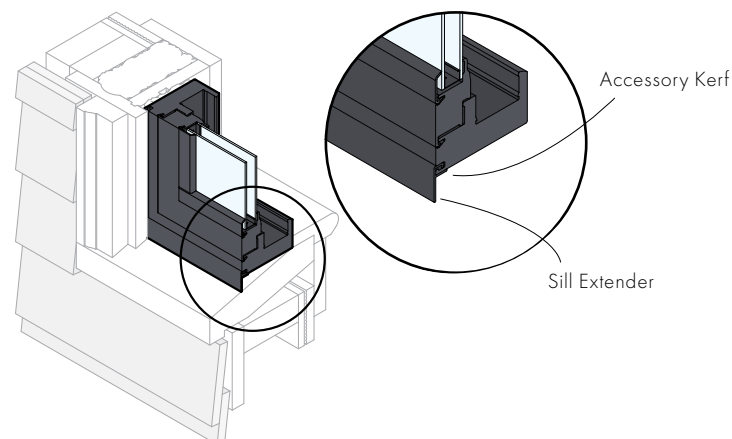
### No Flange Frame

- Allows for full removal of an existing window when the existing frame is rotten or damaged
- Installed into the existing rough opening
- Includes pre-drilled, through-the-jamb installation holes and installation screws to save you time



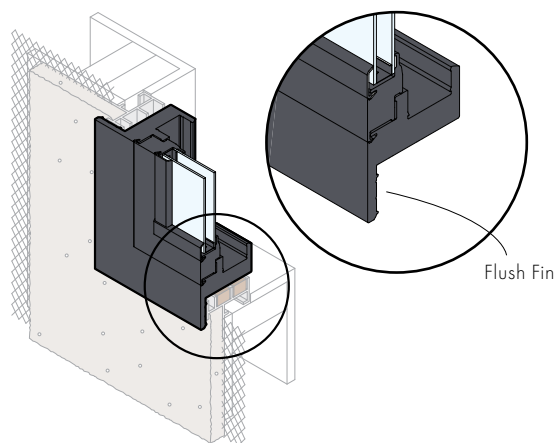
### Insert Frame

- Provides fast and easy window replacement when installing into an existing window frame
- Saves time and money with minimal disruption to the interior or exterior trim
- Exterior accessory kerf for convenient finishing of the window
- Installation accessories include an exterior sill extender to fill the gap at the sill (shown) in addition to exterior frame extender for sides and a head expander



### Flush Fin Frame **NEW!**

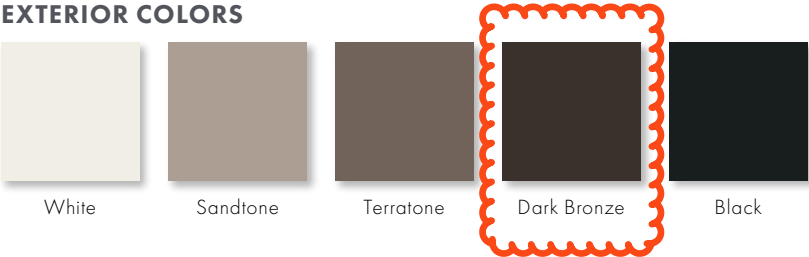
- Allows for easy replacement in stucco applications when installing over an existing aluminum window frame
- Minimizes disruption to the home's stucco exterior
- Flush fin has grooves at ½" (13) and 1" (25) for easy trimming
- Flat and curved interior trim is available to cover the existing window frame
- Available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.



# EXTERIORS & INTERIORS

100 Series windows and patio doors come in five exterior colors, including dark bronze and black – colors that are darker and richer than those of most vinyl windows. The interiors feature a premium matte finish for an attractive appearance.

## EXTERIOR COLORS



## INTERIOR COLORS



\*Products with Sandtone, dark bronze and black interiors have matching exteriors. Printing limitations prevent exact duplication of colors. See your Andersen supplier for actual color samples.





# HARDWARE

## Casement & Awning Windows



Antique Brass | Black | Dark Bronze  
Sandtone | **Satin Nickel** | White

Folding handles avoid interference with window treatments.

## Single-Hung & Gliding Windows



Standard Lock



Optional Lift/Pull

Hardware color matches the window's interior. Shown in white.  
Lock automatically engages when window is closed.



Optional Metal Slim Line Lock

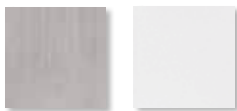
Antique Brass | Black | **Dark Bronze**  
Sandtone | **Satin Nickel** | White

Lock automatically engages when window is closed.

## WINDOW HARDWARE FINISHES



Antique Brass | Black | Dark Bronze | Sandtone



Satin Nickel | White

Bold name denotes color or finish shown.

\*Available for exterior handle only.  
Printing limitation prevent exact replication of colors and finishes.  
See your Andersen supplier for actual color and finish samples.

## Gliding Patio Doors



### TULSA

Standard Handle

Exterior handle color matches the door's exterior. Interior handle color matches the door's interior.  
Exterior handle shown in dark bronze. Interior handle shown in white.

Optional auxiliary foot lock is available.  
See page 100.

## TULSA HARDWARE FINISHES



Black | Dark Bronze | Sandtone | Terratone\* | White



### AFTON

Optional Handle

Antique Brass  
Black  
Bright Brass  
**Satin Nickel**

Optional auxiliary foot lock is available.  
See page 100.  
Bold name denotes color or finish shown.

## AFTON HARDWARE FINISHES



Antique Brass | Black | Bright Brass | Satin Nickel

100 SERIES

**UNIQUELY  
ANDERSEN,  
INCREDIBLY  
STRONG**



# GLASS

Andersen has the glass you need to get the performance you want, with options for every climate, project and customer. Check with your supplier for the selections that meet ENERGY STAR® requirements in your area.

| GLASS                            |                                                                                                     | ENERGY                                                      |                                                                                   | LIGHT                                                                          |                                                              |
|----------------------------------|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------------------------------------------------|
|                                  |                                                                                                     | U-Factor<br>How well a product prevents heat from escaping. | Solar Heat Gain Coefficient<br>How well a product blocks heat caused by sunlight. | Visible Light Transmittance<br>How much visible light comes through a product. | UV Protection<br>How well a product blocks ultraviolet rays. |
| SmartSun™                        | Thermal control similar to tinted glass, with visible light transmittance similar to Low-E glass.   | ● ● ● ○                                                     | ● ● ● ●                                                                           | ● ● ● ○                                                                        | ● ● ● ●                                                      |
| SmartSun with HeatLock® Coating  | Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values. | ● ● ● ●                                                     | ● ● ● ●                                                                           | ● ● ● ○                                                                        | ● ● ● ●                                                      |
| Low-E                            | Outstanding overall performance for climates where both heating and cooling costs are a concern.    | ● ● ● ○                                                     | ● ● ● ○                                                                           | ● ● ● ○                                                                        | ● ● ● ○                                                      |
| Low-E with HeatLock Coating      | Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values. | ● ● ● ●                                                     | ● ● ● ○                                                                           | ● ● ● ○                                                                        | ● ● ● ○                                                      |
| Sun                              | Outstanding thermal control in southern climates where less solar heat gain is desired.             | ● ● ● ○                                                     | ● ● ● ●                                                                           | ● ○ ○ ○                                                                        | ● ● ● ○                                                      |
| PassiveSun®                      | Ideal for northern, passive solar construction applications where solar heat gain is desired.       | ● ● ● ○                                                     | ● ○ ○ ○                                                                           | ● ● ● ●                                                                        | ● ● ○ ○                                                      |
| PassiveSun with HeatLock Coating | Applied to the room-side surface, it reflects heat back into the home and improves U-Factor values. | ● ● ● ●                                                     | ● ○ ○ ○                                                                           | ● ● ● ●                                                                        | ● ● ○ ○                                                      |
| Clear Dual-Pane                  | High visibility, with basic thermal performance.                                                    | ● ○ ○ ○                                                     | ○ ○ ○ ○                                                                           | ● ● ● ●                                                                        | ○ ○ ○ ○                                                      |

Center of glass performance only. Ratings based on glass options as of August 2023. Visit [andersenwindows.com/energystar](https://andersenwindows.com/energystar) for ENERGY STAR map and NFRC total unit performance data.

Triple-pane glass is now available for most casement, awning, picture & transom windows. Click for more information.



## HEATLOCK TECHNOLOGY

Applied to the room-side glass surface, HeatLock coating reflects heat back into the home for improved performance.

## TIME-SAVING FILM

We protect our products during delivery and construction with translucent film on the glass that peels away for a virtually spotless window.

For more details on our glass options, visit [andersenwindows.com/glass](https://andersenwindows.com/glass).



## ADDITIONAL GLASS OPTIONS

**Tempered safety glass** is standard on patio doors and required for larger window sizes.

**Patterned glass** lets in light while obscuring vision and adds a unique, decorative touch.



Cascade



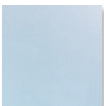
Fern



Obscure



Reed



Satin Etch

Cascade and Reed patterns are only available in a vertical orientation.

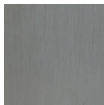
## GLASS SPACER OPTIONS

In addition to stainless steel glass spacers, black glass spacers are available as another way to customize project designs and achieve a contemporary style. Black glass spacers can blend in with the color of the window or door for a sleek design or serve as a shadow line.

Add full divided light grilles and the grille spacer bar between the glass will match.



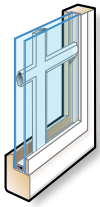
Black



Stainless Steel

# GRILLES

Grilles for 100 Series windows and patio doors are available in a wide variety of patterns to complement virtually any style of home. Plus, they have options for easy cleaning and architectural authenticity many vinyl windows can't match.



Finelight grilles-between-the-glass



Finelight grilles-between-the-glass with permanent exterior



Permanent exterior and permanent interior with spacer



Permanent exterior and permanent interior without spacer

## FINELIGHT™ GRILLES-BETWEEN-THE-GLASS

Make glass easy to clean and have an elegant, sculpted profile. Choose a two-sided color scheme to match both the interior and exterior of the window or patio door. Also available with exterior grilles to provide architectural style and detail.

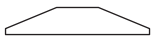
## FULL DIVIDED LIGHT

Permanently applied to the exterior and interior of the window, with a spacer between the glass.

## SIMULATED DIVIDED LIGHT

Permanently applied to the exterior and interior of the window, without a spacer between the glass.

### Grille Bar Widths Actual width shown.



¾" (19) width grille bar for windows.

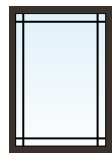


1" (25) width grille bar for patio doors.

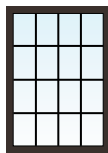


A 2 ¼" (57) width grille is available for most units to simulate a meeting rail or a multi-unit combination such as a transom over a window or patio door.

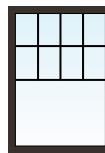
### Grille Patterns



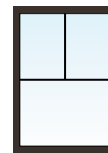
Prairie A



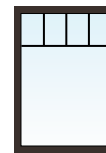
Colonial



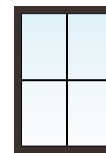
Modified Colonial



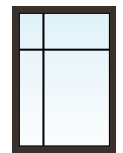
Tall Fractional



Short Fractional



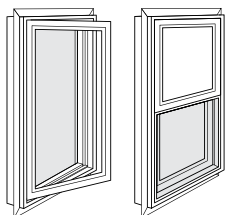
Specified Equal Light\*



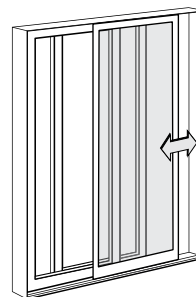
Custom

To see all of the standard patterns available for a specific window or door, refer to the detailed product sections in this product guide or contact your Andersen supplier.

# INSECT SCREENS



Insect screens for venting windows have a fiberglass screen mesh. Optional TruScene® insect screens are made with a micro-fine stainless steel mesh, providing more than 50% greater clarity than our conventional insect screens. Insect screen frames for casement and awning windows are color matched to the product interior and for single-hung and gliding windows are matched to the product exterior.



Gliding insect screens for two-panel gliding patio doors have a fiberglass screen mesh. Insect screen frames for doors are color matched to the product exterior.

\*Specify number of same-size rectangles across or down. Dimensions in parentheses are in millimeters.



A two-story house with dark green horizontal siding and white trim. The house has a gabled roof with a white fascia. On the second floor, there are two white-framed double-hung windows. On the first floor, there is a large white-framed triple window on the right and a red door on the left. The door has a white frame and a small transom window. A white porch with a railing and stairs leads to the door. A black metal fence is in the foreground. The house is flanked by brick buildings on either side.

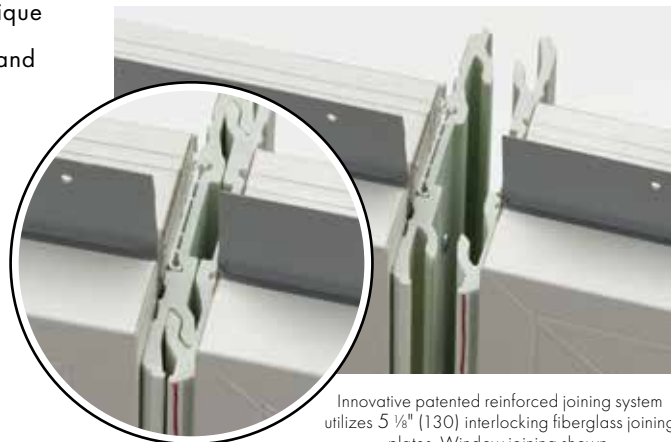
BUILDERS AGREE  
**WINDOWS MADE  
OF ANDERSEN'S  
FIBREX® COMPOSITE  
MATERIAL OUTPERFORM  
VINYL WINDOWS\***

\*2022 Andersen brand survey of U.S. builders.

# AN EASIER WAY TO BUILD BIGGER VIEWS

**NEW!**  
FOR PATIO DOORS

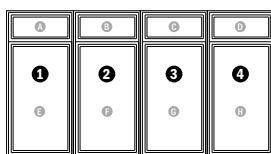
Now available for joining patio doors in addition to windows, our unique reinforced fiberglass joining system makes it easier for you to design and install large combinations in your projects. The Easy Connect Joining System uses strong fiberglass construction – for windows, choose from three options: fully assembled factory-joined combinations, partially assembled factory-prepped combinations or field join kits; patio doors use field join kits. For windows, non-reinforced joining options include factory-joined combinations or field join kits. For more information, visit [andersenwindows.com/joining](http://andersenwindows.com/joining).



Innovative patented reinforced joining system utilizes 5 1/8" (130) interlocking fiberglass joining plates. Window joining shown.

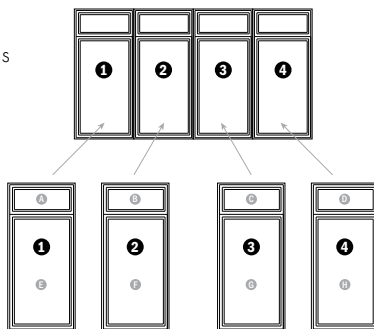
## Reinforced Factory-Joined Window Combinations

Eliminate the need for job site assembly and receive fully assembled, factory-joined window combinations to fit rough openings up to 12' (3658) x 8' (2438) or 8' (2438) x 12' (3658).

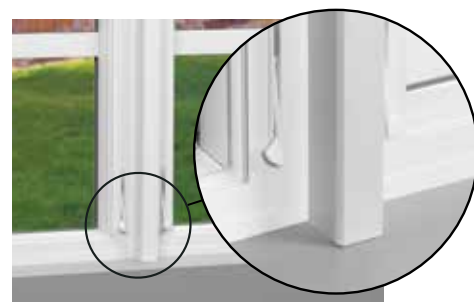


## Reinforced Factory-Prepped Window Combinations

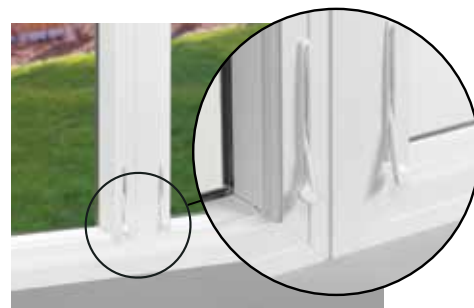
Receive lighter, easier-to-handle, pre-assembled smaller window combinations that join as you install them into the rough opening, making it easier to install large combinations. In fact, most contractors surveyed said they could reduce the number of installers by 50% using the Andersen® Easy Connect Joining System.\*



## Reinforced & Non-Reinforced Window Interiors



Appearance of a reinforced join.



Appearance of a non-reinforced join.

|                                                   | ASSEMBLY       | READY TO INSTALL | NUMBER OF INSTALLERS* | HALLMARK CERTIFIED** | TESTED TO AAMA 450 | PERFORMANCE                                                              | COMBINATION SIZE LIMITATIONS                                                                                  |
|---------------------------------------------------|----------------|------------------|-----------------------|----------------------|--------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| REINFORCED FACTORY-JOINED WINDOW COMBINATIONS     | FACTORY        | ●                | MORE                  | ●                    | ●                  | Extensive unit combination size options available certified to PG50**    | Maximum join length: 12'<br>Maximum combination: 12' x 8' or 8' x 12'<br>96 sq. ft. or 8.92 m <sup>2</sup>    |
| REINFORCED FACTORY-PREPARED WINDOW COMBINATIONS   | IN THE OPENING | ●                | FEWER                 | ●                    | ●                  | Extensive unit combination size options available certified to PG50**    | Maximum join length: 12'<br>Maximum combination height: 16"<br>No maximum width                               |
| REINFORCED FIELD JOIN KITS                        | JOB SITE       |                  | MORE                  | ●                    | ●                  | Extensive unit combination size options available certified to PG50**    | Maximum join length: 12'<br>Maximum combination: 16' x 9' or 12' x 12'<br>144 sq. ft. or 13.34 m <sup>2</sup> |
| NON-REINFORCED FACTORY-JOINED WINDOW COMBINATIONS | FACTORY        | ●                | MORE                  | ●                    | ●                  | Extensive unit combination size options available certified up to PG50** | Maximum join length: 8'<br>Maximum combination: 12' x 8' or 8' x 12'<br>96 sq. ft. or 8.92 m <sup>2</sup>     |
| NON-REINFORCED FIELD JOIN KITS                    | JOB SITE       |                  | MORE                  | ●                    | ●                  | Extensive unit combination size options available certified up to PG50** | Maximum join length: 8'<br>Maximum combination: 12' x 8' or 8' x 12'<br>96 sq. ft. or 8.92 m <sup>2</sup>     |

\*69% of 156 builders/general contractors in a 2018 survey said they could reduce the number of installers by half using the Easy Connect Joining System when comparing the installation of a 12' (3658) wide x 8' (2438) high pre-assembled window combination unit with four 3' (914) wide x 8' (2438) high window combination units.

\*\*Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.

Dimensions in parentheses are in millimeters.

Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.



## WINDOWS

### Casement

|                       |       |
|-----------------------|-------|
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### Single-Hung

|                       |                        |
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### Gliding

|                       |       |
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**CUSTOM SIZING**  
in 1/8" (3) increments 

Dimensions in parentheses are in millimeters.





## FEATURES

### CASEMENT & AWNING

#### FRAME

**A** Constructed with Fibrex® composite material. This construction produces a rigid frame. The durable, low-maintenance finish won't fade, flake, blister or peel.\*

Concealed receiving brackets mounted on the hinge side of the frame keep the sash tightly secured within the window frame when closed.

**B** See Common Features for frame options.

#### SASH

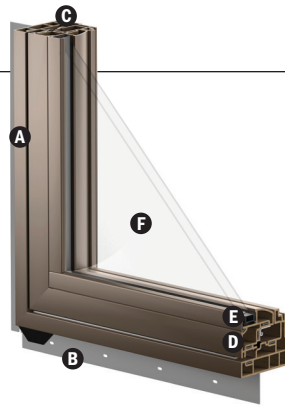
**C** Fibrex material construction provides long-lasting performance.† The sash, finished with a durable capping, provides maximum protection and a low-maintenance matte finish.

**D** The dual weatherstrip system combines both an exterior watershed design and a bulb weatherstrip seal between the sash and frame. The result is a long-lasting, energy-efficient barrier against wind, water and dust.

#### GLASS

**E** A glazing bead and silicone provide superior weathertightness and durability.

**F** See Common Features for glass options.



#### HARDWARE

Sash operator provides easy to operate opening and closing, regardless of window size. Long-lasting stainless steel hinge channels are used at the head and sill to provide easy operation.

#### Single-Action Casement Sash Lock

A single-action lock easily releases all concealed locking points on the casement sash. The color or finish of the lock hardware matches the handle.

#### Awning Sash Locks



Awning sash locks provide an added measure of security and weathertightness. The standard sash lock matches the window's interior color.

### SINGLE-HUNG

#### FRAME

**A** Constructed with Fibrex® composite material. This construction produces a rigid frame. The durable, low-maintenance finish won't fade, flake, blister or peel.\*

**B** A durable side-loaded balancer provides for easy sash opening and closing. The lower sash can be removed without the use of tools.

**C** Weep holes are located on the exterior nose of the sill for proper water management.

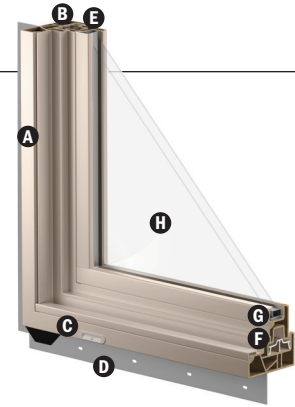
**D** See Common Features for frame options.

#### SASH

The lower sash has a meeting rail cover with a unique raised profile design, allowing the sash to be opened and closed easily.

**E** Fibrex material construction provides long-lasting performance.† The sash, finished with a durable capping, provides maximum protection and a matte low-maintenance finish.

**F** Dual felt weatherstrip provides a long-lasting, energy-efficient barrier against wind, water and dust.



#### GLASS

**G** A glazing bead and silicone provide superior weathertightness and durability.

**H** See Common Features for glass options.

#### HARDWARE

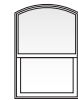
##### Sash Lock

The sash lock engages automatically when the lower sash is closed. The standard sash lock matches the window's interior color.

#### SHAPES & SASH OPTIONS



Single-Hung



Arch Single-Hung



Equal Sash



Reverse Cottage Sash

## COMMON FEATURES

#### FRAME

Five frame options include:

- 1 3/8" (35) flange setback for new construction siding applications.
- 1" (25) flange setback with stucco key for new construction stucco applications.
- No flange for full removal and replacement of an existing window when the existing frame is rotten or damaged.
- Insert for window replacement into an existing window frame.
- Flush fin† for stucco applications when installing over an existing aluminum window frame.

For frame drawings and more detailed information, see pages 8-9.

#### GLASS

Glass spacers are available in stainless steel and black.

High-Performance options include:

- Low-E SmartSun™ glass
- Low-E SmartSun HeatLock® glass
- Low-E glass
- Low-E HeatLock glass
- Low-E Sun glass
- Low-E PassiveSun® glass
- Low-E PassiveSun HeatLock glass
- Clear dual-pane glass

Tempered glass, STC glass and other glass options are available. Contact your Andersen supplier.

**Triple-pane glass is now available for most casement, awning, picture & transom windows. Click for more information.**



A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

#### Patterned Glass

Patterned glass options are available. See page 13 for more details.

#### PERFORMANCE OPTIONS

##### Performance Grade (PG) Upgrades

PG upgrades are available for select sizes of standard non-impact windows, allowing units to achieve PG50. PG ratings are more comprehensive than Design Pressure (DP) ratings for measuring product performance. Choosing the PG50 upgrade doesn't change the appearance of the unit. For up-to-date performance ratings, visit [andersenwindows.com](http://andersenwindows.com).

## EXTERIORS & INTERIORS

#### EXTERIOR COLORS



White



Sandtone



Terratone



Dark Bronze



Black

#### INTERIOR COLORS



White



Sandtone†



Dark Bronze†



Black†

\*Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) for details.

\*\*Available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

†Products with Sandtone, dark bronze and black interiors have matching exteriors.

Printing limitations prevent exact duplication of colors. See your Andersen supplier for actual color samples.

Dimensions in parentheses are in millimeters.

## GLIDING

### FRAME

**A** Constructed with Fibrex® composite material. This construction produces a rigid frame. The durable, low-maintenance finish won't fade, flake, blister or peel.\*

**B** See Common Features for frame options.

### SASH

The operating sash has a meeting stile cover with a unique raised profile design, allowing the sash to be opened and closed easily.

**C** Fibrex material construction provides long-lasting performance. The sash, finished with a durable capping, provides maximum protection and a matte low-maintenance finish.

**D** Dual felt weatherstrip provides a long-lasting, energy-efficient barrier against wind, water and dust.

**E** Operating sash has four metal rollers mounted at the bottom for easy, smooth travel over the sill.



### GLASS

**F** A glazing bead and silicone provide superior weathertightness and durability.

**G** See Common Features for glass options.

### HARDWARE

#### Sash Lock

The sash lock engages automatically when the operable sash is closed. The standard sash lock matches the window's interior color.

## PICTURE, TRANSOM & SPECIALTY

### FRAME

**A** Constructed with Fibrex® composite material. This construction produces a rigid frame. The durable, low-maintenance finish won't fade, flake, blister or peel.\*

**B** See Common Features for frame options.

### GLASS

**C** A glazing bead and silicone provide superior weathertightness and durability.

**D** See Common Features for glass options.

### SHAPES

Along with rectangular windows, half circle, quarter circle, circle, Springline™ and arch windows are available in both standard and custom sizes. Custom windows are also available in unequal leg arch, trapezoid, pentagon, octagon and triangle shapes.



## HARDWARE

### Casement & Awning



Antique Brass  
 Black  
 Dark Bronze  
 Sandtone  
**Satin Nickel**  
 White

Folding handles avoid interference with window treatments.

### Single-Hung & Gliding



Standard Lock

Optional Lift/Pull

**Hardware color matches the window's interior.**  
 Shown in white.



Optional Metal Slim Line Lock

Antique Brass | Black | **Dark Bronze**  
 Sandtone | Satin Nickel | White

Bold name denotes color or finish shown.

### HARDWARE FINISHES



Antique Brass | Black | Dark Bronze | Sandtone | Satin Nickel | White

\*Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) for details.

\*\*TruScene insect screens let in over 25% more fresh air than standard Andersen fiberglass insect screens.

## ACCESSORIES Sold Separately

### HARDWARE

#### Window Opening Control Device

A window opening control device is available for casement, single-hung and gliding windows, which limits sash travel to less than 4" (102) when the window is first opened. Available factory applied, or as a field-applied kit in stone, white and black.

#### Vent Limiter for Awning Windows

A vent limiter is available for awning windows, which prevents opening the sash more than 4" (102). Available factory applied or as a field-applied kit.

### GRILLES

Grilles are available in a variety of configurations. See page 14 for details.

### INSECT SCREENS

#### Conventional Insect Screens

Insect screens have charcoal gray fiberglass screen mesh. For casement and awning windows, frames are color matched to the product interior. For single-hung and gliding windows, stainless steel springs hold the insect screen tightly to the window frame, and their frames are available in colors to match the product's exterior.

#### TruScene® Insect Screens

Our TruScene insect screens let in over 25% more fresh air\*\* and provide 50% greater clarity than conventional Andersen insect screens, all while keeping out unwanted small insects. For casement and awning windows, the frame color matches the product interior. For single-hung and gliding windows, the frame color matches the product's exterior.

Dimensions in parentheses are in millimeters.

Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

# CASEMENT & AWNING WINDOWS

**Table of Casement Window Sizes**

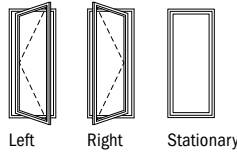
Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                 | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" |
|----------------------------------|-----------|------------|-----------|------------|
|                                  | (445)     | (597)      | (749)     | (902)      |
| <b>Minimum<br/>Rough Opening</b> | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      |
|                                  | (457)     | (610)      | (762)     | (914)      |
| Unobstructed Glass               | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    |
|                                  | (286)     | (438)      | (591)     | (743)      |



Custom-size windows are available in 1/8" (3) increments.

See page 94 for custom sizes and specifications.



Choose left, right or stationary as viewed from the exterior.

Grille patterns shown on page 24. Details shown on pages 25-26.

| CUSTOM WIDTHS – 17 1/2" to 35 1/2"  |           |            |                   |                   |
|-------------------------------------|-----------|------------|-------------------|-------------------|
| CUSTOM HEIGHTS – 23 1/2" to 71 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2"         | 2'-11 1/2"        |
|                                     | (445)     | (597)      | (749)             | (902)             |
| 1'-11 1/2"                          | 1620      | 2020       | 2620              | 3020              |
| 2'-5 1/2"                           | 1626      | 2026       | 2626              | 3026              |
| 2'-11 1/2"                          | 1630      | 2030       | 2630              | 3030              |
| 3'-5 1/2"                           | 1636      | 2036       | 2636              | 3036 <sup>Ø</sup> |
| 3'-11 1/2"                          | 1640      | 2040       | 2640 <sup>Ø</sup> | 3040 <sup>Ø</sup> |
| 4'-5 1/2"                           | 1646      | 2046       | 2646 <sup>Ø</sup> | 3046 <sup>Ø</sup> |
| 4'-11 1/2"                          | 1650      | 2050       | 2650 <sup>Ø</sup> | 3050 <sup>Ø</sup> |
| 5'-5 1/2"                           | 1656      | 2056       | 2656 <sup>Ø</sup> | 3056 <sup>Ø</sup> |
| 5'-11 1/2"                          | 1660      | 2060       | 2660 <sup>Ø</sup> | 3060 <sup>Ø</sup> |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

\* Dimensions in parentheses are in millimeters.

Ø Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610) with appropriate hinge specified. See table on page 23.

# Table of Twin Casement Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                    | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" | 5'-11 1/2" |
|-----------------------------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|
|                                                     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    | (1816)     |
| <b>Minimum Rough Opening</b>                        | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     | 6'-0"      |
|                                                     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    | (1829)     |
| <b>Unobstructed Glass</b><br>(width of single sash) | 11 1/4"    | 14 1/4"   | 17 1/4"    | 20 1/4"   | 23 1/4"    | 26 1/4"   | 29 1/4"    |
|                                                     | (286)      | (362)     | (438)      | (514)     | (591)      | (667)     | (743)      |
| 1'-1 1/2"                                           | (292)      | 1'-0"     | (305)      | 5'-1/4"   | (133)      |           |            |
| 1'-5 1/2"                                           | (445)      | 1'-6"     | (457)      | 11'-1/4"  | (286)      |           |            |
| 1'-11 1/2"                                          | (597)      | 2'-0"     | (610)      | 17'-1/4"  | (438)      |           |            |
| 2'-1 1/2"                                           | (749)      | 2'-6"     | (762)      | 23'-1/4"  | (591)      |           |            |
| 2'-5 1/2"                                           | (902)      | 3'-0"     | (914)      | 29'-1/4"  | (743)      |           |            |
| 2'-11 1/2"                                          | (1054)     | 3'-6"     | (1067)     | 35'-1/4"  | (895)      |           |            |
| 3'-1 1/2"                                           | (1207)     | 4'-0"     | (1219)     | 41'-1/4"  | (1048)     |           |            |
| 3'-5 1/2"                                           | (1359)     | 4'-6"     | (1372)     | 47'-1/4"  | (1200)     |           |            |
| 3'-11 1/2"                                          | (1511)     | 5'-0"     | (1524)     | 53'-1/4"  | (1353)     |           |            |
| 4'-1 1/2"                                           | (1664)     | 5'-6"     | (1676)     | 59'-1/4"  | (1505)     |           |            |
| 4'-5 1/2"                                           | (1816)     | 6'-0"     | (1829)     | 65'-1/4"  | (1657)     |           |            |
| 5'-1 1/2"                                           |            |           |            |           |            |           |            |
| 5'-5 1/2"                                           |            |           |            |           |            |           |            |
| 5'-11 1/2"                                          |            |           |            |           |            |           |            |

| CUSTOM WIDTHS – 35 1/2" to 71 1/2" |        |        |        |                     |                     |                     |  |
|------------------------------------|--------|--------|--------|---------------------|---------------------|---------------------|--|
| 1610-2                             | 1910-2 | 2010-2 | 2310-2 | 2610-2              | 2910-2              | 3010-2              |  |
| 1616-2                             | 1916-2 | 2016-2 | 2316-2 | 2616-2              | 2916-2              | 3016-2              |  |
| 1620-2                             | 1920-2 | 2020-2 | 2320-2 | 2620-2              | 2920-2              | 3020-2              |  |
| 1620-2                             | 1920-2 | 2020-2 | 2320-2 | 2620-2              | 2920-2              | 3020-2              |  |
| 1626-2                             | 1926-2 | 2026-2 | 2326-2 | 2626-2              | 2926-2              | 3026-2              |  |
| 1630-2                             | 1930-2 | 2030-2 | 2330-2 | 2630-2              | 2930-2              | 3030-2              |  |
| 1636-2                             | 1936-2 | 2036-2 | 2336-2 | 2636-2              | 2936-2 <sup>0</sup> | 3036-2 <sup>0</sup> |  |
| 1640-2                             | 1940-2 | 2040-2 | 2340-2 | 2640-2 <sup>0</sup> | 2940-2 <sup>0</sup> | 3040-2 <sup>0</sup> |  |
| 1646-2                             | 1946-2 | 2046-2 | 2346-2 | 2646-2 <sup>0</sup> | 2946-2 <sup>0</sup> | 3046-2 <sup>0</sup> |  |
| 1650-2                             | 1950-2 | 2050-2 | 2350-2 | 2650-2 <sup>0</sup> | 2950-2 <sup>0</sup> | 3050-2 <sup>0</sup> |  |
| 1656-2                             | 1956-2 | 2056-2 | 2356-2 | 2656-2 <sup>0</sup> | 2956-2 <sup>0</sup> | 3056-2 <sup>0</sup> |  |
| 1660-2                             | 1960-2 | 2060-2 | 2360-2 | 2660-2 <sup>0</sup> | 2960-2 <sup>0</sup> | 3060-2 <sup>0</sup> |  |

Custom-size windows are available in 1/8" (3) increments. See page 94 for custom sizes and specifications.

Choose left, right or stationary as viewed from the exterior. In addition to venting shown, other standard configurations are available. Windows have one continuous outer frame.

Matching transom windows are also shown. See Picture, Transom & Specialty Windows section starting on page 68 for more information.

Grille patterns shown on page 24. Details shown on pages 25-26.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610) with appropriate hinge specified. See table on pages 23-24.

# CASEMENT & AWNING WINDOWS

**Table of Picture Window With Flanking Casements Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                      | 5'-11 1/2"<br>(1816) | 7'-11 1/2"<br>(2426) | 9'-11 1/2"<br>(3035) | 11'-11 1/2"<br>(3645) |
|-------------------------------------------------------|----------------------|----------------------|----------------------|-----------------------|
| <b>Minimum<br/>Rough Opening</b>                      | 6'-0"<br>(1829)      | 8'-0"<br>(2438)      | 10'-0"<br>(3048)     | 12'-0"<br>(3658)      |
| Unobstructed Glass<br>(width of center sash)          | 29 1/4"<br>(743)     | 41 1/4"<br>(1048)    | 53 1/4"<br>(1353)    | 65 1/4"<br>(1657)     |
| Unobstructed Glass<br>(width of single flanking sash) | 11 1/4"<br>(286)     | 17 1/4"<br>(438)     | 23 1/4"<br>(591)     | 29 1/4"<br>(743)      |

|                      |                 |                    |            |            |                         |                         |
|----------------------|-----------------|--------------------|------------|------------|-------------------------|-------------------------|
| 11'-1 1/2"<br>(292)  | 1'-0"<br>(305)  | 5'-1/4"<br>(133)   |            |            |                         |                         |
| 1'-5 1/2"<br>(445)   | 1'-6"<br>(457)  | 11'-1/4"<br>(286)  | 16-3016-16 | 20-4016-20 | 26-5016-26              | 30-6016-30              |
| 1'-11 1/2"<br>(597)  | 2'-0"<br>(610)  | 17'-1/4"<br>(438)  | 16-3020-16 | 20-4020-20 | 26-5020-26              | 30-6020-30              |
| 1'-11 1/2"<br>(597)  | 2'-0"<br>(610)  | 17'-1/4"<br>(438)  | 16-3020-16 | 20-4020-20 | 26-5020-26              | 30-6020-30              |
| 2'-5 1/2"<br>(749)   | 2'-6"<br>(762)  | 23'-1/4"<br>(591)  | 16-3026-16 | 20-4026-20 | 26-5026-26              | 30-6026-30              |
| 2'-11 1/2"<br>(902)  | 3'-0"<br>(914)  | 29'-1/4"<br>(743)  | 16-3030-16 | 20-4030-20 | 26-5030-26              | 30-6030-30              |
| 3'-5 1/2"<br>(1054)  | 3'-6"<br>(1067) | 35'-1/4"<br>(895)  | 16-3036-16 | 20-4036-20 | 26-5036-26              | 30-6036-30 <sup>Ø</sup> |
| 3'-11 1/2"<br>(1207) | 4'-0"<br>(1219) | 41'-1/4"<br>(1048) | 16-3040-16 | 20-4040-20 | 26-5040-26 <sup>Ø</sup> | 30-6040-30 <sup>Ø</sup> |
| 4'-5 1/2"<br>(1359)  | 4'-6"<br>(1372) | 47'-1/4"<br>(1200) | 16-3046-16 | 20-4046-20 | 26-5046-26 <sup>Ø</sup> | 30-6046-30 <sup>Ø</sup> |
| 4'-11 1/2"<br>(1511) | 5'-0"<br>(1524) | 53'-1/4"<br>(1353) | 16-3050-16 | 20-4050-20 | 26-5050-26 <sup>Ø</sup> | 30-6050-30 <sup>Ø</sup> |
| 5'-5 1/2"<br>(1664)  | 5'-6"<br>(1676) | 59'-1/4"<br>(1505) | 16-3056-16 | 20-4056-20 | 26-5056-26 <sup>Ø</sup> | 30-6056-30 <sup>Ø</sup> |
| 5'-11 1/2"<br>(1816) | 6'-0"<br>(1829) | 65'-1/4"<br>(1657) | 16-3060-16 | 20-4060-20 | 26-5060-26 <sup>Ø</sup> | 30-6060-30 <sup>Ø</sup> |

Choose left, right or stationary as viewed from the exterior. In addition to venting shown, other standard configurations are available. Windows have one continuous outer frame.

Matching transom windows are also shown. See Picture, Transom & Specialty Windows section starting on page 68 for more information.

Grille patterns shown on page 24. Details shown on pages 25-26.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

\* Dimensions in parentheses are in millimeters.

Ø Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610) with appropriate hinge specified. See table on pages 23-24.

## Casement Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) | Default Hinge Type*  |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|----------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |                      |
| 1620          | 0.67 (0.06)                                      | 5 3/8" (137)                        | 17 13/16" (452)       | 1.35 (0.13)                              | 1.46 (0.14)                             | 61 9/16" (1564)                                           | 2.86 (0.27)                                       | wash mode            |
| 1626          | 0.89 (0.08)                                      | 5 3/8" (137)                        | 23 13/16" (605)       | 1.82 (0.17)                              | 1.95 (0.18)                             | 55 9/16" (1411)                                           | 3.59 (0.33)                                       | wash mode            |
| 1630          | 1.12 (0.10)                                      | 5 3/8" (137)                        | 29 13/16" (757)       | 2.29 (0.21)                              | 2.44 (0.23)                             | 49 9/16" (1259)                                           | 4.31 (0.40)                                       | wash mode            |
| 1636          | 1.34 (0.12)                                      | 5 3/8" (137)                        | 35 13/16" (909)       | 2.75 (0.26)                              | 2.94 (0.27)                             | 43 9/16" (1106)                                           | 5.04 (0.47)                                       | wash mode            |
| 1640          | 1.57 (0.15)                                      | 5 3/8" (137)                        | 41 13/16" (1062)      | 3.22 (0.30)                              | 3.43 (0.32)                             | 37 9/16" (954)                                            | 5.77 (0.54)                                       | wash mode            |
| 1646          | 1.79 (0.17)                                      | 5 3/8" (137)                        | 47 13/16" (1214)      | 3.69 (0.34)                              | 3.92 (0.36)                             | 31 9/16" (802)                                            | 6.50 (0.60)                                       | wash mode            |
| 1650          | 2.02 (0.19)                                      | 5 3/8" (137)                        | 53 13/16" (1367)      | 4.16 (0.39)                              | 4.41 (0.41)                             | 25 9/16" (649)                                            | 7.23 (0.67)                                       | wash mode            |
| 1656          | 2.24 (0.21)                                      | 5 3/8" (137)                        | 59 13/16" (1519)      | 4.63 (0.43)                              | 4.90 (0.46)                             | 19 9/16" (497)                                            | 7.96 (0.74)                                       | wash mode            |
| 1660          | 2.47 (0.23)                                      | 5 3/8" (137)                        | 65 13/16" (1671)      | 5.10 (0.47)                              | 5.40 (0.50)                             | 13 9/16" (344)                                            | 8.69 (0.81)                                       | wash mode            |
| 2020          | 1.41 (0.13)                                      | 11 3/8" (289)                       | 17 13/16" (452)       | 2.07 (0.19)                              | 2.20 (0.20)                             | 61 9/16" (1564)                                           | 3.84 (0.36)                                       | wash mode            |
| 2026          | 1.88 (0.18)                                      | 11 3/8" (289)                       | 23 13/16" (605)       | 2.79 (0.26)                              | 2.94 (0.27)                             | 55 9/16" (1411)                                           | 4.81 (0.45)                                       | wash mode            |
| 2030          | 2.36 (0.22)                                      | 11 3/8" (289)                       | 29 13/16" (757)       | 3.50 (0.33)                              | 3.69 (0.34)                             | 49 9/16" (1259)                                           | 5.79 (0.54)                                       | wash mode            |
| 2036          | 2.83 (0.26)                                      | 11 3/8" (289)                       | 35 13/16" (909)       | 4.22 (0.39)                              | 4.43 (0.41)                             | 43 9/16" (1106)                                           | 6.77 (0.63)                                       | wash mode            |
| 2040          | 3.31 (0.31)                                      | 11 3/8" (289)                       | 41 13/16" (1062)      | 4.94 (0.46)                              | 5.17 (0.48)                             | 37 9/16" (954)                                            | 7.75 (0.72)                                       | wash mode            |
| 2046          | 3.78 (0.35)                                      | 11 3/8" (289)                       | 47 13/16" (1214)      | 5.66 (0.53)                              | 5.91 (0.55)                             | 31 9/16" (802)                                            | 8.73 (0.81)                                       | wash mode            |
| 2050          | 4.26 (0.40)                                      | 11 3/8" (289)                       | 53 13/16" (1367)      | 6.38 (0.59)                              | 6.65 (0.62)                             | 25 9/16" (649)                                            | 9.71 (0.90)                                       | wash mode            |
| 2056          | 4.73 (0.44)                                      | 11 3/8" (289)                       | 59 13/16" (1519)      | 7.10 (0.66)                              | 7.40 (0.69)                             | 19 9/16" (497)                                            | 10.69 (0.99)                                      | wash mode            |
| 2060          | 5.21 (0.48)                                      | 11 3/8" (289)                       | 65 13/16" (1671)      | 7.82 (0.73)                              | 8.14 (0.76)                             | 13 9/16" (344)                                            | 11.67 (1.08)                                      | wash mode            |
| 2620          | 2.15 (0.20)                                      | 17 3/8" (442)                       | 17 13/16" (452)       | 2.79 (0.26)                              | 2.94 (0.27)                             | 61 9/16" (1564)                                           | 4.81 (0.45)                                       | wash mode            |
| 2626          | 2.88 (0.27)                                      | 17 3/8" (442)                       | 23 13/16" (605)       | 3.75 (0.35)                              | 3.94 (0.37)                             | 55 9/16" (1411)                                           | 6.04 (0.56)                                       | wash mode            |
| 2630          | 3.60 (0.33)                                      | 17 3/8" (442)                       | 29 13/16" (757)       | 4.72 (0.44)                              | 4.93 (0.46)                             | 49 9/16" (1259)                                           | 7.27 (0.68)                                       | wash mode            |
| 2636          | 4.33 (0.40)                                      | 17 3/8" (442)                       | 35 13/16" (909)       | 5.69 (0.53)                              | 5.92 (0.55)                             | 43 9/16" (1106)                                           | 8.50 (0.79)                                       | wash mode            |
| 2640 Ø        | 6.30 (0.59)                                      | 21 11/16" (551)                     | 41 13/16" (1062)      | 6.66 (0.62)                              | 6.91 (0.64)                             | 37 9/16" (954)                                            | 9.73 (0.90)                                       | widest clear opening |
| 2646 Ø        | 7.21 (0.67)                                      | 21 11/16" (551)                     | 47 13/16" (1214)      | 7.63 (0.71)                              | 7.90 (0.73)                             | 31 9/16" (802)                                            | 10.96 (1.02)                                      | widest clear opening |
| 2650 Ø        | 8.11 (0.75)                                      | 21 11/16" (551)                     | 53 13/16" (1367)      | 8.60 (0.80)                              | 8.90 (0.83)                             | 25 9/16" (649)                                            | 12.19 (1.13)                                      | widest clear opening |
| 2656 Ø        | 9.02 (0.84)                                      | 21 11/16" (551)                     | 59 13/16" (1519)      | 9.57 (0.89)                              | 9.89 (0.92)                             | 19 9/16" (497)                                            | 13.42 (1.25)                                      | widest clear opening |
| 2660 Ø        | 9.92 (0.92)                                      | 21 11/16" (551)                     | 65 13/16" (1671)      | 10.54 (0.98)                             | 10.88 (1.01)                            | 13 9/16" (344)                                            | 14.65 (1.36)                                      | widest clear opening |
| 3020          | 2.89 (0.27)                                      | 23 3/8" (594)                       | 17 13/16" (452)       | 3.50 (0.33)                              | 3.69 (0.34)                             | 61 9/16" (1564)                                           | 5.79 (0.54)                                       | wash mode            |
| 3026          | 3.87 (0.36)                                      | 23 3/8" (594)                       | 23 13/16" (605)       | 4.72 (0.44)                              | 4.93 (0.46)                             | 55 9/16" (1411)                                           | 7.27 (0.68)                                       | wash mode            |
| 3030          | 4.84 (0.45)                                      | 23 3/8" (594)                       | 29 13/16" (757)       | 5.94 (0.55)                              | 6.17 (0.57)                             | 49 9/16" (1259)                                           | 8.75 (0.81)                                       | wash mode            |
| 3036 Ø        | 5.82 (0.54)                                      | 23 3/8" (594)                       | 35 13/16" (909)       | 7.16 (0.67)                              | 7.41 (0.69)                             | 43 9/16" (1106)                                           | 10.23 (0.95)                                      | wash mode            |
| 3040 Ø        | 6.79 (0.63)                                      | 23 3/8" (594)                       | 41 13/16" (1062)      | 8.38 (0.78)                              | 8.65 (0.80)                             | 37 9/16" (954)                                            | 11.71 (1.09)                                      | wash mode            |
| 3046 Ø        | 7.77 (0.72)                                      | 23 3/8" (594)                       | 47 13/16" (1214)      | 9.60 (0.89)                              | 9.90 (0.92)                             | 31 9/16" (802)                                            | 13.19 (1.23)                                      | wash mode            |
| 3050 Ø        | 8.74 (0.81)                                      | 23 3/8" (594)                       | 53 13/16" (1367)      | 10.82 (1.00)                             | 11.14 (1.03)                            | 25 9/16" (649)                                            | 14.67 (1.36)                                      | wash mode            |
| 3056 Ø        | 9.72 (0.90)                                      | 23 3/8" (594)                       | 59 13/16" (1519)      | 12.04 (1.12)                             | 12.38 (1.15)                            | 19 9/16" (497)                                            | 16.15 (1.50)                                      | wash mode            |
| 3060 Ø        | 10.69 (0.99)                                     | 23 3/8" (594)                       | 65 13/16" (1671)      | 13.25 (1.23)                             | 13.62 (1.27)                            | 13 9/16" (344)                                            | 17.63 (1.64)                                      | wash mode            |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).  
• Dimensions in parentheses are in millimeters or square meters.  
Ø Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).  
\*To calculate alternative hinge type, see page 94.

## Twin Casement Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) | Default Hinge Type* |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|---------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |                     |
| 1620-2        | 0.67 (0.06)                                      | 5 3/8" (137)                        | 17 13/16" (452)       | 2.70 (0.25)                              | 2.92 (0.27)                             | 61 9/16" (1564)                                           | 5.79 (0.54)                                       | wash mode           |
| 1626-2        | 0.89 (0.08)                                      | 5 3/8" (137)                        | 23 13/16" (605)       | 3.63 (0.34)                              | 3.90 (0.36)                             | 55 9/16" (1411)                                           | 7.27 (0.68)                                       | wash mode           |
| 1630-2        | 1.12 (0.10)                                      | 5 3/8" (137)                        | 29 13/16" (757)       | 4.57 (0.42)                              | 4.89 (0.45)                             | 49 9/16" (1259)                                           | 8.75 (0.81)                                       | wash mode           |
| 1636-2        | 1.34 (0.12)                                      | 5 3/8" (137)                        | 35 13/16" (909)       | 5.51 (0.51)                              | 5.87 (0.55)                             | 43 9/16" (1106)                                           | 10.23 (0.95)                                      | wash mode           |
| 1640-2        | 1.57 (0.15)                                      | 5 3/8" (137)                        | 41 13/16" (1062)      | 6.45 (0.60)                              | 6.86 (0.64)                             | 37 9/16" (954)                                            | 11.71 (1.09)                                      | wash mode           |
| 1646-2        | 1.79 (0.17)                                      | 5 3/8" (137)                        | 47 13/16" (1214)      | 7.38 (0.69)                              | 7.84 (0.73)                             | 31 9/16" (802)                                            | 13.19 (1.23)                                      | wash mode           |
| 1650-2        | 2.02 (0.19)                                      | 5 3/8" (137)                        | 53 13/16" (1367)      | 8.32 (0.77)                              | 8.82 (0.82)                             | 25 9/16" (649)                                            | 14.67 (1.36)                                      | wash mode           |
| 1656-2        | 2.24 (0.21)                                      | 5 3/8" (137)                        | 59 13/16" (1519)      | 9.26 (0.86)                              | 9.81 (0.91)                             | 19 9/16" (497)                                            | 16.15 (1.50)                                      | wash mode           |
| 1660-2        | 2.47 (0.23)                                      | 5 3/8" (137)                        | 65 13/16" (1671)      | 10.20 (0.95)                             | 10.79 (1.00)                            | 13 9/16" (344)                                            | 17.63 (1.64)                                      | wash mode           |
| 1920-2        | 1.04 (0.10)                                      | 8 3/8" (213)                        | 17 13/16" (452)       | 3.41 (0.32)                              | 3.66 (0.34)                             | 61 9/16" (1564)                                           | 6.77 (0.63)                                       | wash mode           |
| 1926-2        | 1.39 (0.13)                                      | 8 3/8" (213)                        | 23 13/16" (605)       | 4.60 (0.43)                              | 4.90 (0.45)                             | 55 9/16" (1411)                                           | 8.50 (0.79)                                       | wash mode           |
| 1930-2        | 1.74 (0.16)                                      | 8 3/8" (213)                        | 29 13/16" (757)       | 5.79 (0.54)                              | 6.13 (0.57)                             | 49 9/16" (1259)                                           | 10.23 (0.95)                                      | wash mode           |
| 1936-2        | 2.09 (0.19)                                      | 8 3/8" (213)                        | 35 13/16" (909)       | 6.98 (0.65)                              | 7.36 (0.68)                             | 43 9/16" (1106)                                           | 11.96 (1.11)                                      | wash mode           |
| 1940-2        | 2.44 (0.23)                                      | 8 3/8" (213)                        | 41 13/16" (1062)      | 8.16 (0.76)                              | 8.60 (0.80)                             | 37 9/16" (954)                                            | 13.69 (1.27)                                      | wash mode           |
| 1946-2        | 2.79 (0.26)                                      | 8 3/8" (213)                        | 47 13/16" (1214)      | 9.35 (0.87)                              | 9.83 (0.91)                             | 31 9/16" (802)                                            | 15.42 (1.43)                                      | wash mode           |
| 1950-2        | 3.14 (0.29)                                      | 8 3/8" (213)                        | 53 13/16" (1367)      | 10.54 (0.98)                             | 11.06 (1.03)                            | 25 9/16" (649)                                            | 17.15 (1.59)                                      | wash mode           |
| 1956-2        | 3.49 (0.32)                                      | 8 3/8" (213)                        | 59 13/16" (1519)      | 11.73 (1.09)                             | 12.30 (1.14)                            | 19 9/16" (497)                                            | 18.88 (1.75)                                      | wash mode           |
| 1960-2        | 3.84 (0.36)                                      | 8 3/8" (213)                        | 65 13/16" (1671)      | 12.91 (1.20)                             | 13.53 (1.26)                            | 13 9/16" (344)                                            | 20.61 (1.91)                                      | wash mode           |
| 2020-2        | 1.41 (0.13)                                      | 11 3/8" (289)                       | 17 13/16" (452)       | 4.13 (0.38)                              | 4.40 (0.41)                             | 61 9/16" (1564)                                           | 7.75 (0.72)                                       | wash mode           |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).  
• Dimensions in parentheses are in millimeters or square meters.  
\*To calculate alternative hinge type, see page 94.

continued on next page



CASEMENT & AWNING WINDOWS

Twin Casement Window Opening and Area Specifications (continued)

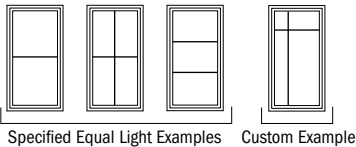
| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) | Default Hinge Type*  |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|----------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |                      |
| 2026-2        | 1.88 (0.18)                                      | 11 3/8" (289)                       | 23 13/16" (605)       | 5.57 (0.52)                              | 5.89 (0.55)                             | 55 9/16" (1411)                                           | 9.73 (0.90)                                       | wash mode            |
| 2030-2        | 2.36 (0.22)                                      | 11 3/8" (289)                       | 29 13/16" (757)       | 7.01 (0.65)                              | 7.37 (0.68)                             | 49 9/16" (1259)                                           | 11.71 (1.09)                                      | wash mode            |
| 2036-2        | 2.83 (0.26)                                      | 11 3/8" (289)                       | 35 13/16" (909)       | 8.45 (0.78)                              | 8.86 (0.82)                             | 43 9/16" (1106)                                           | 13.69 (1.27)                                      | wash mode            |
| 2040-2        | 3.31 (0.31)                                      | 11 3/8" (289)                       | 41 13/16" (1062)      | 9.88 (0.92)                              | 10.34 (0.96)                            | 37 9/16" (954)                                            | 15.67 (1.46)                                      | wash mode            |
| 2046-2        | 3.78 (0.35)                                      | 11 3/8" (289)                       | 47 13/16" (1214)      | 11.32 (1.05)                             | 11.82 (1.10)                            | 31 9/16" (802)                                            | 17.65 (1.64)                                      | wash mode            |
| 2050-2        | 4.26 (0.40)                                      | 11 3/8" (289)                       | 53 13/16" (1367)      | 12.76 (1.19)                             | 13.31 (1.24)                            | 25 9/16" (649)                                            | 19.63 (1.82)                                      | wash mode            |
| 2056-2        | 4.73 (0.44)                                      | 11 3/8" (289)                       | 59 13/16" (1519)      | 14.20 (1.32)                             | 14.79 (1.37)                            | 19 9/16" (497)                                            | 21.61 (2.01)                                      | wash mode            |
| 2060-2        | 5.21 (0.48)                                      | 11 3/8" (289)                       | 65 13/16" (1671)      | 15.63 (1.45)                             | 16.27 (1.51)                            | 13 9/16" (344)                                            | 23.59 (2.19)                                      | wash mode            |
| 2320-2        | 1.78 (0.17)                                      | 14 3/8" (366)                       | 17 13/16" (452)       | 4.85 (0.45)                              | 5.15 (0.48)                             | 61 9/16" (1564)                                           | 8.73 (0.81)                                       | wash mode            |
| 2326-2        | 2.38 (0.22)                                      | 14 3/8" (366)                       | 23 13/16" (605)       | 6.54 (0.61)                              | 6.88 (0.64)                             | 55 9/16" (1411)                                           | 10.96 (1.02)                                      | wash mode            |
| 2330-2        | 2.98 (0.28)                                      | 14 3/8" (366)                       | 29 13/16" (757)       | 8.23 (0.76)                              | 8.61 (0.80)                             | 49 9/16" (1259)                                           | 13.19 (1.23)                                      | wash mode            |
| 2336-2        | 3.58 (0.33)                                      | 14 3/8" (366)                       | 35 13/16" (909)       | 9.91 (0.92)                              | 10.35 (0.96)                            | 43 9/16" (1106)                                           | 15.42 (1.43)                                      | wash mode            |
| 2340-2        | 4.18 (0.39)                                      | 14 3/8" (366)                       | 41 13/16" (1062)      | 11.60 (1.08)                             | 12.08 (1.12)                            | 37 9/16" (954)                                            | 17.65 (1.64)                                      | wash mode            |
| 2346-2        | 4.78 (0.44)                                      | 14 3/8" (366)                       | 47 13/16" (1214)      | 13.29 (1.23)                             | 13.81 (1.28)                            | 31 9/16" (802)                                            | 19.88 (1.85)                                      | wash mode            |
| 2350-2        | 5.38 (0.50)                                      | 14 3/8" (366)                       | 53 13/16" (1367)      | 14.98 (1.39)                             | 15.55 (1.44)                            | 25 9/16" (649)                                            | 22.11 (2.05)                                      | wash mode            |
| 2356-2        | 5.98 (0.56)                                      | 14 3/8" (366)                       | 59 13/16" (1519)      | 16.66 (1.55)                             | 17.28 (1.61)                            | 19 9/16" (497)                                            | 24.34 (2.26)                                      | wash mode            |
| 2360-2        | 6.58 (0.61)                                      | 14 3/8" (366)                       | 65 13/16" (1671)      | 18.35 (1.70)                             | 19.02 (1.77)                            | 13 9/16" (344)                                            | 26.56 (2.47)                                      | wash mode            |
| 2620-2        | 2.15 (0.20)                                      | 17 3/8" (442)                       | 17 13/16" (452)       | 5.57 (0.52)                              | 5.89 (0.55)                             | 61 9/16" (1564)                                           | 9.71 (0.90)                                       | wash mode            |
| 2626-2        | 2.88 (0.27)                                      | 17 3/8" (442)                       | 23 13/16" (605)       | 7.51 (0.70)                              | 7.87 (0.73)                             | 55 9/16" (1411)                                           | 12.19 (1.13)                                      | wash mode            |
| 2630-2        | 3.60 (0.33)                                      | 17 3/8" (442)                       | 29 13/16" (757)       | 9.45 (0.88)                              | 9.86 (0.92)                             | 49 9/16" (1259)                                           | 14.67 (1.36)                                      | wash mode            |
| 2636-2        | 4.33 (0.40)                                      | 17 3/8" (442)                       | 35 13/16" (909)       | 11.38 (1.06)                             | 11.84 (1.10)                            | 43 9/16" (1106)                                           | 17.15 (1.59)                                      | wash mode            |
| 2640-2 ◊      | 6.30 (0.59)                                      | 21 11/16" (551)                     | 41 13/16" (1062)      | 13.32 (1.24)                             | 13.82 (1.28)                            | 37 9/16" (954)                                            | 19.63 (1.82)                                      | widest clear opening |
| 2646-2 ◊      | 7.21 (0.67)                                      | 21 11/16" (551)                     | 47 13/16" (1214)      | 15.26 (1.42)                             | 15.81 (1.47)                            | 31 9/16" (802)                                            | 22.11 (2.05)                                      | widest clear opening |
| 2650-2 ◊      | 8.11 (0.75)                                      | 21 11/16" (551)                     | 53 13/16" (1367)      | 17.20 (1.60)                             | 17.79 (1.65)                            | 25 9/16" (649)                                            | 24.59 (2.28)                                      | widest clear opening |
| 2656-2 ◊      | 9.02 (0.84)                                      | 21 11/16" (551)                     | 59 13/16" (1519)      | 19.13 (1.78)                             | 19.77 (1.84)                            | 19 9/16" (497)                                            | 27.06 (2.51)                                      | widest clear opening |
| 2660-2 ◊      | 9.92 (0.92)                                      | 21 11/16" (551)                     | 65 13/16" (1671)      | 21.07 (1.96)                             | 21.76 (2.02)                            | 13 9/16" (344)                                            | 29.54 (2.74)                                      | widest clear opening |
| 2920-2        | 2.52 (0.23)                                      | 20 3/8" (518)                       | 17 13/16" (452)       | 6.29 (0.58)                              | 6.63 (0.62)                             | 61 9/16" (1564)                                           | 10.69 (0.99)                                      | wash mode            |
| 2926-2        | 3.37 (0.31)                                      | 20 3/8" (518)                       | 23 13/16" (605)       | 8.48 (0.79)                              | 8.86 (0.82)                             | 55 9/16" (1411)                                           | 13.42 (1.25)                                      | wash mode            |
| 2930-2        | 4.22 (0.39)                                      | 20 3/8" (518)                       | 29 13/16" (757)       | 10.66 (0.99)                             | 11.10 (1.03)                            | 49 9/16" (1259)                                           | 16.15 (1.50)                                      | wash mode            |
| 2936-2 ◊      | 6.08 (0.57)                                      | 24 1/2" (621)                       | 35 13/16" (909)       | 12.85 (1.19)                             | 13.33 (1.24)                            | 43 9/16" (1106)                                           | 18.88 (1.75)                                      | widest clear opening |
| 2940-2 ◊      | 5.92 (0.55)                                      | 20 3/8" (518)                       | 41 13/16" (1062)      | 15.04 (1.40)                             | 15.56 (1.45)                            | 37 9/16" (954)                                            | 21.61 (2.01)                                      | wash mode            |
| 2946-2 ◊      | 6.77 (0.63)                                      | 20 3/8" (518)                       | 47 13/16" (1214)      | 17.23 (1.60)                             | 17.80 (1.65)                            | 31 9/16" (802)                                            | 24.34 (2.26)                                      | wash mode            |
| 2950-2 ◊      | 7.62 (0.71)                                      | 20 3/8" (518)                       | 53 13/16" (1367)      | 19.41 (1.80)                             | 20.03 (1.86)                            | 25 9/16" (649)                                            | 27.06 (2.51)                                      | wash mode            |
| 2956-2 ◊      | 8.47 (0.79)                                      | 20 3/8" (518)                       | 59 13/16" (1519)      | 21.60 (2.01)                             | 22.27 (2.07)                            | 19 9/16" (497)                                            | 29.79 (2.77)                                      | wash mode            |
| 2960-2 ◊      | 9.32 (0.87)                                      | 20 3/8" (518)                       | 65 13/16" (1671)      | 23.79 (2.21)                             | 24.50 (2.28)                            | 13 9/16" (344)                                            | 32.52 (3.02)                                      | wash mode            |
| 3020-2        | 2.89 (0.27)                                      | 23 3/8" (594)                       | 17 13/16" (452)       | 7.01 (0.65)                              | 7.37 (0.68)                             | 61 9/16" (1564)                                           | 11.67 (1.08)                                      | wash mode            |
| 3026-2        | 3.87 (0.36)                                      | 23 3/8" (594)                       | 23 13/16" (605)       | 9.45 (0.88)                              | 9.86 (0.92)                             | 55 9/16" (1411)                                           | 14.65 (1.36)                                      | wash mode            |
| 3030-2        | 4.84 (0.45)                                      | 23 3/8" (594)                       | 29 13/16" (757)       | 11.88 (1.10)                             | 12.34 (1.15)                            | 49 9/16" (1259)                                           | 17.63 (1.64)                                      | wash mode            |
| 3036-2 ◊      | 5.82 (0.54)                                      | 23 3/8" (594)                       | 35 13/16" (909)       | 14.32 (1.33)                             | 14.82 (1.38)                            | 43 9/16" (1106)                                           | 20.61 (1.91)                                      | wash mode            |
| 3040-2 ◊      | 6.79 (0.63)                                      | 23 3/8" (594)                       | 41 13/16" (1062)      | 16.76 (1.56)                             | 17.31 (1.61)                            | 37 9/16" (954)                                            | 23.59 (2.19)                                      | wash mode            |
| 3046-2 ◊      | 7.77 (0.72)                                      | 23 3/8" (594)                       | 47 13/16" (1214)      | 19.20 (1.78)                             | 19.79 (1.84)                            | 31 9/16" (802)                                            | 26.56 (2.47)                                      | wash mode            |
| 3050-2 ◊      | 8.74 (0.81)                                      | 23 3/8" (594)                       | 53 13/16" (1367)      | 21.63 (2.01)                             | 22.27 (2.07)                            | 25 9/16" (649)                                            | 29.54 (2.74)                                      | wash mode            |
| 3056-2 ◊      | 9.72 (0.90)                                      | 23 3/8" (594)                       | 59 13/16" (1519)      | 24.07 (2.24)                             | 24.76 (2.30)                            | 19 9/16" (497)                                            | 32.52 (3.02)                                      | wash mode            |
| 3060-2 ◊      | 10.69 (0.99)                                     | 23 3/8" (594)                       | 65 13/16" (1671)      | 26.51 (2.46)                             | 27.24 (2.53)                            | 13 9/16" (344)                                            | 35.50 (3.30)                                      | wash mode            |

\* Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).  
\* Dimensions in parentheses are in millimeters or square meters.  
◊ Meets or exceeds clear opening area of 5.7 sq.ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).  
\*To calculate alternative hinge type, see page 94.

Grille Patterns

|          | Prairie A | Colonial | Modified Colonial | Simulated Meeting Rail | Tall Fractional | Short Fractional | Victorian |
|----------|-----------|----------|-------------------|------------------------|-----------------|------------------|-----------|
| Casement |           |          |                   |                        |                 |                  |           |

Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes. Specified equal light and custom patterns are also available. For specified equal light, specify number of same-size rectangles across or down. For more grille options, see page 14 or visit [andersenwindows.com/grilles](https://andersenwindows.com/grilles).

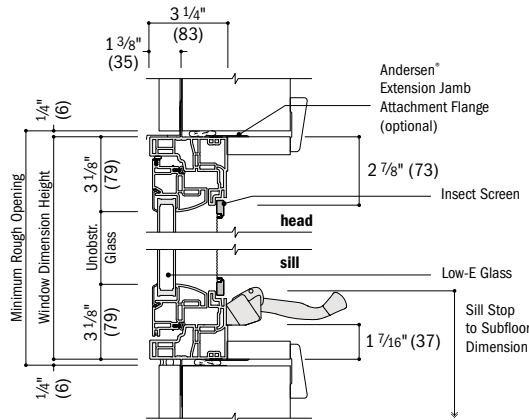




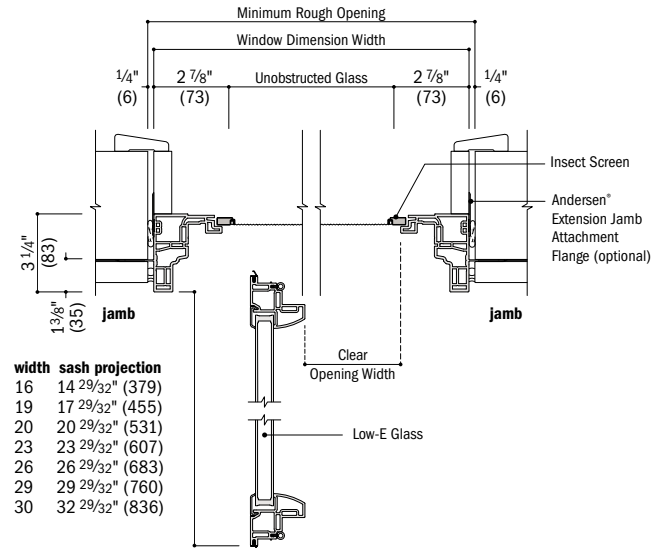
## Casement Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

### 1 3/8" Flange Setback

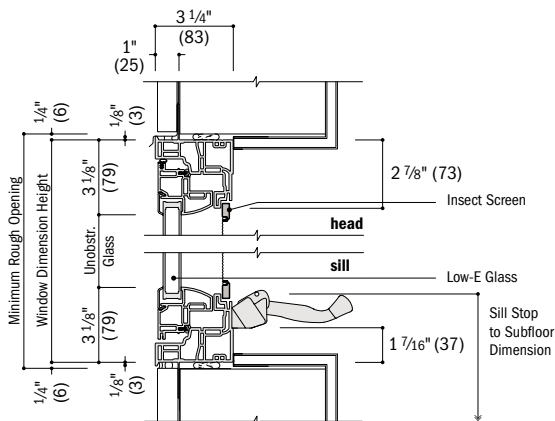


Vertical Section

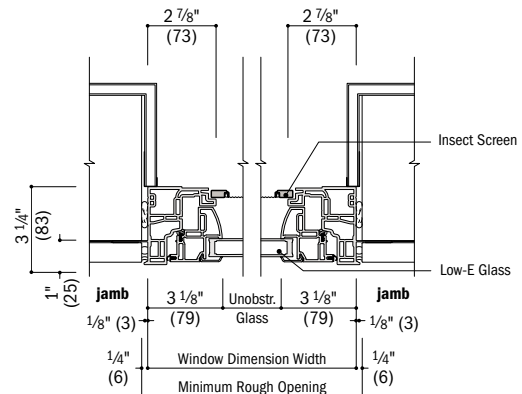


Horizontal Section

### 1" Flange Setback With Stucco Key

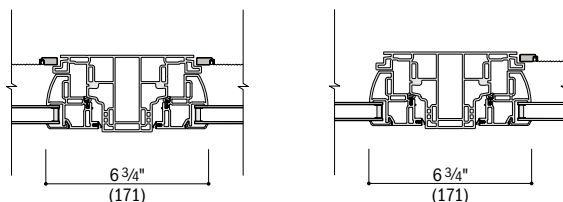


Vertical Section  
Stucco Exterior



Horizontal Section  
Stucco Exterior

### Integrals



Horizontal Section  
Twin Casement

Horizontal Section  
Picture With Flanking Casement

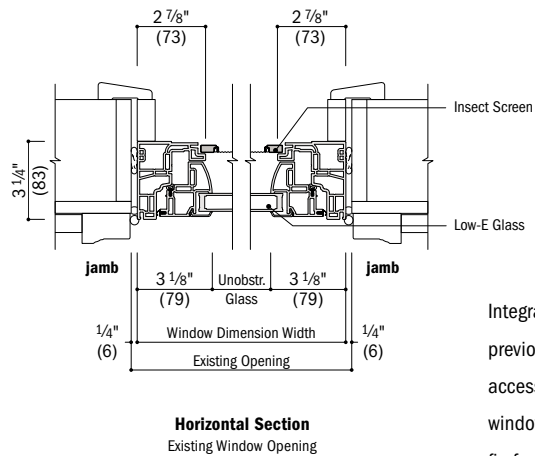
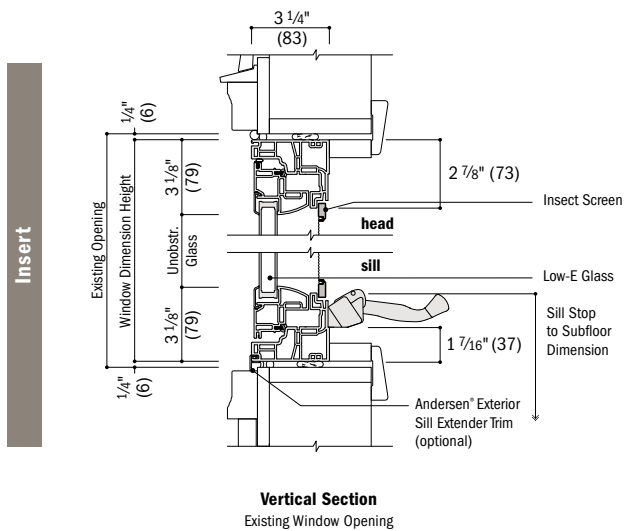
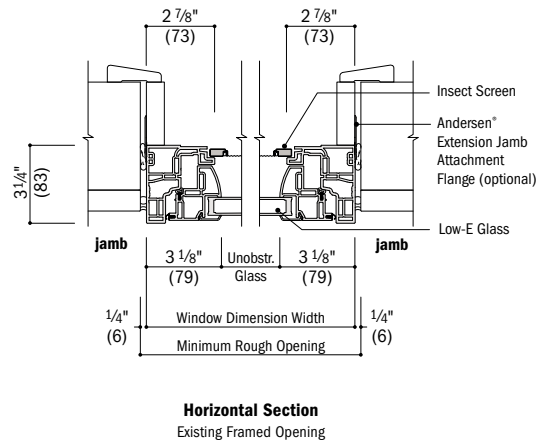
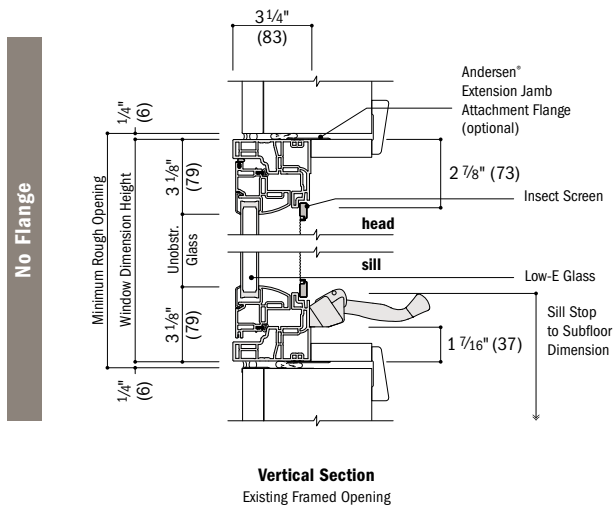
See pages 88-93 for joining details.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

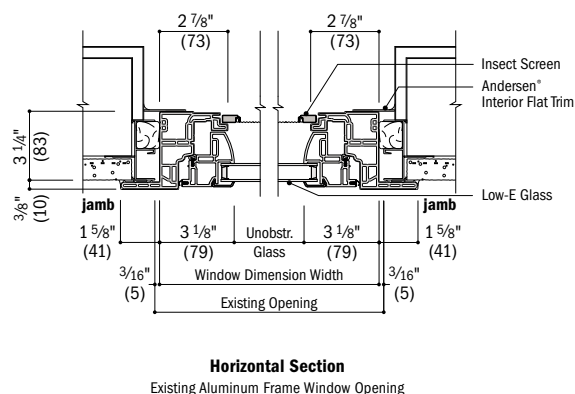
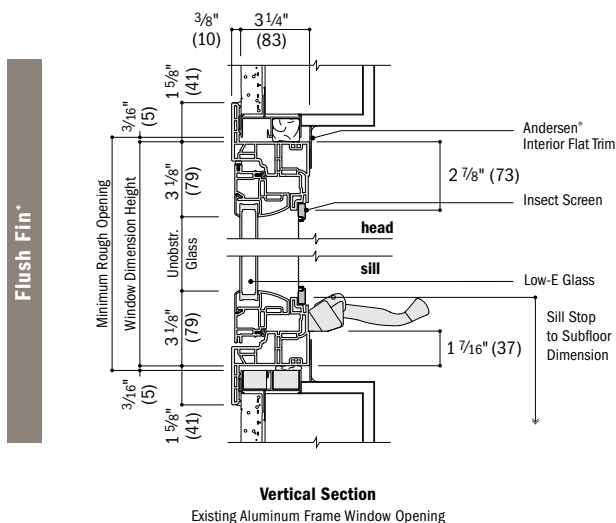
# CASEMENT & AWNING WINDOWS

## Casement Window Details – Replacement

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Integral details shown on previous page. Installation accessories are available for windows with insert and flush jam frames; see page 120.



See pages 88-93 for joining details.

\* Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

\* **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).

\* Dimensions in parentheses are in millimeters.

\* Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

## Table of Awning Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension             | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" |
|------------------------------|-----------|------------|-----------|------------|-----------|------------|
|                              | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     |
| <b>Minimum Rough Opening</b> | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      |
|                              | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     |
| <b>Unobstructed Glass</b>    | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    |
|                              | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     |

| CUSTOM WIDTHS – 17 1/2" to 47 1/2" |            |           |            |           |            |  |
|------------------------------------|------------|-----------|------------|-----------|------------|--|
| 1'-5 1/2"                          | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" |  |
| (445)                              | (597)      | (749)     | (902)      | (1054)    | (1207)     |  |
| 1'-6"                              | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      |  |
| (457)                              | (610)      | (762)     | (914)      | (1067)    | (1219)     |  |
| 11 1/4"                            | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    |  |
| (286)                              | (438)      | (591)     | (743)      | (895)     | (1048)     |  |

| CUSTOM HEIGHTS – 17 1/2" to 35 1/2" |            |           |            |           |            |  |
|-------------------------------------|------------|-----------|------------|-----------|------------|--|
| 1'-5 1/2"                           | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" |  |
| (445)                               | (597)      | (749)     | (902)      | (1054)    | (1207)     |  |
| 1'-6"                               | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      |  |
| (457)                               | (610)      | (762)     | (914)      | (1067)    | (1219)     |  |
| 11 1/4"                             | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    |  |
| (286)                               | (438)      | (591)     | (743)      | (895)     | (1048)     |  |

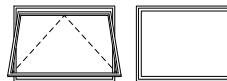
  

|      |      |      |      |      |      |  |
|------|------|------|------|------|------|--|
| 1616 | 2016 | 2616 | 3016 | 3616 | 4016 |  |
| 1620 | 2020 | 2620 | 3020 | 3620 | 4020 |  |
| 1626 | 2026 | 2626 | 3026 | 3626 | 4026 |  |
| 1630 | 2030 | 2630 | 3030 | 3630 | 4030 |  |



Custom-size windows are available in 1/8" (3) increments.

See page 95 for custom sizes and specifications.



Venting

Stationary

Choose venting or stationary. **Awning windows must be installed to vent as shown and should not be rotated and used as a hopper.**

Grille patterns shown on page 28. Details shown on pages 30-31.

## Table of Twin Awning Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                    | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" | 5'-11 1/2" |
|-----------------------------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|
|                                                     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    | (1816)     |
| <b>Minimum Rough Opening</b>                        | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     | 6'-0"      |
|                                                     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    | (1829)     |
| <b>Unobstructed Glass</b><br>(width of single sash) | 11 1/4"    | 14 1/4"   | 17 1/4"    | 20 1/4"   | 23 1/4"    | 26 1/4"   | 29 1/4"    |
|                                                     | (286)      | (362)     | (438)      | (514)     | (591)      | (667)     | (743)      |

|        |        |        |        |        |        |        |  |
|--------|--------|--------|--------|--------|--------|--------|--|
| 1610-2 | 1910-2 | 2010-2 | 2310-2 | 2610-2 | 2910-2 | 3010-2 |  |
| 1616-2 | 1916-2 | 2016-2 | 2316-2 | 2616-2 | 2916-2 | 3016-2 |  |
| 1620-2 | 1920-2 | 2020-2 | 2320-2 | 2620-2 | 2920-2 | 3020-2 |  |

| CUSTOM WIDTHS – 35 1/2" to 71 1/2" |            |           |            |           |            |           |            |
|------------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|
| 1'-5 1/2"                          | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" |
| (445)                              | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     |
| 1'-6"                              | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      |
| (457)                              | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     |
| 11 1/4"                            | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    |
| (286)                              | (438)      | (591)     | (743)      | (895)     | (1048)     | (1201)    | (1354)     |

|        |        |        |        |        |        |        |  |
|--------|--------|--------|--------|--------|--------|--------|--|
| 1616-2 | 1916-2 | 2016-2 | 2316-2 | 2616-2 | 2916-2 | 3016-2 |  |
| 1620-2 | 1920-2 | 2020-2 | 2320-2 | 2620-2 | 2920-2 | 3020-2 |  |
| 1626-2 | 1926-2 | 2026-2 | 2326-2 | 2626-2 | 2926-2 | 3026-2 |  |
| 1630-2 | 1930-2 | 2030-2 | 2330-2 | 2630-2 | 2930-2 | 3030-2 |  |



Custom-size windows are available in 1/8" (3) increments. See page 95 for custom sizes and specifications.

Windows have one continuous outer frame.

Matching transom windows are also shown. See Picture, Transom & Specialty Windows section starting on page 68 for more information.

Grille patterns shown on page 28. Details shown on pages 30-31.

• Window Dimension always refers to outside frame-to-frame dimension.

• Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

• Dimensions in parentheses are in millimeters.

## 28

## Awning Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m²) |        | Clear Opening in Full Open Position |                      | Glass Area<br>Sq. Ft./ (m²) | Vent Area<br>Sq. Ft./ (m²) |                 | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m²) |
|---------------|-------------------------------------|--------|-------------------------------------|----------------------|-----------------------------|----------------------------|-----------------|-----------------------------------------------------------|--------------------------------------|
|               |                                     |        | Width<br>Inches/(mm)                | Depth<br>Inches/(mm) |                             |                            |                 |                                                           |                                      |
| 1616          | 0.66                                | (0.06) | 11 13/16" (300)                     | 8" (203)             | 0.88 (0.08)                 | 0.66 (0.06)                | 67 9/16" (1716) | 2.13 (0.20)                                               |                                      |
| 1620          | 0.66                                | (0.06) | 11 13/16" (300)                     | 8" (203)             | 1.35 (0.13)                 | 0.66 (0.06)                | 61 9/16" (1564) | 2.86 (0.27)                                               |                                      |
| 1626          | 0.66                                | (0.06) | 11 13/16" (300)                     | 8" (203)             | 1.82 (0.17)                 | 0.66 (0.06)                | 55 9/16" (1411) | 3.59 (0.33)                                               |                                      |
| 1630          | 0.66                                | (0.06) | 11 13/16" (300)                     | 8" (203)             | 2.29 (0.21)                 | 0.66 (0.06)                | 49 9/16" (1259) | 4.31 (0.40)                                               |                                      |
| 2016          | 0.99                                | (0.09) | 17 13/16" (452)                     | 8" (203)             | 1.35 (0.13)                 | 0.99 (0.09)                | 67 9/16" (1716) | 2.86 (0.27)                                               |                                      |
| 2020          | 0.99                                | (0.09) | 17 13/16" (452)                     | 8" (203)             | 2.07 (0.19)                 | 0.99 (0.09)                | 61 9/16" (1564) | 3.84 (0.36)                                               |                                      |
| 2026          | 0.99                                | (0.09) | 17 13/16" (452)                     | 8" (203)             | 2.79 (0.26)                 | 0.99 (0.09)                | 55 9/16" (1411) | 4.81 (0.45)                                               |                                      |
| 2030          | 0.99                                | (0.09) | 17 13/16" (452)                     | 8" (203)             | 3.50 (0.33)                 | 0.99 (0.09)                | 49 9/16" (1259) | 5.79 (0.54)                                               |                                      |
| 2616          | 1.32                                | (0.12) | 23 13/16" (605)                     | 8" (203)             | 1.82 (0.17)                 | 1.32 (0.12)                | 67 9/16" (1716) | 3.59 (0.33)                                               |                                      |
| 2620          | 1.32                                | (0.12) | 23 13/16" (605)                     | 8" (203)             | 2.79 (0.26)                 | 1.32 (0.12)                | 61 9/16" (1564) | 4.81 (0.45)                                               |                                      |
| 2626          | 1.32                                | (0.12) | 23 13/16" (605)                     | 8" (203)             | 3.75 (0.35)                 | 1.32 (0.12)                | 55 9/16" (1411) | 6.04 (0.56)                                               |                                      |
| 2630          | 1.32                                | (0.12) | 23 13/16" (605)                     | 8" (203)             | 4.72 (0.44)                 | 1.32 (0.12)                | 49 9/16" (1259) | 7.27 (0.68)                                               |                                      |
| 3016          | 1.66                                | (0.15) | 29 13/16" (757)                     | 8" (203)             | 2.29 (0.21)                 | 1.66 (0.15)                | 67 9/16" (1716) | 4.31 (0.40)                                               |                                      |
| 3020          | 1.66                                | (0.15) | 29 13/16" (757)                     | 8" (203)             | 3.50 (0.33)                 | 1.66 (0.15)                | 61 9/16" (1564) | 5.79 (0.54)                                               |                                      |
| 3026          | 1.66                                | (0.15) | 29 13/16" (757)                     | 8" (203)             | 4.72 (0.44)                 | 1.66 (0.15)                | 55 9/16" (1411) | 7.27 (0.68)                                               |                                      |
| 3030          | 1.66                                | (0.15) | 29 13/16" (757)                     | 8" (203)             | 5.94 (0.55)                 | 1.66 (0.15)                | 49 9/16" (1259) | 8.75 (0.81)                                               |                                      |
| 3616          | 1.99                                | (0.18) | 35 13/16" (909)                     | 8" (203)             | 2.75 (0.26)                 | 1.99 (0.18)                | 67 9/16" (1716) | 5.04 (0.47)                                               |                                      |
| 3620          | 1.99                                | (0.18) | 35 13/16" (909)                     | 8" (203)             | 4.22 (0.39)                 | 1.99 (0.18)                | 61 9/16" (1564) | 6.77 (0.63)                                               |                                      |
| 3626          | 1.99                                | (0.18) | 35 13/16" (909)                     | 8" (203)             | 5.69 (0.53)                 | 1.99 (0.18)                | 55 9/16" (1411) | 8.50 (0.79)                                               |                                      |
| 3630          | 1.99                                | (0.18) | 35 13/16" (909)                     | 8" (203)             | 7.16 (0.67)                 | 1.99 (0.18)                | 49 9/16" (1259) | 10.23 (0.95)                                              |                                      |
| 4016          | 2.32                                | (0.22) | 41 13/16" (1062)                    | 8" (203)             | 3.22 (0.30)                 | 2.32 (0.22)                | 67 9/16" (1716) | 5.77 (0.54)                                               |                                      |
| 4020          | 2.32                                | (0.22) | 41 13/16" (1062)                    | 8" (203)             | 4.94 (0.46)                 | 2.32 (0.22)                | 61 9/16" (1564) | 7.75 (0.72)                                               |                                      |
| 4026          | 2.32                                | (0.22) | 41 13/16" (1062)                    | 8" (203)             | 6.66 (0.62)                 | 2.32 (0.22)                | 55 9/16" (1411) | 9.73 (0.90)                                               |                                      |
| 4030          | 2.32                                | (0.22) | 41 13/16" (1062)                    | 8" (203)             | 8.38 (0.78)                 | 2.32 (0.22)                | 49 9/16" (1259) | 11.71 (1.09)                                              |                                      |

- Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 <sup>1</sup>/<sub>2</sub>" (2096).
- Dimensions in parentheses are in millimeters or square meters.

## Twin Awning Window Opening and Area Specifications

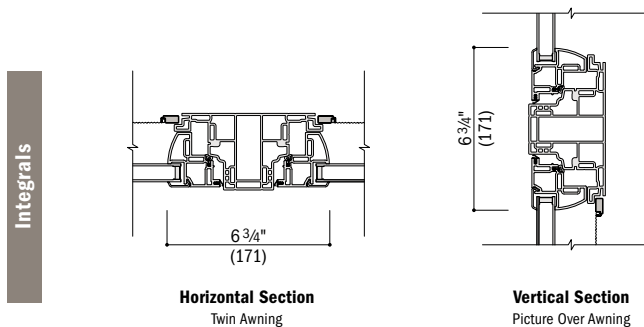
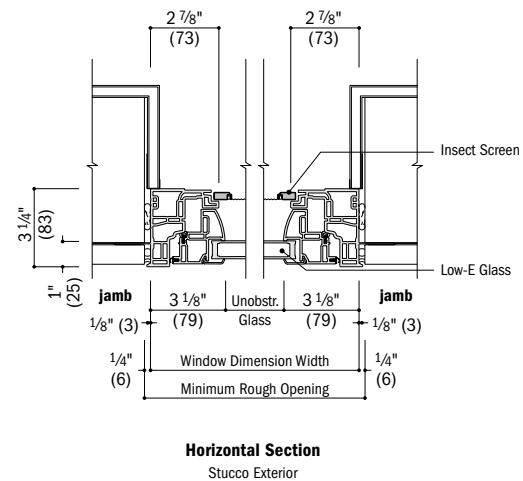
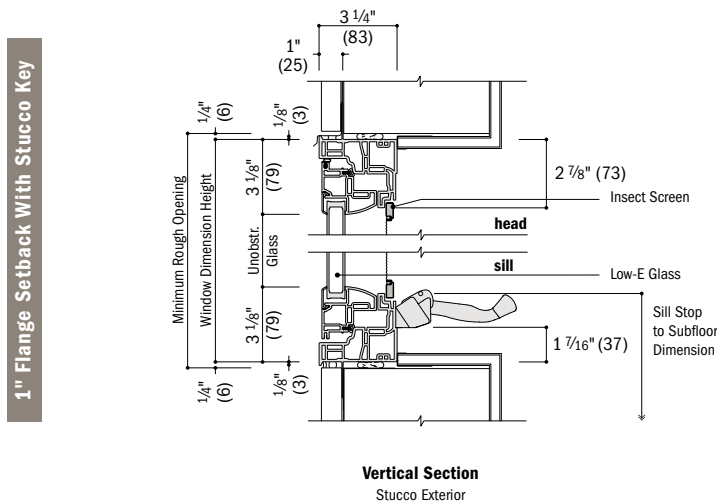
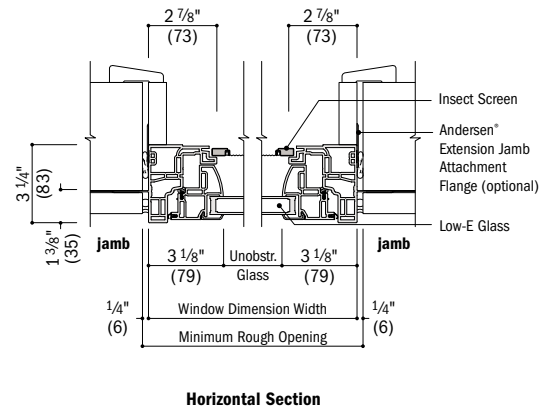
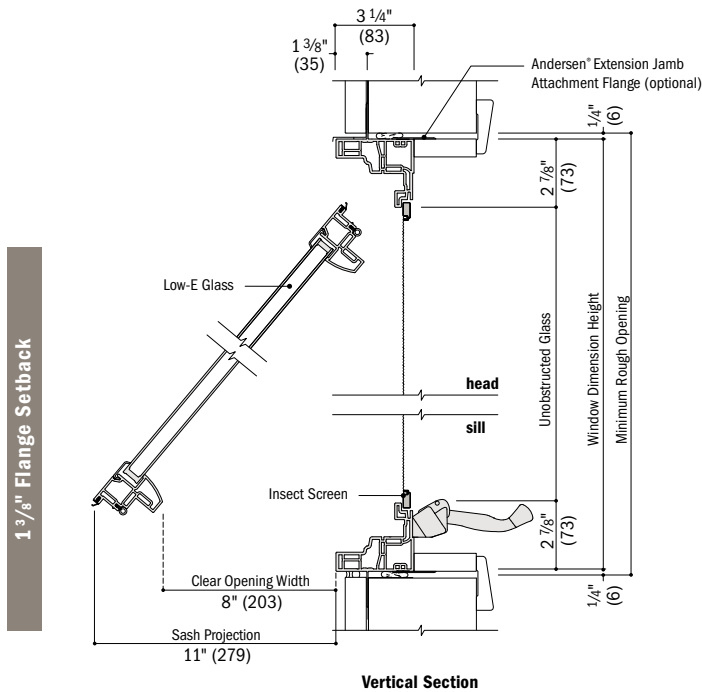
| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Clear Opening in Full Open Position |                      | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) |                 | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|--------|-------------------------------------|----------------------|------------------------------------------|-----------------------------------------|-----------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  |        | Width<br>Inches/(mm)                | Depth<br>Inches/(mm) |                                          |                                         |                 |                                                           |                                                   |
| 1616-2        | 0.66                                             | (0.06) | 11 13/16" (300)                     | 8" (203)             | 1.76 (0.16)                              | 1.31 (0.12)                             | 67 9/16" (1716) | 4.31 (0.40)                                               |                                                   |
| 1620-2        | 0.66                                             | (0.06) | 11 13/16" (300)                     | 8" (203)             | 2.70 (0.25)                              | 1.31 (0.12)                             | 61 9/16" (1564) | 5.79 (0.54)                                               |                                                   |
| 1626-2        | 0.66                                             | (0.06) | 11 13/16" (300)                     | 8" (203)             | 3.63 (0.34)                              | 1.31 (0.12)                             | 55 9/16" (1411) | 7.27 (0.68)                                               |                                                   |
| 1630-2        | 0.66                                             | (0.06) | 11 13/16" (300)                     | 8" (203)             | 4.57 (0.42)                              | 1.31 (0.12)                             | 49 9/16" (1259) | 8.75 (0.81)                                               |                                                   |
| 1916-2        | 0.82                                             | (0.08) | 14 13/16" (376)                     | 8" (203)             | 2.23 (0.21)                              | 1.65 (0.15)                             | 67 9/16" (1716) | 5.04 (0.47)                                               |                                                   |
| 1920-2        | 0.82                                             | (0.08) | 14 13/16" (376)                     | 8" (203)             | 3.41 (0.32)                              | 1.65 (0.15)                             | 61 9/16" (1564) | 6.77 (0.63)                                               |                                                   |
| 1926-2        | 0.82                                             | (0.08) | 14 13/16" (376)                     | 8" (203)             | 4.60 (0.43)                              | 1.65 (0.15)                             | 55 9/16" (1411) | 8.50 (0.79)                                               |                                                   |
| 1930-2        | 0.82                                             | (0.08) | 14 13/16" (376)                     | 8" (203)             | 5.79 (0.54)                              | 1.65 (0.15)                             | 49 9/16" (1259) | 10.23 (0.95)                                              |                                                   |
| 2016-2        | 0.99                                             | (0.09) | 17 13/16" (452)                     | 8" (203)             | 2.70 (0.25)                              | 1.98 (0.18)                             | 67 9/16" (1716) | 5.77 (0.54)                                               |                                                   |
| 2020-2        | 0.99                                             | (0.09) | 17 13/16" (452)                     | 8" (203)             | 4.13 (0.38)                              | 1.98 (0.18)                             | 61 9/16" (1564) | 7.75 (0.72)                                               |                                                   |
| 2026-2        | 0.99                                             | (0.09) | 17 13/16" (452)                     | 8" (203)             | 5.57 (0.52)                              | 1.98 (0.18)                             | 55 9/16" (1411) | 9.73 (0.90)                                               |                                                   |
| 2030-2        | 0.99                                             | (0.09) | 17 13/16" (452)                     | 8" (203)             | 7.01 (0.65)                              | 1.98 (0.18)                             | 49 9/16" (1259) | 11.71 (1.09)                                              |                                                   |
| 2316-2        | 1.16                                             | (0.11) | 20 13/16" (528)                     | 8" (203)             | 3.16 (0.29)                              | 2.31 (0.21)                             | 67 9/16" (1716) | 6.50 (0.60)                                               |                                                   |
| 2320-2        | 1.16                                             | (0.11) | 20 13/16" (528)                     | 8" (203)             | 4.85 (0.45)                              | 2.31 (0.21)                             | 61 9/16" (1564) | 8.73 (0.81)                                               |                                                   |
| 2326-2        | 1.16                                             | (0.11) | 20 13/16" (528)                     | 8" (203)             | 6.54 (0.61)                              | 2.31 (0.21)                             | 55 9/16" (1411) | 10.96 (1.02)                                              |                                                   |
| 2330-2        | 1.16                                             | (0.11) | 20 13/16" (528)                     | 8" (203)             | 8.23 (0.76)                              | 2.31 (0.21)                             | 49 9/16" (1259) | 13.19 (1.23)                                              |                                                   |
| 2616-2        | 1.32                                             | (0.12) | 23 13/16" (605)                     | 8" (203)             | 3.63 (0.34)                              | 2.65 (0.25)                             | 67 9/16" (1716) | 7.23 (0.67)                                               |                                                   |
| 2620-2        | 1.32                                             | (0.12) | 23 13/16" (605)                     | 8" (203)             | 5.57 (0.52)                              | 2.65 (0.25)                             | 61 9/16" (1564) | 9.71 (0.90)                                               |                                                   |
| 2626-2        | 1.32                                             | (0.12) | 23 13/16" (605)                     | 8" (203)             | 7.51 (0.70)                              | 2.65 (0.25)                             | 55 9/16" (1411) | 12.19 (1.13)                                              |                                                   |
| 2630-2        | 1.32                                             | (0.12) | 23 13/16" (605)                     | 8" (203)             | 9.45 (0.88)                              | 2.65 (0.25)                             | 49 9/16" (1259) | 14.67 (1.36)                                              |                                                   |
| 2916-2        | 1.49                                             | (0.14) | 26 13/16" (681)                     | 8" (203)             | 4.10 (0.38)                              | 2.98 (0.28)                             | 67 9/16" (1716) | 7.96 (0.74)                                               |                                                   |
| 2920-2        | 1.49                                             | (0.14) | 26 13/16" (681)                     | 8" (203)             | 6.29 (0.58)                              | 2.98 (0.28)                             | 61 9/16" (1564) | 10.69 (0.99)                                              |                                                   |
| 2926-2        | 1.49                                             | (0.14) | 26 13/16" (681)                     | 8" (203)             | 8.48 (0.79)                              | 2.98 (0.28)                             | 55 9/16" (1411) | 13.42 (1.25)                                              |                                                   |
| 2930-2        | 1.49                                             | (0.14) | 26 13/16" (681)                     | 8" (203)             | 10.66 (0.99)                             | 2.98 (0.28)                             | 49 9/16" (1259) | 16.15 (1.50)                                              |                                                   |
| 3016-2        | 1.66                                             | (0.15) | 29 13/16" (757)                     | 8" (203)             | 4.57 (0.42)                              | 3.31 (0.31)                             | 67 9/16" (1716) | 8.69 (0.81)                                               |                                                   |
| 3020-2        | 1.66                                             | (0.15) | 29 13/16" (757)                     | 8" (203)             | 7.01 (0.65)                              | 3.31 (0.31)                             | 61 9/16" (1564) | 11.67 (1.08)                                              |                                                   |
| 3026-2        | 1.66                                             | (0.15) | 29 13/16" (757)                     | 8" (203)             | 9.45 (0.88)                              | 3.31 (0.31)                             | 55 9/16" (1411) | 14.65 (1.36)                                              |                                                   |
| 3030-2        | 1.66                                             | (0.15) | 29 13/16" (757)                     | 8" (203)             | 11.88 (1.10)                             | 3.31 (0.31)                             | 49 9/16" (1259) | 17.63 (1.64)                                              |                                                   |

- Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 <sup>1</sup>/<sub>2</sub>" (2096).
- Dimensions in parentheses are in millimeters or square meters.

# CASEMENT & AWNING WINDOWS

## Awning Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



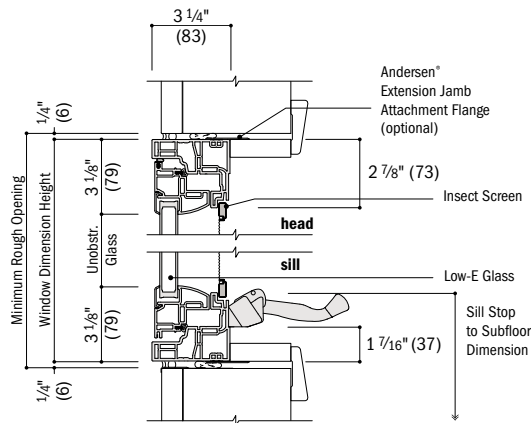
See pages 88-93 for joining details.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

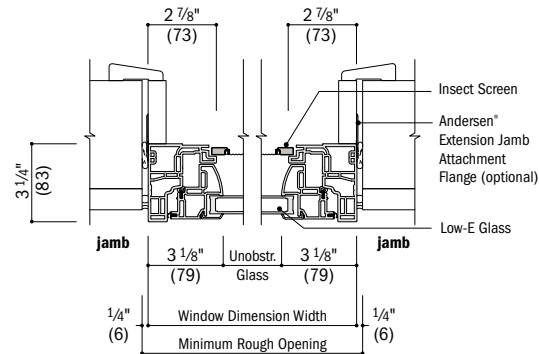
## Awning Window Details - Replacement

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

No Flange

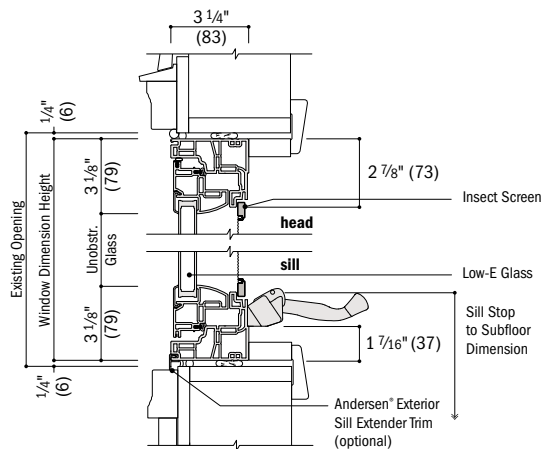


**Vertical Section**  
Existing Framed Opening

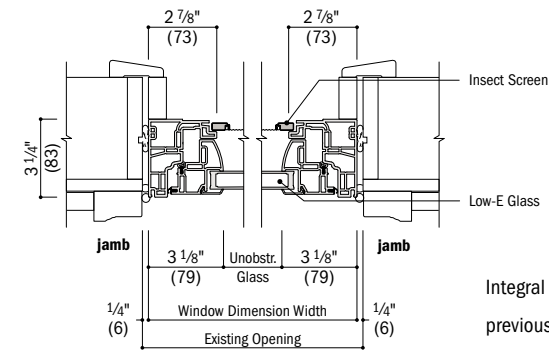


**Horizontal Section**  
Existing Framed Opening

Insert



**Vertical Section**  
Existing Window Opening

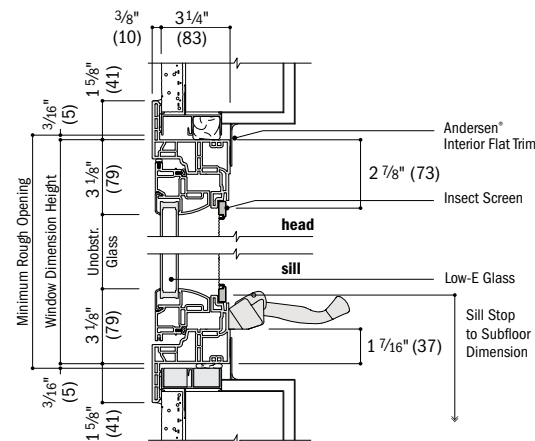


**Horizontal Section**  
Existing Window Opening

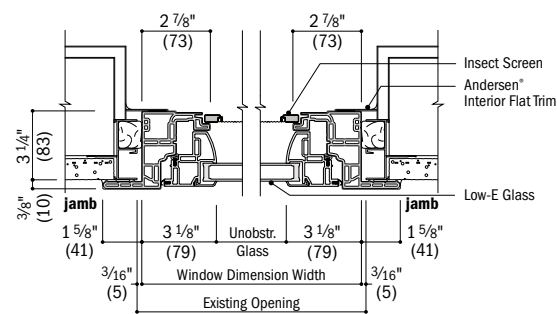
Integral details shown on previous page. Installation accessories are available for windows with insert and flush fin frames; see page 120.

See pages 88-93 for joining details.

Flush Fin\*



**Vertical Section**  
Existing Aluminum Frame Window Opening



**Horizontal Section**  
Existing Aluminum Frame Window Opening

- \*Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.
- Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.



# SINGLE-HUNG WINDOWS

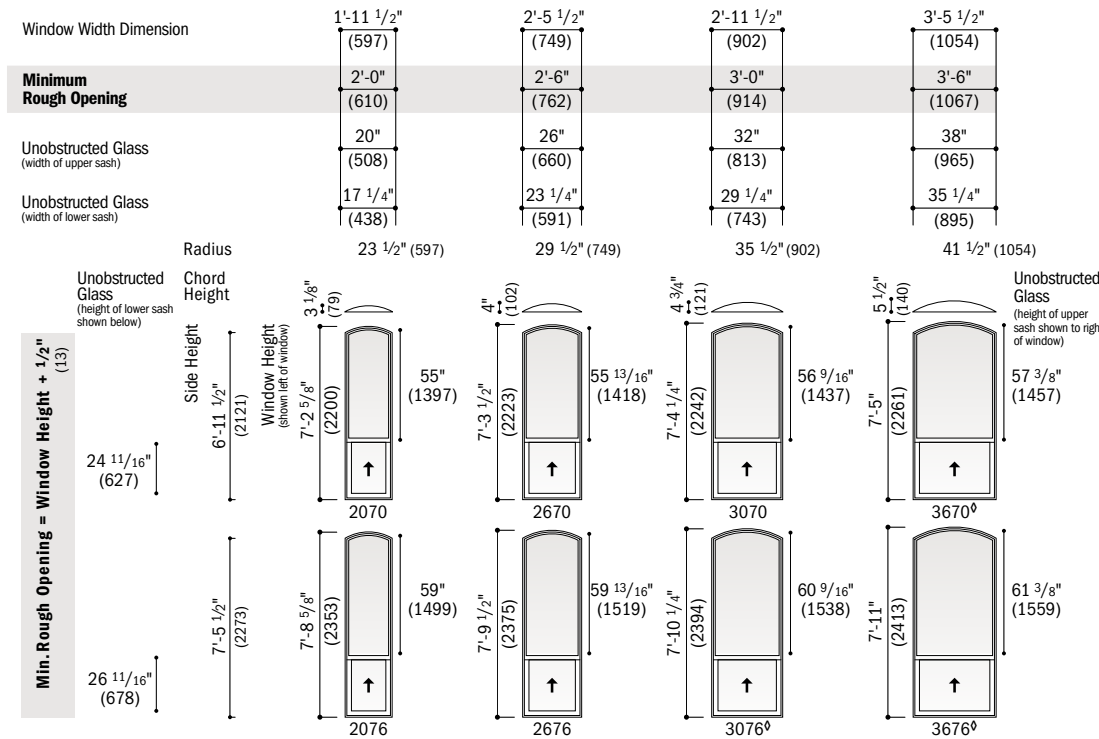
**Table of Arch Single-Hung Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Width Dimension                                             |  | 1'-11 1/2"                                                  | 2'-5 1/2"                                                   | 2'-11 1/2"                                                  | 3'-5 1/2"                                                     |
|--------------------------------------------------------------------|--|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------------|
| Minimum Rough Opening                                              |  | (597)<br>2'-0"<br>(610)<br>20"<br>(508)<br>17 1/4"<br>(438) | (749)<br>2'-6"<br>(762)<br>26"<br>(660)<br>23 1/4"<br>(591) | (902)<br>3'-0"<br>(914)<br>32"<br>(813)<br>29 1/4"<br>(743) | (1054)<br>3'-6"<br>(1067)<br>38"<br>(965)<br>35 1/4"<br>(895) |
| Radius                                                             |  | 23 1/2" (597)                                               | 29 1/2" (749)                                               | 35 1/2" (902)                                               | 41 1/2" (1054)                                                |
| Chord Height                                                       |  | 3 1/8" (79)                                                 | 4" (102)                                                    | 4 3/4" (121)                                                | 5 1/2" (140)                                                  |
| Unobstructed Glass (height of lower sash shown below)              |  | 10 9/16" (268)                                              | 15 1/16" (383)                                              | 16 11/16" (424)                                             | 17 1/2" (445)                                                 |
| Side Height                                                        |  | 2'-5 1/2" (749)                                             | 2'-9 1/2" (851)                                             | 2'-10 1/4" (870)                                            | 2'-11" (889)                                                  |
| Window Height (shown left of window)                               |  | 2'-8 5/8" (829)                                             | 2'-8 5/8" (851)                                             | 2'-10 1/4" (870)                                            | 2'-11" (889)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 15 1/16" (383)                                              | 15 7/8" (403)                                               | 16 11/16" (424)                                             | 17 1/2" (445)                                                 |
| Side Height                                                        |  | 2'-11 1/2" (902)                                            | 3'-3 1/2" (1003)                                            | 3'-4 1/4" (1022)                                            | 3'-5" (1041)                                                  |
| Window Height (shown left of window)                               |  | 3'-2 5/8" (981)                                             | 3'-3 1/2" (1003)                                            | 3'-4 1/4" (1022)                                            | 3'-5" (1041)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 18 1/16" (459)                                              | 18 7/8" (479)                                               | 19 11/16" (500)                                             | 20 1/2" (521)                                                 |
| Side Height                                                        |  | 3'-5 1/2" (1054)                                            | 3'-9 1/2" (1156)                                            | 3'-10 1/4" (1175)                                           | 3'-11" (1194)                                                 |
| Window Height (shown left of window)                               |  | 3'-8 5/8" (1133)                                            | 3'-9 1/2" (1156)                                            | 3'-10 1/4" (1175)                                           | 3'-11" (1194)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 21 1/16" (535)                                              | 21 7/8" (556)                                               | 22 11/16" (576)                                             | 23 1/2" (597)                                                 |
| Side Height                                                        |  | 3'-11 1/2" (1207)                                           | 4'-3 1/2" (1308)                                            | 4'-4 1/4" (1327)                                            | 4'-5" (1346)                                                  |
| Window Height (shown left of window)                               |  | 4'-2 5/8" (1286)                                            | 4'-3 1/2" (1308)                                            | 4'-4 1/4" (1327)                                            | 4'-5" (1346)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 24 1/16" (611)                                              | 24 7/8" (632)                                               | 25 11/16" (652)                                             | 26 1/2" (673)                                                 |
| Side Height                                                        |  | 4'-5 1/2" (1359)                                            | 4'-9 1/2" (1461)                                            | 4'-10 1/4" (1480)                                           | 4'-11" (1499)                                                 |
| Window Height (shown left of window)                               |  | 4'-8 5/8" (1438)                                            | 4'-9 1/2" (1461)                                            | 4'-10 1/4" (1480)                                           | 4'-11" (1499)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 27 1/16" (687)                                              | 27 7/8" (708)                                               | 28 11/16" (729)                                             | 29 1/2" (749)                                                 |
| Side Height                                                        |  | 4'-11 1/2" (1511)                                           | 5'-3 1/2" (1613)                                            | 5'-4 1/4" (1632)                                            | 5'-5" (1651)                                                  |
| Window Height (shown left of window)                               |  | 5'-2 5/8" (1591)                                            | 5'-3 1/2" (1613)                                            | 5'-4 1/4" (1632)                                            | 5'-5" (1651)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 30 1/16" (764)                                              | 30 7/8" (784)                                               | 31 11/16" (805)                                             | 32 1/2" (826)                                                 |
| Side Height                                                        |  | 5'-5 1/2" (1664)                                            | 5'-9 1/2" (1765)                                            | 5'-10 1/4" (1784)                                           | 5'-11" (1803)                                                 |
| Window Height (shown left of window)                               |  | 5'-8 5/8" (1743)                                            | 5'-9 1/2" (1765)                                            | 5'-10 1/4" (1784)                                           | 5'-11" (1803)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 33 1/16" (840)                                              | 33 7/8" (860)                                               | 34 11/16" (881)                                             | 35 1/2" (902)                                                 |
| Side Height                                                        |  | 5'-11 1/2" (1816)                                           | 6'-3 1/2" (1918)                                            | 6'-4 1/4" (1937)                                            | 6'-5" (1956)                                                  |
| Window Height (shown left of window)                               |  | 6'-2 5/8" (1895)                                            | 6'-3 1/2" (1918)                                            | 6'-4 1/4" (1937)                                            | 6'-5" (1956)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 36 1/16" (916)                                              | 36 7/8" (937)                                               | 37 11/16" (957)                                             | 38 1/2" (978)                                                 |
| Side Height                                                        |  | 6'-5 1/2" (1969)                                            | 6'-9 1/2" (2070)                                            | 6'-10 1/4" (2089)                                           | 6'-11" (2108)                                                 |
| Window Height (shown left of window)                               |  | 6'-8 5/8" (2048)                                            | 6'-9 1/2" (2070)                                            | 6'-10 1/4" (2089)                                           | 6'-11" (2108)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 39 1/16" (992)                                              | 39 7/8" (1013)                                              | 40 11/16" (1033)                                            | 41 1/2" (1054)                                                |
| Side Height                                                        |  | 6'-11 1/2" (2140)                                           | 7'-3 1/2" (2241)                                            | 7'-4 1/4" (2260)                                            | 7'-5" (2279)                                                  |
| Window Height (shown left of window)                               |  | 7'-2 5/8" (2219)                                            | 7'-3 1/2" (2241)                                            | 7'-4 1/4" (2260)                                            | 7'-5" (2279)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 42 1/16" (1068)                                             | 42 7/8" (1089)                                              | 43 11/16" (1109)                                            | 44 1/2" (1130)                                                |
| Side Height                                                        |  | 7'-5 1/2" (2293)                                            | 7'-9 1/2" (2394)                                            | 7'-10 1/4" (2413)                                           | 7'-11" (2432)                                                 |
| Window Height (shown left of window)                               |  | 7'-8 5/8" (2372)                                            | 7'-9 1/2" (2394)                                            | 7'-10 1/4" (2413)                                           | 7'-11" (2432)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 45 1/16" (1144)                                             | 45 7/8" (1165)                                              | 46 11/16" (1185)                                            | 47 1/2" (1206)                                                |
| Side Height                                                        |  | 7'-8 1/2" (2446)                                            | 8'-1 1/2" (2547)                                            | 8'-2 1/4" (2566)                                            | 8'-3" (2585)                                                  |
| Window Height (shown left of window)                               |  | 8'-1 1/2" (2525)                                            | 8'-2 1/2" (2626)                                            | 8'-3 1/4" (2645)                                            | 8'-4" (2664)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 48 1/16" (1220)                                             | 48 7/8" (1241)                                              | 49 11/16" (1261)                                            | 50 1/2" (1282)                                                |
| Side Height                                                        |  | 8'-11 1/2" (2599)                                           | 8'-5 1/2" (2699)                                            | 8'-6 1/4" (2718)                                            | 8'-7" (2737)                                                  |
| Window Height (shown left of window)                               |  | 8'-4 5/8" (2678)                                            | 8'-5 1/2" (2699)                                            | 8'-6 1/4" (2718)                                            | 8'-7" (2737)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 51 1/16" (1296)                                             | 51 7/8" (1317)                                              | 52 11/16" (1337)                                            | 53 1/2" (1358)                                                |
| Side Height                                                        |  | 9'-1 1/2" (2752)                                            | 9'-5 1/2" (2852)                                            | 9'-6 1/4" (2871)                                            | 9'-7" (2890)                                                  |
| Window Height (shown left of window)                               |  | 9'-4 5/8" (2831)                                            | 9'-5 1/2" (2852)                                            | 9'-6 1/4" (2871)                                            | 9'-7" (2890)                                                  |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 54 1/16" (1372)                                             | 54 7/8" (1393)                                              | 55 11/16" (1413)                                            | 56 1/2" (1434)                                                |
| Side Height                                                        |  | 9'-7 1/2" (2886)                                            | 9'-9 1/2" (2986)                                            | 9'-10 1/4" (3005)                                           | 9'-11" (3024)                                                 |
| Window Height (shown left of window)                               |  | 9'-10 5/8" (2965)                                           | 9'-11 1/2" (2986)                                           | 10'-0 1/4" (3005)                                           | 10'-1" (3024)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 57 1/16" (1448)                                             | 57 7/8" (1469)                                              | 58 11/16" (1489)                                            | 59 1/2" (1510)                                                |
| Side Height                                                        |  | 10'-1 1/2" (3058)                                           | 10'-5 1/2" (3158)                                           | 10'-6 1/4" (3177)                                           | 10'-7" (3196)                                                 |
| Window Height (shown left of window)                               |  | 10'-4 5/8" (3137)                                           | 10'-5 1/2" (3158)                                           | 10'-6 1/4" (3177)                                           | 10'-7" (3196)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 60 1/16" (1524)                                             | 60 7/8" (1545)                                              | 61 11/16" (1565)                                            | 62 1/2" (1586)                                                |
| Side Height                                                        |  | 10'-7 1/2" (3211)                                           | 10'-9 1/2" (3311)                                           | 10'-10 1/4" (3330)                                          | 10'-11" (3349)                                                |
| Window Height (shown left of window)                               |  | 10'-10 5/8" (3290)                                          | 10'-11 1/2" (3311)                                          | 11'-0 1/4" (3330)                                           | 11'-1" (3349)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 63 1/16" (1600)                                             | 63 7/8" (1621)                                              | 64 11/16" (1641)                                            | 65 1/2" (1662)                                                |
| Side Height                                                        |  | 11'-1 1/2" (3364)                                           | 11'-5 1/2" (3464)                                           | 11'-6 1/4" (3483)                                           | 11'-7" (3502)                                                 |
| Window Height (shown left of window)                               |  | 11'-4 5/8" (3443)                                           | 11'-5 1/2" (3464)                                           | 11'-6 1/4" (3483)                                           | 11'-7" (3502)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 66 1/16" (1676)                                             | 66 7/8" (1697)                                              | 67 11/16" (1717)                                            | 68 1/2" (1738)                                                |
| Side Height                                                        |  | 11'-7 1/2" (3517)                                           | 11'-9 1/2" (3617)                                           | 11'-10 1/4" (3636)                                          | 11'-11" (3655)                                                |
| Window Height (shown left of window)                               |  | 11'-10 5/8" (3596)                                          | 11'-11 1/2" (3617)                                          | 12'-0 1/4" (3636)                                           | 12'-1" (3655)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 69 1/16" (1752)                                             | 69 7/8" (1773)                                              | 70 11/16" (1793)                                            | 71 1/2" (1814)                                                |
| Side Height                                                        |  | 12'-1 1/2" (3670)                                           | 12'-5 1/2" (3770)                                           | 12'-6 1/4" (3789)                                           | 12'-7" (3808)                                                 |
| Window Height (shown left of window)                               |  | 12'-4 5/8" (3749)                                           | 12'-5 1/2" (3770)                                           | 12'-6 1/4" (3789)                                           | 12'-7" (3808)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 72 1/16" (1828)                                             | 72 7/8" (1849)                                              | 73 11/16" (1869)                                            | 74 1/2" (1890)                                                |
| Side Height                                                        |  | 12'-7 1/2" (3823)                                           | 12'-9 1/2" (3923)                                           | 12'-10 1/4" (3942)                                          | 12'-11" (3961)                                                |
| Window Height (shown left of window)                               |  | 12'-10 5/8" (3902)                                          | 12'-11 1/2" (3923)                                          | 13'-0 1/4" (3942)                                           | 13'-1" (3961)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 75 1/16" (1904)                                             | 75 7/8" (1925)                                              | 76 11/16" (1945)                                            | 77 1/2" (1966)                                                |
| Side Height                                                        |  | 13'-1 1/2" (3976)                                           | 13'-5 1/2" (4076)                                           | 13'-6 1/4" (4095)                                           | 13'-7" (4114)                                                 |
| Window Height (shown left of window)                               |  | 13'-4 5/8" (4055)                                           | 13'-5 1/2" (4076)                                           | 13'-6 1/4" (4095)                                           | 13'-7" (4114)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 78 1/16" (1980)                                             | 78 7/8" (2001)                                              | 79 11/16" (2021)                                            | 80 1/2" (2042)                                                |
| Side Height                                                        |  | 13'-7 1/2" (4129)                                           | 13'-9 1/2" (4229)                                           | 13'-10 1/4" (4248)                                          | 13'-11" (4267)                                                |
| Window Height (shown left of window)                               |  | 13'-10 5/8" (4208)                                          | 13'-11 1/2" (4229)                                          | 14'-0 1/4" (4248)                                           | 14'-1" (4267)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 81 1/16" (2056)                                             | 81 7/8" (2077)                                              | 82 11/16" (2097)                                            | 83 1/2" (2118)                                                |
| Side Height                                                        |  | 14'-1 1/2" (4282)                                           | 14'-5 1/2" (4382)                                           | 14'-6 1/4" (4401)                                           | 14'-7" (4420)                                                 |
| Window Height (shown left of window)                               |  | 14'-4 5/8" (4361)                                           | 14'-5 1/2" (4382)                                           | 14'-6 1/4" (4401)                                           | 14'-7" (4420)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 84 1/16" (2132)                                             | 84 7/8" (2153)                                              | 85 11/16" (2173)                                            | 86 1/2" (2194)                                                |
| Side Height                                                        |  | 14'-7 1/2" (4435)                                           | 14'-9 1/2" (4535)                                           | 14'-10 1/4" (4554)                                          | 14'-11" (4573)                                                |
| Window Height (shown left of window)                               |  | 14'-10 5/8" (4514)                                          | 14'-11 1/2" (4535)                                          | 15'-0 1/4" (4554)                                           | 15'-1" (4573)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 87 1/16" (2208)                                             | 87 7/8" (2229)                                              | 88 11/16" (2249)                                            | 89 1/2" (2270)                                                |
| Side Height                                                        |  | 15'-1 1/2" (4588)                                           | 15'-5 1/2" (4688)                                           | 15'-6 1/4" (4707)                                           | 15'-7" (4726)                                                 |
| Window Height (shown left of window)                               |  | 15'-4 5/8" (4667)                                           | 15'-5 1/2" (4688)                                           | 15'-6 1/4" (4707)                                           | 15'-7" (4726)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 90 1/16" (2284)                                             | 90 7/8" (2305)                                              | 91 11/16" (2325)                                            | 92 1/2" (2346)                                                |
| Side Height                                                        |  | 15'-7 1/2" (4741)                                           | 15'-9 1/2" (4841)                                           | 15'-10 1/4" (4860)                                          | 15'-11" (4879)                                                |
| Window Height (shown left of window)                               |  | 15'-10 5/8" (4820)                                          | 15'-11 1/2" (4841)                                          | 16'-0 1/4" (4860)                                           | 16'-1" (4879)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 93 1/16" (2360)                                             | 93 7/8" (2381)                                              | 94 11/16" (2401)                                            | 95 1/2" (2422)                                                |
| Side Height                                                        |  | 16'-1 1/2" (4894)                                           | 16'-5 1/2" (4994)                                           | 16'-6 1/4" (5013)                                           | 16'-7" (5032)                                                 |
| Window Height (shown left of window)                               |  | 16'-4 5/8" (4973)                                           | 16'-5 1/2" (4994)                                           | 16'-6 1/4" (5013)                                           | 16'-7" (5032)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 96 1/16" (2436)                                             | 96 7/8" (2457)                                              | 97 11/16" (2477)                                            | 98 1/2" (2498)                                                |
| Side Height                                                        |  | 16'-7 1/2" (4947)                                           | 16'-9 1/2" (5047)                                           | 16'-10 1/4" (5066)                                          | 16'-11" (5085)                                                |
| Window Height (shown left of window)                               |  | 16'-10 5/8" (5026)                                          | 16'-11 1/2" (5047)                                          | 17'-0 1/4" (5066)                                           | 17'-1" (5085)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 99 1/16" (2512)                                             | 99 7/8" (2533)                                              | 100 11/16" (2553)                                           | 101 1/2" (2574)                                               |
| Side Height                                                        |  | 17'-1 1/2" (5100)                                           | 17'-5 1/2" (5200)                                           | 17'-6 1/4" (5219)                                           | 17'-7" (5238)                                                 |
| Window Height (shown left of window)                               |  | 17'-4 5/8" (5179)                                           | 17'-5 1/2" (5200)                                           | 17'-6 1/4" (5219)                                           | 17'-7" (5238)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 102 1/16" (2588)                                            | 102 7/8" (2609)                                             | 103 11/16" (2629)                                           | 104 1/2" (2650)                                               |
| Side Height                                                        |  | 17'-7 1/2" (5253)                                           | 17'-9 1/2" (5353)                                           | 17'-10 1/4" (5372)                                          | 17'-11" (5391)                                                |
| Window Height (shown left of window)                               |  | 17'-10 5/8" (5332)                                          | 17'-11 1/2" (5353)                                          | 18'-0 1/4" (5372)                                           | 18'-1" (5391)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 105 1/16" (2664)                                            | 105 7/8" (2685)                                             | 106 11/16" (2705)                                           | 107 1/2" (2726)                                               |
| Side Height                                                        |  | 18'-1 1/2" (5386)                                           | 18'-5 1/2" (5486)                                           | 18'-6 1/4" (5505)                                           | 18'-7" (5524)                                                 |
| Window Height (shown left of window)                               |  | 18'-4 5/8" (5465)                                           | 18'-5 1/2" (5486)                                           | 18'-6 1/4" (5505)                                           | 18'-7" (5524)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 108 1/16" (2740)                                            | 108 7/8" (2761)                                             | 109 11/16" (2781)                                           | 110 1/2" (2802)                                               |
| Side Height                                                        |  | 18'-7 1/2" (5539)                                           | 18'-9 1/2" (5639)                                           | 18'-10 1/4" (5658)                                          | 18'-11" (5677)                                                |
| Window Height (shown left of window)                               |  | 18'-10 5/8" (5618)                                          | 18'-11 1/2" (5639)                                          | 19'-0 1/4" (5658)                                           | 19'-1" (5677)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 111 1/16" (2816)                                            | 111 7/8" (2837)                                             | 112 11/16" (2857)                                           | 113 1/2" (2878)                                               |
| Side Height                                                        |  | 19'-1 1/2" (5670)                                           | 19'-5 1/2" (5770)                                           | 19'-6 1/4" (5789)                                           | 19'-7" (5808)                                                 |
| Window Height (shown left of window)                               |  | 19'-4 5/8" (5749)                                           | 19'-5 1/2" (5770)                                           | 19'-6 1/4" (5789)                                           | 19'-7" (5808)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 114 1/16" (2892)                                            | 114 7/8" (2913)                                             | 115 11/16" (2933)                                           | 116 1/2" (2954)                                               |
| Side Height                                                        |  | 19'-7 1/2" (5823)                                           | 19'-9 1/2" (5923)                                           | 19'-10 1/4" (5942)                                          | 19'-11" (5961)                                                |
| Window Height (shown left of window)                               |  | 19'-10 5/8" (5902)                                          | 19'-11 1/2" (5923)                                          | 20'-0 1/4" (5942)                                           | 20'-1" (5961)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 117 1/16" (2968)                                            | 117 7/8" (2989)                                             | 118 11/16" (3009)                                           | 119 1/2" (3030)                                               |
| Side Height                                                        |  | 20'-1 1/2" (5956)                                           | 20'-5 1/2" (6056)                                           | 20'-6 1/4" (6075)                                           | 20'-7" (6094)                                                 |
| Window Height (shown left of window)                               |  | 20'-4 5/8" (6035)                                           | 20'-5 1/2" (6056)                                           | 20'-6 1/4" (6075)                                           | 20'-7" (6094)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 120 1/16" (3044)                                            | 120 7/8" (3065)                                             | 121 11/16" (3085)                                           | 122 1/2" (3106)                                               |
| Side Height                                                        |  | 20'-7 1/2" (6089)                                           | 20'-9 1/2" (6189)                                           | 20'-10 1/4" (6208)                                          | 20'-11" (6227)                                                |
| Window Height (shown left of window)                               |  | 20'-10 5/8" (6168)                                          | 20'-11 1/2" (6189)                                          | 21'-0 1/4" (6208)                                           | 21'-1" (6227)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 123 1/16" (3120)                                            | 123 7/8" (3141)                                             | 124 11/16" (3161)                                           | 125 1/2" (3182)                                               |
| Side Height                                                        |  | 21'-1 1/2" (6192)                                           | 21'-5 1/2" (6292)                                           | 21'-6 1/4" (6311)                                           | 21'-7" (6330)                                                 |
| Window Height (shown left of window)                               |  | 21'-4 5/8" (6271)                                           | 21'-5 1/2" (6292)                                           | 21'-6 1/4" (6311)                                           | 21'-7" (6330)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 126 1/16" (3196)                                            | 126 7/8" (3217)                                             | 127 11/16" (3237)                                           | 128 1/2" (3258)                                               |
| Side Height                                                        |  | 21'-7 1/2" (6345)                                           | 21'-9 1/2" (6445)                                           | 21'-10 1/4" (6464)                                          | 21'-11" (6483)                                                |
| Window Height (shown left of window)                               |  | 21'-10 5/8" (6353)                                          | 21'-11 1/2" (6373)                                          | 22'-0 1/4" (6392)                                           | 22'-1" (6411)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 129 1/16" (3272)                                            | 129 7/8" (3293)                                             | 130 11/16" (3313)                                           | 131 1/2" (3334)                                               |
| Side Height                                                        |  | 22'-1 1/2" (6408)                                           | 22'-5 1/2" (6508)                                           | 22'-6 1/4" (6527)                                           | 22'-7" (6546)                                                 |
| Window Height (shown left of window)                               |  | 22'-4 5/8" (6487)                                           | 22'-5 1/2" (6508)                                           | 22'-6 1/4" (6527)                                           | 22'-7" (6546)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 132 1/16" (3348)                                            | 132 7/8" (3369)                                             | 133 11/16" (3389)                                           | 134 1/2" (3410)                                               |
| Side Height                                                        |  | 22'-7 1/2" (6539)                                           | 22'-9 1/2" (6639)                                           | 22'-10 1/4" (6658)                                          | 22'-11" (6677)                                                |
| Window Height (shown left of window)                               |  | 22'-10 5/8" (6618)                                          | 22'-11 1/2" (6639)                                          | 23'-0 1/4" (6658)                                           | 23'-1" (6677)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 135 1/16" (3424)                                            | 135 7/8" (3445)                                             | 136 11/16" (3465)                                           | 137 1/2" (3486)                                               |
| Side Height                                                        |  | 23'-1 1/2" (6670)                                           | 23'-5 1/2" (6770)                                           | 23'-6 1/4" (6789)                                           | 23'-7" (6808)                                                 |
| Window Height (shown left of window)                               |  | 23'-4 5/8" (6749)                                           | 23'-5 1/2" (6770)                                           | 23'-6 1/4" (6789)                                           | 23'-7" (6808)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 138 1/16" (3500)                                            | 138 7/8" (3521)                                             | 139 11/16" (3541)                                           | 140 1/2" (3562)                                               |
| Side Height                                                        |  | 23'-7 1/2" (6823)                                           | 23'-9 1/2" (6923)                                           | 23'-10 1/4" (6942)                                          | 23'-11" (6961)                                                |
| Window Height (shown left of window)                               |  | 23'-10 5/8" (6860)                                          | 23'-11 1/2" (6881)                                          | 24'-0 1/4" (6900)                                           | 24'-1" (6919)                                                 |
| Unobstructed Glass (height of upper sash shown to right of window) |  | 141 1/16" (3576)                                            | 141 7/8" (3597)                                             | 142 11/16" (3617)                                           | 143 1/2" (3638)                                               |
| Side                                                               |  |                                                             |                                                             |                                                             |                                                               |

**Table of Arch Single-Hung Window Sizes** (continued)

Scale 1/8" (3) = 1'-0" (305) – 1:96



\* Window Dimension always refers to outside frame-to-frame dimension.

\* **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**

See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

\* Arch single-hung windows are not available with the flush fin frame option.

φ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on pages 33 and 41.

\* For side heights greater than 6'-5 1/2" (1969), meeting rail location = (side height in inches x 0.33) + 1.96".

## Arch Single-Hung Window Opening and Area Specifications

| Window Number | Clear Opening Area Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                     | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Vent Area Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop Inches/ (mm) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|---------------|-----------------------------------------------|-------------------------------------|---------------------|---------------------------------------|--------------------------------------|---------------------------------------------------------|------------------------------------------------|
|               |                                               | Width Inches/ (mm)                  | Height Inches/ (mm) |                                       |                                      |                                                         |                                                |
| 2026          | 1.53 (0.14)                                   | 20" (508)                           | 11 1/16" (280)      | 3.25 (0.30)                           | 1.53 (0.14)                          | 51 3/8" (1304)                                          | 5.16 (0.48)                                    |
| 2030          | 1.95 (0.18)                                   | 20" (508)                           | 14 1/16" (357)      | 4.03 (0.37)                           | 1.95 (0.18)                          | 45 3/8" (1152)                                          | 6.14 (0.57)                                    |
| 2036          | 2.37 (0.22)                                   | 20" (508)                           | 17 1/16" (433)      | 4.80 (0.45)                           | 2.37 (0.22)                          | 39 3/8" (1000)                                          | 7.12 (0.66)                                    |
| 2040          | 2.78 (0.26)                                   | 20" (508)                           | 20 1/16" (509)      | 5.58 (0.52)                           | 2.78 (0.26)                          | 33 3/8" (847)                                           | 8.10 (0.75)                                    |
| 2046          | 3.20 (0.30)                                   | 20" (508)                           | 23 1/16" (585)      | 6.36 (0.59)                           | 3.20 (0.30)                          | 27 3/8" (695)                                           | 9.08 (0.84)                                    |
| 2050          | 3.62 (0.34)                                   | 20" (508)                           | 26 1/16" (661)      | 7.13 (0.66)                           | 3.62 (0.34)                          | 21 3/8" (542)                                           | 10.06 (0.93)                                   |
| 2056          | 4.03 (0.37)                                   | 20" (508)                           | 29 1/16" (738)      | 7.91 (0.73)                           | 4.03 (0.37)                          | 15 3/8" (390)                                           | 11.04 (1.03)                                   |
| 2060          | 4.45 (0.41)                                   | 20" (508)                           | 32 1/16" (814)      | 8.68 (0.81)                           | 4.45 (0.41)                          | 9 3/8" (238)                                            | 12.02 (1.12)                                   |
| 2066          | 4.87 (0.45)                                   | 20" (508)                           | 35 1/16" (890)      | 9.46 (0.88)                           | 4.87 (0.45)                          | 16 7/8" (429)**                                         | 12.99 (1.21)                                   |
| 2070*         | 3.48 (0.32)                                   | 20" (508)                           | 25 1/16" (636)      | 10.48 (0.97)                          | 3.48 (0.32)                          | 10 7/8" (276)**                                         | 13.97 (1.30)                                   |
| 2076*         | 3.76 (0.35)                                   | 20" (508)                           | 27 1/16" (687)      | 11.28 (1.05)                          | 3.76 (0.35)                          | 4 7/8" (124)**                                          | 14.95 (1.39)                                   |
| 2626          | 1.99 (0.19)                                   | 26" (660)                           | 11 1/16" (280)      | 4.39 (0.41)                           | 1.99 (0.19)                          | 50 9/16" (1284)                                         | 6.59 (0.61)                                    |
| 2630          | 2.53 (0.24)                                   | 26" (660)                           | 14 1/16" (357)      | 5.41 (0.50)                           | 2.53 (0.24)                          | 44 9/16" (1132)                                         | 7.82 (0.73)                                    |
| 2636          | 3.08 (0.29)                                   | 26" (660)                           | 17 1/16" (433)      | 6.44 (0.60)                           | 3.08 (0.29)                          | 38 9/16" (979)                                          | 9.05 (0.84)                                    |
| 2640          | 3.62 (0.34)                                   | 26" (660)                           | 20 1/16" (509)      | 7.46 (0.69)                           | 3.62 (0.34)                          | 32 9/16" (827)                                          | 10.28 (0.95)                                   |
| 2646          | 4.16 (0.39)                                   | 26" (660)                           | 23 1/16" (585)      | 8.49 (0.79)                           | 4.16 (0.39)                          | 26 9/16" (674)                                          | 11.51 (1.07)                                   |
| 2650          | 4.70 (0.44)                                   | 26" (660)                           | 26 1/16" (661)      | 9.52 (0.88)                           | 4.70 (0.44)                          | 20 3/16" (522)                                          | 12.74 (1.18)                                   |
| 2656          | 5.24 (0.49)                                   | 26" (660)                           | 29 1/16" (738)      | 10.54 (0.98)                          | 5.24 (0.49)                          | 14 9/16" (370)                                          | 13.97 (1.30)                                   |
| 2660 φ        | 5.78 (0.54)                                   | 26" (660)                           | 32 1/16" (814)      | 11.57 (1.07)                          | 5.78 (0.54)                          | 8 9/16" (217)                                           | 15.20 (1.41)                                   |
| 2666 φ        | 6.33 (0.59)                                   | 26" (660)                           | 35 1/16" (890)      | 12.59 (1.17)                          | 6.33 (0.59)                          | 16 1/16" (429)**                                        | 16.42 (1.53)                                   |
| 2670*         | 4.52 (0.42)                                   | 26" (660)                           | 25 1/16" (636)      | 13.87 (1.29)                          | 4.52 (0.42)                          | 10 1/16" (256)**                                        | 17.65 (1.64)                                   |
| 2676*         | 4.88 (0.45)                                   | 26" (660)                           | 27 1/16" (687)      | 14.91 (1.39)                          | 4.88 (0.45)                          | 4 1/16" (103)**                                         | 18.88 (1.75)                                   |
| 3026          | 2.45 (0.23)                                   | 32" (813)                           | 11 1/16" (280)      | 5.57 (0.52)                           | 2.45 (0.23)                          | 49 3/4" (1263)                                          | 8.07 (0.75)                                    |
| 3030          | 3.12 (0.29)                                   | 32" (813)                           | 14 1/16" (357)      | 6.84 (0.64)                           | 3.12 (0.29)                          | 43 3/4" (1111)                                          | 9.54 (0.89)                                    |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX66, XX70 and XX76 heights, which are calculated using a header height of 8' (2438).

• Dimensions in parentheses are in millimeters or square meters.

φ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

\* Available only with a 2:1 reverse cottage sash ratio.

\*\* Calculated based upon a structural header height of 8' (2438).

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# SINGLE-HUNG WINDOWS

**Table of Single-Hung Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                  | 1'-5 1/2" (445) | 1'-11 1/2" (597) | 2'-5 1/2" (749) | 2'-11 1/2" (902) | 3'-5 1/2" (1054) | 3'-11 1/2" (1207) |
|---------------------------------------------------|-----------------|------------------|-----------------|------------------|------------------|-------------------|
| <b>Minimum Rough Opening</b>                      | 1'-6" (457)     | 2'-0" (610)      | 2'-6" (762)     | 3'-0" (914)      | 3'-6" (1067)     | 4'-0" (1219)      |
| <b>Unobstructed Glass (height of single sash)</b> | 11 1/4" (286)   | 17 1/4" (438)    | 23 1/4" (591)   | 29 1/4" (743)    | 35 1/4" (895)    | 41 1/4" (1048)    |

| CUSTOM WIDTHS – 17 1/2" to 47 1/2"   |                  |             |             |                  |                  |                   |
|--------------------------------------|------------------|-------------|-------------|------------------|------------------|-------------------|
| CUSTOM HEIGHTS – 23 1/2" to 77 1/2"  | 1'-11 1/2" (597) | 2'-0" (610) | 2'-6" (762) | 2'-11 1/2" (902) | 3'-5 1/2" (1054) | 3'-11 1/2" (1207) |
|                                      | 1620             | 2020        | 2620        | 3020             | 3620             | 4020              |
|                                      | 1626             | 2026        | 2626        | 3026             | 3626             | 4026              |
|                                      | 1630             | 2030        | 2630        | 3030             | 3630             | 4030              |
|                                      | 1636             | 2036        | 2636        | 3036             | 3636             | 4036              |
|                                      | 1640             | 2040        | 2640        | 3040             | 3640             | 4040              |
|                                      | 1646             | 2046        | 2646        | 3046             | 3646             | 4046              |
|                                      | 1650             | 2050        | 2650†       | 3050†            | 3650†            | 4050†             |
|                                      | 1656             | 2056        | 2656†       | 3056†            | 3656†            | 4056†             |
|                                      | 1660             | 2060        | 2660†       | 3060†            | 3660†            | 4060†             |
| CUSTOM HEIGHTS – 77 1/2" to 111 1/2" | 1666             | 2066        | 2666†       | 3066†            | 3666†            | 4066†             |
|                                      | 1670             | 2070        | 2670†       | 3070†            | 3670†            | 4070†             |
|                                      | 1676             | 2076        | 2676†       | 3076†            | 3676†            | 4076†             |
|                                      | 1680             | 2080        | 2680†       | 3080†            | 3680†            | 4080†             |
|                                      | 1686             | 2086        | 2686†       | 3086†            | 3686†            | 4086†             |
|                                      | 1690             | 2090        | 2690†       | 3090†            | 3690†            | 4090†             |
|                                      | 1696             | 2096        | 2696†       | 3096†            | 3696†            | 4096†             |
|                                      | 1700             | 2100        | 2700†       | 3100†            | 3700†            | 4100†             |
|                                      | 1706             | 2106        | 2706†       | 3106†            | 3706†            | 4106†             |
|                                      | 1710             | 2110        | 2710†       | 3110†            | 3710†            | 4110†             |

**2:1 sash ratio is not available for heights 6'-5 1/2" (1969) and less.**

Reverse cottage sash is available based on a 3:2 ratio. Available in standard widths for the heights shown below.

**REVERSE COTTAGE CUSTOM WIDTHS – 17 1/2" (445) to 47 1/2" (1207)**

**REVERSE COTTAGE CUSTOM HEIGHTS – 29 1/2" (749) to 77 1/2" (1969)**



Reverse Cottage\*



Custom-size windows are available in 1/8" (3) increments. See page 96 for custom sizes and specifications.

For construction site convenience, an optional drywall pass-through window is available for removal and installation of the upper and lower sash.



Windows with a height greater than 6'-5 1/2" (1969) are only available with a 2:1 reverse cottage sash ratio.\*\* To see all windows sizes with reverse cottage sash, visit [andersenwindows.com/sizing](http://andersenwindows.com/sizing).

Grille patterns shown on page 49.

Details shown on pages 52-54.

- \*Window Dimension always refers to outside frame-to-frame dimension.
- **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**
- Dimensions in parentheses are in millimeters.
- †Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on page 35.
- †Drywall pass-through window available for these standard and reverse cottage sizes and for custom-size windows wider than 1'-11 1/2" (597) and taller than 4'-5 1/2" (1359).
- \*\*For reverse cottage sash windows, meeting rail location = (window height in inches x 0.40) + 1.96".
- \*\*For heights greater than 6'-5 1/2" (1969), meeting rail location = (window height in inches x 0.33) + 1.96".

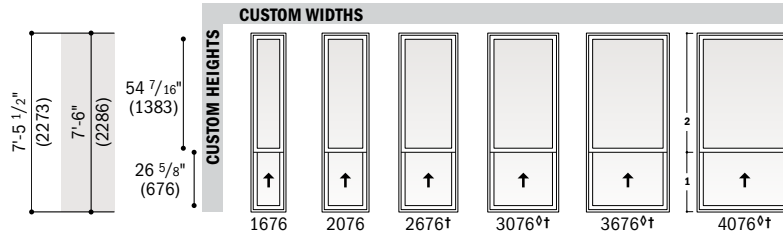
continued on next page

# Table of Single-Hung Window Sizes (continued)

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension      | 1'-5 1/2" (445) | 1'-11 1/2" (597) | 2'-5 1/2" (749) | 2'-11 1/2" (902) | 3'-5 1/2" (1054) | 3'-11 1/2" (1207) |
|-----------------------|-----------------|------------------|-----------------|------------------|------------------|-------------------|
| Minimum Rough Opening | 1'-6" (457)     | 2'-0" (610)      | 2'-6" (762)     | 3'-0" (914)      | 3'-6" (1067)     | 4'-0" (1219)      |
| Unobstructed Glass    | 11 1/4" (286)   | 17 1/4" (438)    | 23 1/4" (591)   | 29 1/4" (743)    | 35 1/4" (895)    | 41 1/4" (1048)    |

Notes on previous page also apply to this page.



Windows with a height greater than 6'-5 1/2" (1969) are only available with a 2:1 reverse cottage sash ratio.\* To see all windows sizes with reverse cottage sash, visit [andersenwindows.com/sizing](http://andersenwindows.com/sizing).

\*Window Dimension always refers to outside frame-to-frame dimension.

\*Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\*Dimensions in parentheses are in millimeters.

†Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table below.

†Drywall pass-through window available for these standard and reverse cottage sizes and for custom-size windows wider than 1'-11 1/2" (597) and taller than 4'-5 1/2" (1359).

\*For heights greater than 6'-5 1/2" (1969), meeting rail location = (window height in inches x 0.33) + 1.96".

## Single-Hung Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                        | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|------------------------|------------------------------------------|-----------------------------------------|------------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                          |                                         |                                                            |                                                   |
| 1620          | 0.78 (0.07)                                      | 14" (356)                           | 8 1/16" (204)          | 1.18 (0.11)                              | 0.78 (0.07)                             | 60 1/2" (1537)                                             | 2.86 (0.27)                                       |
| 1626          | 1.07 (0.10)                                      | 14" (356)                           | 11 1/16" (280)         | 1.65 (0.15)                              | 1.07 (0.10)                             | 54 1/2" (1384)                                             | 3.59 (0.33)                                       |
| 1630          | 1.37 (0.13)                                      | 14" (356)                           | 14 1/16" (357)         | 2.12 (0.20)                              | 1.37 (0.13)                             | 48 1/2" (1232)                                             | 4.31 (0.40)                                       |
| 1636          | 1.66 (0.15)                                      | 14" (356)                           | 17 1/16" (433)         | 2.59 (0.24)                              | 1.66 (0.15)                             | 42 1/2" (1080)                                             | 5.04 (0.47)                                       |
| 1640          | 1.95 (0.18)                                      | 14" (356)                           | 20 1/16" (509)         | 3.05 (0.28)                              | 1.95 (0.18)                             | 36 1/2" (927)                                              | 5.77 (0.54)                                       |
| 1646          | 2.24 (0.21)                                      | 14" (356)                           | 23 1/16" (585)         | 3.52 (0.33)                              | 2.24 (0.21)                             | 30 1/2" (775)                                              | 6.50 (0.60)                                       |
| 1650          | 2.53 (0.24)                                      | 14" (356)                           | 26 1/16" (661)         | 3.99 (0.37)                              | 2.53 (0.24)                             | 24 1/2" (622)                                              | 7.23 (0.67)                                       |
| 1656          | 2.82 (0.26)                                      | 14" (356)                           | 29 1/16" (738)         | 4.46 (0.41)                              | 2.82 (0.26)                             | 18 1/2" (470)                                              | 7.96 (0.74)                                       |
| 1660          | 3.12 (0.29)                                      | 14" (356)                           | 32 1/16" (814)         | 4.93 (0.46)                              | 3.12 (0.29)                             | 12 1/2" (318)                                              | 8.69 (0.81)                                       |
| 1666          | 3.41 (0.32)                                      | 14" (356)                           | 35 1/16" (890)         | 5.40 (0.50)                              | 3.41 (0.32)                             | 6 1/2" (165)                                               | 9.42 (0.88)                                       |
| 1670*         | 2.43 (0.23)                                      | 14" (356)                           | 25 1/16" (636)         | 5.87 (0.55)                              | 2.43 (0.23)                             | 14*** (356)**                                              | 10.15 (0.94)                                      |
| 1676*         | 2.63 (0.24)                                      | 14" (356)                           | 27 1/16" (687)         | 6.34 (0.59)                              | 2.63 (0.24)                             | 8*** (203)**                                               | 10.88 (1.01)                                      |
| 2020          | 1.12 (0.10)                                      | 20" (508)                           | 8 1/16" (204)          | 1.81 (0.17)                              | 1.12 (0.10)                             | 60 1/2" (1537)                                             | 3.84 (0.36)                                       |
| 2026          | 1.53 (0.14)                                      | 20" (508)                           | 11 1/16" (280)         | 2.53 (0.24)                              | 1.53 (0.14)                             | 54 1/2" (1384)                                             | 4.81 (0.45)                                       |
| 2030          | 1.95 (0.18)                                      | 20" (508)                           | 14 1/16" (357)         | 3.25 (0.30)                              | 1.95 (0.18)                             | 48 1/2" (1232)                                             | 5.79 (0.54)                                       |
| 2036          | 2.37 (0.22)                                      | 20" (508)                           | 17 1/16" (433)         | 3.96 (0.37)                              | 2.37 (0.22)                             | 42 1/2" (1080)                                             | 6.77 (0.63)                                       |
| 2040          | 2.78 (0.26)                                      | 20" (508)                           | 20 1/16" (509)         | 4.68 (0.44)                              | 2.78 (0.26)                             | 36 1/2" (927)                                              | 7.75 (0.72)                                       |
| 2046          | 3.20 (0.30)                                      | 20" (508)                           | 23 1/16" (585)         | 5.40 (0.50)                              | 3.20 (0.30)                             | 30 1/2" (775)                                              | 8.73 (0.81)                                       |
| 2050          | 3.62 (0.34)                                      | 20" (508)                           | 26 1/16" (661)         | 6.12 (0.57)                              | 3.62 (0.34)                             | 24 1/2" (622)                                              | 9.71 (0.90)                                       |
| 2056          | 4.03 (0.38)                                      | 20" (508)                           | 29 1/16" (738)         | 6.84 (0.64)                              | 4.03 (0.38)                             | 18 1/2" (470)                                              | 10.69 (0.99)                                      |
| 2060          | 4.45 (0.41)                                      | 20" (508)                           | 32 1/16" (814)         | 7.56 (0.70)                              | 4.45 (0.41)                             | 12 1/2" (318)                                              | 11.67 (1.08)                                      |
| 2066          | 4.87 (0.45)                                      | 20" (508)                           | 35 1/16" (890)         | 8.28 (0.77)                              | 4.87 (0.45)                             | 6 1/2" (165)                                               | 12.65 (1.18)                                      |
| 2070*         | 3.48 (0.32)                                      | 20" (508)                           | 25 1/16" (636)         | 9.00 (0.84)                              | 3.48 (0.32)                             | 14*** (356)**                                              | 13.63 (1.27)                                      |
| 2076*         | 3.76 (0.35)                                      | 20" (508)                           | 27 1/16" (687)         | 9.71 (0.90)                              | 3.76 (0.35)                             | 8*** (203)**                                               | 14.61 (1.36)                                      |
| 2620          | 1.45 (0.14)                                      | 26" (660)                           | 8 1/16" (204)          | 2.44 (0.23)                              | 1.45 (0.14)                             | 60 1/2" (1537)                                             | 4.81 (0.45)                                       |
| 2626          | 1.99 (0.19)                                      | 26" (660)                           | 11 1/16" (280)         | 3.41 (0.32)                              | 1.99 (0.19)                             | 54 1/2" (1384)                                             | 6.04 (0.56)                                       |
| 2630          | 2.54 (0.24)                                      | 26" (660)                           | 14 1/16" (357)         | 4.37 (0.41)                              | 2.54 (0.24)                             | 48 1/2" (1232)                                             | 7.27 (0.68)                                       |
| 2636          | 3.08 (0.29)                                      | 26" (660)                           | 17 1/16" (433)         | 5.34 (0.50)                              | 3.08 (0.29)                             | 42 1/2" (1080)                                             | 8.50 (0.79)                                       |
| 2640          | 3.62 (0.34)                                      | 26" (660)                           | 20 1/16" (509)         | 6.31 (0.59)                              | 3.62 (0.34)                             | 36 1/2" (927)                                              | 9.73 (0.90)                                       |
| 2646          | 4.16 (0.39)                                      | 26" (660)                           | 23 1/16" (585)         | 7.28 (0.68)                              | 4.16 (0.39)                             | 30 1/2" (775)                                              | 10.96 (1.02)                                      |
| 2650          | 4.70 (0.44)                                      | 26" (660)                           | 26 1/16" (661)         | 8.25 (0.77)                              | 4.70 (0.44)                             | 24 1/2" (622)                                              | 12.19 (1.13)                                      |
| 2656          | 5.24 (0.49)                                      | 26" (660)                           | 29 1/16" (738)         | 9.22 (0.86)                              | 5.24 (0.49)                             | 18 1/2" (470)                                              | 13.42 (1.25)                                      |
| 2660 †        | 5.79 (0.54)                                      | 26" (660)                           | 32 1/16" (814)         | 10.19 (0.95)                             | 5.79 (0.54)                             | 12 1/2" (318)                                              | 14.65 (1.36)                                      |
| 2666 †        | 6.33 (0.59)                                      | 26" (660)                           | 35 1/16" (890)         | 11.16 (1.04)                             | 6.33 (0.45)                             | 6 1/2" (165)                                               | 15.88 (1.48)                                      |
| 2670*         | 4.52 (0.42)                                      | 26" (660)                           | 25 1/16" (636)         | 12.12 (1.13)                             | 4.52 (0.42)                             | 14*** (356)**                                              | 17.11 (1.59)                                      |
| 2676*         | 4.88 (0.45)                                      | 26" (660)                           | 27 1/16" (687)         | 13.09 (1.22)                             | 4.88 (0.45)                             | 8*** (203)**                                               | 18.34 (1.70)                                      |

continued on page 41

For reverse cottage, twin and triple single-hung window specifications, see pages 43, 45 and 47.

\*Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX70 and XX76 heights, which are calculated using a header height of 8' (2438).

\*Dimensions in parentheses are in millimeters or square meters.

†Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

\*Available only with a 2:1 reverse cottage sash ratio.

\*\*Calculated based upon a structural header height of 8' (2438).

# SINGLE-HUNG WINDOWS

**Table of Twin and Triple Single-Hung Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

| Window Dimension                                    | 2'-11 1/2"                                                                                    | 3'-11 1/2"                                                                                    | 4'-11 1/2"                                                                                                 | 5'-11 1/2"                                                                                                 | 6'-11 1/2"                                                                                                 | 7'-11 1/2"                                                                                                 | 4'-5 1/2"                                                                                       |
|-----------------------------------------------------|-----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                                                     | (902)                                                                                         | (1207)                                                                                        | (1511)                                                                                                     | (1816)                                                                                                     | (2121)                                                                                                     | (2426)                                                                                                     | (1359)                                                                                          |
| <b>Minimum Rough Opening</b>                        | 3'-0"                                                                                         | 4'-0"                                                                                         | 5'-0"                                                                                                      | 6'-0"                                                                                                      | 7'-0"                                                                                                      | 8'-0"                                                                                                      | 4'-6"                                                                                           |
|                                                     | (914)                                                                                         | (1219)                                                                                        | (1524)                                                                                                     | (1829)                                                                                                     | (2134)                                                                                                     | (2438)                                                                                                     | (1372)                                                                                          |
| <b>Unobstructed Glass</b><br>(width of single sash) | 11 1/4"                                                                                       | 17 1/4"                                                                                       | 23 1/4"                                                                                                    | 29 1/4"                                                                                                    | 35 1/4"                                                                                                    | 41 1/4"                                                                                                    | 11 1/4"                                                                                         |
|                                                     | (286)                                                                                         | (438)                                                                                         | (591)                                                                                                      | (743)                                                                                                      | (895)                                                                                                      | (1048)                                                                                                     | (286)                                                                                           |
| <b>CUSTOM WIDTHS TWIN – 35 1/2" to 95 1/2"</b>      |                                                                                               |                                                                                               |                                                                                                            |                                                                                                            |                                                                                                            |                                                                                                            |                                                                                                 |
| <b>CUSTOM HEIGHTS – 23 1/2" to 71 1/2"</b>          | <br>1610-2   | <br>2010-2   | <br>2610-2                | <br>3010-2                | <br>3610-2                | <br>4010-2                | <br>1610-3   |
|                                                     | <br>1616-2   | <br>2016-2   | <br>2616-2                | <br>3016-2                | <br>3616-2                | <br>4016-2                | <br>1616-3   |
|                                                     | <br>1620-2   | <br>2020-2   | <br>2620-2                | <br>3020-2                | <br>3620-2                | <br>4020-2                | <br>1620-3   |
|                                                     | <br>1620-2   | <br>2020-2   | <br>2620-2                | <br>3020-2                | <br>3620-2                | <br>4020-2                | <br>1620-3   |
|                                                     | <br>1626-2   | <br>2026-2   | <br>2626-2                | <br>3026-2                | <br>3626-2                | <br>4026-2                | <br>1626-3   |
|                                                     | <br>1630-2   | <br>2030-2   | <br>2630-2                | <br>3030-2                | <br>3630-2                | <br>4030-2                | <br>1630-3   |
|                                                     | <br>1636-2   | <br>2036-2   | <br>2636-2                | <br>3036-2                | <br>3636-2                | <br>4036-2                | <br>1636-3   |
|                                                     | <br>1640-2  | <br>2040-2  | <br>2640-2               | <br>3040-2               | <br>3640-2               | <br>4040-2               | <br>1640-3  |
|                                                     | <br>1646-2 | <br>2046-2 | <br>2646-2              | <br>3046-2              | <br>3646-2              | <br>4046-2              | <br>1646-3 |
|                                                     | <br>1650-2 | <br>2050-2 | <br>2650-2              | <br>3050-2 <sup>0</sup> | <br>3650-2 <sup>0</sup> | <br>4050-2 <sup>0</sup> | <br>1650-3 |
|                                                     | <br>1656-2 | <br>2056-2 | <br>2656-2              | <br>3056-2 <sup>0</sup> | <br>3656-2 <sup>0</sup> | <br>4056-2 <sup>0</sup> | <br>1656-3 |
|                                                     | <br>1660-2 | <br>2060-2 | <br>2660-2 <sup>0</sup> | <br>3060-2 <sup>0</sup> | <br>3660-2 <sup>0</sup> | <br>4060-2 <sup>0</sup> | <br>1660-3 |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 45 and 47.

|                      |                     |                      |                      |                       |
|----------------------|---------------------|----------------------|----------------------|-----------------------|
| 5'-11 1/2"<br>(1816) | 7'-5 1/2"<br>(2273) | 8'-11 1/2"<br>(2731) | 10'-5 1/2"<br>(3188) | 11'-11 1/2"<br>(3645) |
| 6'-0"<br>(1829)      | 7'-6"<br>(2286)     | 9'-0"<br>(2743)      | 10'-6"<br>(3200)     | 12'-0"<br>(3658)      |
| 17 1/4"<br>(438)     | 23 1/4"<br>(591)    | 29 1/4"<br>(743)     | 35 1/4"<br>(895)     | 41 1/4"<br>(1048)     |

**CUSTOM WIDTHS TRIPLE – 53 1/2" to 143 1/2"**

|        |                     |                     |                     |                     |
|--------|---------------------|---------------------|---------------------|---------------------|
| 2010-3 | 2610-3              | 3010-3              | 3610-3              | 4010-3              |
| 2016-3 | 2616-3              | 3016-3              | 3616-3              | 4016-3              |
| 2020-3 | 2620-3              | 3020-3              | 3620-3              | 4020-3              |
| 2020-3 | 2620-3              | 3020-3              | 3620-3              | 4020-3              |
| 2026-3 | 2626-3              | 3026-3              | 3626-3              | 4026-3              |
| 2030-3 | 2630-3              | 3030-3              | 3630-3              | 4030-3              |
| 2036-3 | 2636-3              | 3036-3              | 3636-3              | 4036-3              |
| 2040-3 | 2640-3              | 3040-3              | 3640-3              | 4040-3              |
| 2046-3 | 2646-3              | 3046-3              | 3646-3              | 4040-3              |
| 2050-3 | 2650-3              | 3050-3 <sup>0</sup> | 3650-3 <sup>0</sup> | 4050-3 <sup>0</sup> |
| 2056-3 | 2656-3              | 3056-3 <sup>0</sup> | 3656-3 <sup>0</sup> | 4056-3 <sup>0</sup> |
| 2060-3 | 2660-3 <sup>0</sup> | 3060-3 <sup>0</sup> | 3660-3 <sup>0</sup> | 4060-3 <sup>0</sup> |



Custom-size windows are available in 1/8" (3) increments. See page 96 for custom sizes and specifications.

Windows have one continuous outer frame.

Matching transom windows are also shown. See Picture, Transom & Specialty Windows section starting on page 68 for more information.

Grille patterns shown on page 49. Details shown on pages 52-54.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

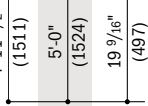
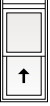
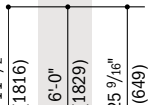
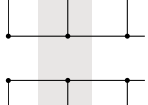
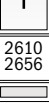
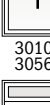
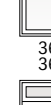
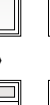
\* Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See tables on pages 45 and 47.

# SINGLE-HUNG WINDOWS

**Table of 10-High Transom Window Over Single-Hung Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                                   | 1'-5 1/2" (445)                                                                                                                     | 1'-11 1/2" (597)                                                                                                                    | 2'-5 1/2" (749)                                                                                                                     | 2'-11 1/2" (902)                                                                                                                    | 3'-5 1/2" (1054)                                                                                                                    | 3'-11 1/2" (1207)                                                                                                                   |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Minimum Rough Opening</b>                                       | 1'-6" (457)                                                                                                                         | 2'-0" (610)                                                                                                                         | 2'-6" (762)                                                                                                                         | 3'-0" (914)                                                                                                                         | 3'-6" (1067)                                                                                                                        | 4'-0" (1219)                                                                                                                        |
| Unobstructed Glass<br>(height of individual single-hung sash only) | 11 1/4" (286)                                                                                                                       | 17 1/4" (438)                                                                                                                       | 23 1/4" (591)                                                                                                                       | 29 1/4" (743)                                                                                                                       | 35 1/4" (895)                                                                                                                       | 41 1/4" (1048)                                                                                                                      |
| 3'-11 1/2" (1207)                                                  |    |    |    |    |    |    |
|                                                                    | 1610<br>1630                                                                                                                        | 2010<br>2030                                                                                                                        | 2610<br>2630                                                                                                                        | 3010<br>3030                                                                                                                        | 3610<br>3630                                                                                                                        | 4010<br>4030                                                                                                                        |
| 4'-5 1/2" (1359)                                                   |    |    |    |    |    |    |
|                                                                    | 1610<br>1636                                                                                                                        | 2010<br>2036                                                                                                                        | 2610<br>2636                                                                                                                        | 3010<br>3036                                                                                                                        | 3610<br>3636                                                                                                                        | 4010<br>4036                                                                                                                        |
| 4'-11 1/2" (1511)                                                  |    |    |    |    |    |    |
|                                                                    | 1610<br>1640                                                                                                                        | 2010<br>2040                                                                                                                        | 2610<br>2640                                                                                                                        | 3010<br>3040                                                                                                                        | 3610<br>3640                                                                                                                        | 4010<br>4040                                                                                                                        |
| 5'-5 1/2" (1664)                                                   |    |    |    |    |    |    |
|                                                                    | 1610<br>1646                                                                                                                        | 2010<br>2046                                                                                                                        | 2610<br>2646                                                                                                                        | 3010<br>3046                                                                                                                        | 3610<br>3646                                                                                                                        | 4010<br>4046                                                                                                                        |
| 5'-11 1/2" (1816)                                                  |  |  |  |  |  |  |
|                                                                    | 1610<br>1650                                                                                                                        | 2010<br>2050                                                                                                                        | 2610<br>2650                                                                                                                        | 3010<br>3050 <sup>◊</sup>                                                                                                           | 3610<br>3650 <sup>◊</sup>                                                                                                           | 4010<br>4050 <sup>◊</sup>                                                                                                           |
| 6'-5 1/2" (1969)                                                   |  |  |  |  |  |  |
|                                                                    | 1610<br>1656                                                                                                                        | 2010<br>2056                                                                                                                        | 2610<br>2656                                                                                                                        | 3010<br>3056 <sup>◊</sup>                                                                                                           | 3610<br>3656 <sup>◊</sup>                                                                                                           | 4010<br>4056 <sup>◊</sup>                                                                                                           |
| 6'-11 1/2" (2121)                                                  |  |  |  |  |  |  |
|                                                                    | 1610<br>1660                                                                                                                        | 2010<br>2060                                                                                                                        | 2610<br>2660 <sup>◊</sup>                                                                                                           | 3010<br>3060 <sup>◊</sup>                                                                                                           | 3610<br>3660 <sup>◊</sup>                                                                                                           | 4010<br>4060 <sup>◊</sup>                                                                                                           |

Windows have one continuous outer frame.

Unobstructed glass height dimension  
of upper transom sash is 5 1/4" (133).

Grille patterns shown on page 49.

Details shown on pages 52-54.

• Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).



**Table of 16-High Transom Window Over Single-Hung Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                                   | 1'-5 1/2" (445) | 1'-11 1/2" (597) | 2'-5 1/2" (749)           | 2'-11 1/2" (902)          | 3'-5 1/2" (1054)          | 3'-11 1/2" (1207)         |
|--------------------------------------------------------------------|-----------------|------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| <b>Minimum Rough Opening</b>                                       | 1'-6" (457)     | 2'-0" (610)      | 2'-6" (762)               | 3'-0" (914)               | 3'-6" (1067)              | 4'-0" (1219)              |
| Unobstructed Glass<br>(height of individual single-hung sash only) | 11 1/4" (286)   | 17 1/4" (438)    | 23 1/4" (591)             | 29 1/4" (743)             | 35 1/4" (895)             | 41 1/4" (1048)            |
| 4'-5 1/2" (1359)                                                   |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1630    | 2016<br>2030     | 2616<br>2630              | 3016<br>3030              | 3616<br>3630              | 4016<br>4030              |
| 4'-11 1/2" (1511)                                                  |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1636    | 2016<br>2036     | 2616<br>2636              | 3016<br>3036              | 3616<br>3636              | 4016<br>4036              |
| 5'-5 1/2" (1664)                                                   |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1640    | 2016<br>2040     | 2616<br>2640              | 3016<br>3040              | 3616<br>3640              | 4016<br>4040              |
| 5'-11 1/2" (1816)                                                  |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1646    | 2016<br>2046     | 2616<br>2646              | 3016<br>3046              | 3616<br>3646              | 4016<br>4046              |
| 6'-5 1/2" (1969)                                                   |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1650    | 2016<br>2050     | 2616<br>2650              | 3016<br>3050 <sup>ø</sup> | 3616<br>3650 <sup>ø</sup> | 4016<br>4050 <sup>ø</sup> |
| 6'-11 1/2" (2121)                                                  |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1656    | 2016<br>2056     | 2616<br>2656              | 3016<br>3056 <sup>ø</sup> | 3616<br>3656 <sup>ø</sup> | 4016<br>4056 <sup>ø</sup> |
| 7'-5 1/2" (2273)                                                   |                 |                  |                           |                           |                           |                           |
|                                                                    | 1616<br>1660    | 2016<br>2060     | 2616<br>2660 <sup>ø</sup> | 3016<br>3060 <sup>ø</sup> | 3616<br>3660 <sup>ø</sup> | 4016<br>4060 <sup>ø</sup> |

Windows have one continuous outer frame.

Unobstructed glass height dimension  
of upper transom sash is 11 1/4" (286).

Grille patterns shown on page 49.

Details shown on pages 52-54.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

\* Dimensions in parentheses are in millimeters.

<sup>ø</sup> Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

# SINGLE-HUNG WINDOWS

**Table of 20-High Transom Window Over Single-Hung Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                                | 1'-5 1/2" (445) | 1'-11 1/2" (597) | 2'-5 1/2" (749)           | 2'-11 1/2" (902)          | 3'-5 1/2" (1054)          | 3'-11 1/2" (1207)         |
|-----------------------------------------------------------------|-----------------|------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| Minimum Rough Opening                                           | 1'-6" (457)     | 2'-0" (610)      | 2'-6" (762)               | 3'-0" (914)               | 3'-6" (1067)              | 4'-0" (1219)              |
| Unobstructed Glass (height of individual single-hung sash only) | 11 1/4" (286)   | 17 1/4" (438)    | 23 1/4" (591)             | 29 1/4" (743)             | 35 1/4" (895)             | 41 1/4" (1048)            |
| 4'-11 1/2" (1511)                                               |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1630    | 2020<br>2030     | 2620<br>2630              | 3020<br>3030              | 3620<br>3630              | 4020<br>4030              |
| 5'-5 1/2" (1664)                                                |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1636    | 2020<br>2036     | 2620<br>2636              | 3020<br>3036              | 3620<br>3636              | 4020<br>4036              |
| 5'-11 1/2" (1816)                                               |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1640    | 2020<br>2040     | 2620<br>2640              | 3020<br>3040              | 3620<br>3640              | 4020<br>4040              |
| 6'-5 1/2" (1969)                                                |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1646    | 2020<br>2046     | 2620<br>2646              | 3020<br>3046              | 3620<br>3646              | 4020<br>4046              |
| 6'-11 1/2" (2121)                                               |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1650    | 2020<br>2050     | 2620<br>2650              | 3020<br>3050 <sup>◊</sup> | 3620<br>3650 <sup>◊</sup> | 4020<br>4050 <sup>◊</sup> |
| 7'-5 1/2" (2273)                                                |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1656    | 2020<br>2056     | 2620<br>2656              | 3020<br>3056 <sup>◊</sup> | 3620<br>3656 <sup>◊</sup> | 4020<br>4056 <sup>◊</sup> |
| 7'-11 1/2" (2426)                                               |                 |                  |                           |                           |                           |                           |
|                                                                 | 1620<br>1660    | 2020<br>2060     | 2620<br>2660 <sup>◊</sup> | 3020<br>3060 <sup>◊</sup> | 3620<br>3660 <sup>◊</sup> | 4020<br>4060 <sup>◊</sup> |

Windows have one continuous outer frame.

Unobstructed glass height dimension of upper transom sash is 17 1/4" (438).

Grille patterns shown on page 49.

Details shown on pages 52-54.

\* Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

## Arch Single-Hung Window Opening and Area Specifications (continued from page 33)

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |
| 3036          | 3.79 (0.35)                                      | 32" (813)                           | 17 1/16" (433)        | 8.12 (0.75)                              | 3.79 (0.35)                             | 37 3/4" (959)                                             | 11.02 (1.02)                                      |
| 3040          | 4.45 (0.41)                                      | 32" (813)                           | 20 1/16" (509)        | 9.39 (0.87)                              | 4.45 (0.41)                             | 31 3/4" (806)                                             | 12.50 (1.16)                                      |
| 3046          | 5.12 (0.48)                                      | 32" (813)                           | 23 1/16" (585)        | 10.67 (0.99)                             | 5.12 (0.48)                             | 25 3/4" (654)                                             | 13.98 (1.30)                                      |
| 3050 ◊        | 5.79 (0.54)                                      | 32" (813)                           | 26 1/16" (661)        | 11.95 (1.11)                             | 5.79 (0.54)                             | 19 3/4" (501)                                             | 15.46 (1.44)                                      |
| 3056 ◊        | 6.45 (0.60)                                      | 32" (813)                           | 29 1/16" (738)        | 13.22 (1.23)                             | 6.45 (0.60)                             | 13 3/4" (349)                                             | 16.94 (1.57)                                      |
| 3060 ◊        | 7.12 (0.66)                                      | 32" (813)                           | 32 1/16" (814)        | 14.50 (1.35)                             | 7.12 (0.66)                             | 7 3/4" (197)                                              | 18.42 (1.71)                                      |
| 3066 ◊        | 7.79 (0.72)                                      | 32" (813)                           | 35 1/16" (890)        | 15.77 (1.47)                             | 7.79 (0.72)                             | 15 1/4"*** (387)**                                        | 19.90 (1.85)                                      |
| 3070 *        | 5.56 (0.52)                                      | 32" (813)                           | 25 1/16" (636)        | 17.30 (1.61)                             | 5.56 (0.52)                             | 9 1/2"*** (235)**                                         | 21.38 (1.99)                                      |
| 3076 ◊*       | 6.01 (0.56)                                      | 32" (813)                           | 27 1/16" (687)        | 18.59 (1.73)                             | 6.01 (0.56)                             | 3 1/4"*** (83)**                                          | 22.86 (2.12)                                      |
| 3626          | 2.91 (0.27)                                      | 38" (965)                           | 11 1/16" (280)        | 6.79 (0.63)                              | 2.91 (0.27)                             | 48 15/16" (1243)                                          | 9.59 (0.89)                                       |
| 3630          | 3.70 (0.34)                                      | 38" (965)                           | 14 1/16" (357)        | 8.32 (0.77)                              | 3.70 (0.34)                             | 42 15/16" (1091)                                          | 11.31 (1.05)                                      |
| 3636          | 4.50 (0.42)                                      | 38" (965)                           | 17 1/16" (433)        | 9.84 (0.91)                              | 4.50 (0.42)                             | 36 15/16" (938)                                           | 13.04 (1.21)                                      |
| 3640          | 5.29 (0.49)                                      | 38" (965)                           | 20 1/16" (509)        | 11.37 (1.06)                             | 5.29 (0.49)                             | 30 15/16" (786)                                           | 14.77 (1.37)                                      |
| 3646          | 6.08 (0.56)                                      | 38" (965)                           | 23 1/16" (585)        | 12.89 (1.20)                             | 6.08 (0.56)                             | 24 15/16" (633)                                           | 16.50 (1.53)                                      |
| 3650 ◊        | 6.87 (0.64)                                      | 38" (965)                           | 26 1/16" (661)        | 14.42 (1.34)                             | 6.87 (0.64)                             | 18 15/16" (481)                                           | 18.23 (1.69)                                      |
| 3656 ◊        | 7.66 (0.71)                                      | 38" (965)                           | 29 1/16" (738)        | 15.95 (1.48)                             | 7.66 (0.71)                             | 12 15/16" (329)                                           | 19.96 (1.85)                                      |
| 3660 ◊        | 8.45 (0.79)                                      | 38" (965)                           | 32 1/16" (814)        | 17.47 (1.62)                             | 8.45 (0.79)                             | 6 15/16" (176)                                            | 21.69 (2.02)                                      |
| 3666 ◊        | 9.25 (0.86)                                      | 38" (965)                           | 35 1/16" (890)        | 19.00 (1.77)                             | 9.25 (0.86)                             | 14 7/16"*** (367)**                                       | 23.42 (2.18)                                      |
| 3670 ◊*       | 6.61 (0.61)                                      | 38" (965)                           | 25 1/16" (636)        | 20.77 (1.93)                             | 6.61 (0.61)                             | 8 7/16"*** (214)**                                        | 25.15 (2.34)                                      |
| 3676 ◊*       | 7.14 (0.66)                                      | 38" (965)                           | 27 1/16" (687)        | 22.32 (2.07)                             | 7.14 (0.66)                             | 2 7/16"*** (62)**                                         | 26.88 (2.50)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX66, XX70 and XX76 heights, which are calculated using a header height of 8' (2438).  
• Dimensions in parentheses are in millimeters or square meters.  
◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).  
\* Available only with a 2:1 reverse cottage sash ratio.  
\*\* Calculated based upon a structural header height of 8' (2438).

100 Series Single-Hung Windows

## Single-Hung Window Opening and Area Specifications (continued from page 35)

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |
| 3020          | 1.79 (0.17)                                      | 32" (813)                           | 8 1/16" (204)         | 3.07 (0.29)                              | 1.79 (0.17)                             | 60 1/2" (1537)                                            | 5.79 (0.54)                                       |
| 3026          | 2.45 (0.23)                                      | 32" (813)                           | 11 1/16" (280)        | 4.28 (0.40)                              | 2.45 (0.23)                             | 54 1/2" (1384)                                            | 7.27 (0.68)                                       |
| 3030          | 3.12 (0.29)                                      | 32" (813)                           | 14 1/16" (357)        | 5.50 (0.51)                              | 3.12 (0.29)                             | 48 1/2" (1232)                                            | 8.75 (0.81)                                       |
| 3036          | 3.79 (0.35)                                      | 32" (813)                           | 17 1/16" (433)        | 6.72 (0.62)                              | 3.79 (0.35)                             | 42 1/2" (1080)                                            | 10.23 (0.95)                                      |
| 3040          | 4.45 (0.41)                                      | 32" (813)                           | 20 1/16" (509)        | 7.94 (0.74)                              | 4.45 (0.41)                             | 36 1/2" (927)                                             | 11.71 (1.09)                                      |
| 3046          | 5.12 (0.48)                                      | 32" (813)                           | 23 1/16" (585)        | 9.16 (0.85)                              | 5.12 (0.48)                             | 30 1/2" (775)                                             | 13.19 (1.23)                                      |
| 3050 ◊        | 5.79 (0.54)                                      | 32" (813)                           | 26 1/16" (661)        | 10.38 (0.96)                             | 5.79 (0.54)                             | 24 1/2" (622)                                             | 14.67 (1.36)                                      |
| 3056 ◊        | 6.45 (0.60)                                      | 32" (813)                           | 29 1/16" (738)        | 11.60 (1.08)                             | 6.45 (0.60)                             | 18 1/2" (470)                                             | 16.15 (1.50)                                      |
| 3060 ◊        | 7.12 (0.66)                                      | 32" (813)                           | 32 1/16" (814)        | 12.82 (1.19)                             | 7.12 (0.66)                             | 12 1/2" (318)                                             | 17.63 (1.64)                                      |
| 3066 ◊        | 7.79 (0.72)                                      | 32" (813)                           | 35 1/16" (890)        | 14.03 (1.30)                             | 7.79 (0.72)                             | 6 1/2" (165)                                              | 19.11 (1.78)                                      |
| 3070 *        | 5.56 (0.52)                                      | 32" (813)                           | 25 1/16" (636)        | 15.25 (1.42)                             | 5.56 (0.52)                             | 14"*** (356)**                                            | 20.59 (1.91)                                      |
| 3076 ◊*       | 6.01 (0.56)                                      | 32" (813)                           | 27 1/16" (687)        | 16.47 (1.53)                             | 6.01 (0.56)                             | 8"*** (203)**                                             | 22.06 (2.05)                                      |
| 3620          | 2.12 (0.20)                                      | 38" (965)                           | 8 1/16" (204)         | 3.69 (0.34)                              | 2.12 (0.20)                             | 60 1/2" (1537)                                            | 6.77 (0.63)                                       |
| 3626          | 2.91 (0.27)                                      | 38" (965)                           | 11 1/16" (280)        | 5.16 (0.48)                              | 2.91 (0.27)                             | 54 1/2" (1384)                                            | 8.50 (0.79)                                       |
| 3630          | 3.71 (0.34)                                      | 38" (965)                           | 14 1/16" (357)        | 6.63 (0.62)                              | 3.71 (0.34)                             | 48 1/2" (1232)                                            | 10.23 (0.95)                                      |
| 3636          | 4.50 (0.42)                                      | 38" (965)                           | 17 1/16" (433)        | 8.10 (0.75)                              | 4.50 (0.42)                             | 42 1/2" (1080)                                            | 11.96 (1.11)                                      |
| 3640          | 5.29 (0.49)                                      | 38" (965)                           | 20 1/16" (509)        | 9.57 (0.89)                              | 5.29 (0.49)                             | 36 1/2" (927)                                             | 13.69 (1.27)                                      |
| 3646          | 6.08 (0.57)                                      | 38" (965)                           | 23 1/16" (585)        | 11.04 (1.03)                             | 6.08 (0.57)                             | 30 1/2" (775)                                             | 15.42 (1.43)                                      |
| 3650 ◊        | 6.87 (0.64)                                      | 38" (965)                           | 26 1/16" (661)        | 12.51 (1.16)                             | 6.87 (0.64)                             | 24 1/2" (622)                                             | 17.15 (1.59)                                      |
| 3656 ◊        | 7.66 (0.71)                                      | 38" (965)                           | 29 1/16" (738)        | 13.98 (1.30)                             | 7.66 (0.71)                             | 18 1/2" (470)                                             | 18.88 (1.75)                                      |
| 3660 ◊        | 8.46 (0.79)                                      | 38" (965)                           | 32 1/16" (814)        | 15.44 (1.44)                             | 8.46 (0.79)                             | 12 1/2" (318)                                             | 20.61 (1.91)                                      |
| 3666 ◊        | 9.25 (0.86)                                      | 38" (965)                           | 35 1/16" (890)        | 16.91 (1.57)                             | 9.25 (0.86)                             | 6 1/2" (165)                                              | 22.34 (2.08)                                      |
| 3670 ◊*       | 6.61 (0.61)                                      | 38" (965)                           | 25 1/16" (636)        | 18.38 (1.71)                             | 6.61 (0.61)                             | 14"*** (356)**                                            | 24.06 (2.24)                                      |
| 3676 ◊*       | 7.14 (0.66)                                      | 38" (965)                           | 27 1/16" (687)        | 19.85 (1.84)                             | 7.14 (0.66)                             | 8"*** (203)**                                             | 25.79 (2.40)                                      |
| 4020          | 2.46 (0.23)                                      | 44" (1118)                          | 8 1/16" (204)         | 4.32 (0.40)                              | 2.46 (0.23)                             | 60 1/2" (1537)                                            | 7.75 (0.72)                                       |
| 4026          | 3.37 (0.31)                                      | 44" (1118)                          | 11 1/16" (280)        | 6.04 (0.56)                              | 3.37 (0.31)                             | 54 1/2" (1384)                                            | 9.73 (0.90)                                       |
| 4030          | 4.29 (0.40)                                      | 44" (1118)                          | 14 1/16" (357)        | 7.76 (0.72)                              | 4.29 (0.40)                             | 48 1/2" (1232)                                            | 11.71 (1.09)                                      |
| 4036          | 5.21 (0.48)                                      | 44" (1118)                          | 17 1/16" (433)        | 9.48 (0.88)                              | 5.21 (0.48)                             | 42 1/2" (1080)                                            | 13.69 (1.27)                                      |
| 4040          | 6.12 (0.57)                                      | 44" (1118)                          | 20 1/16" (509)        | 11.20 (1.04)                             | 6.12 (0.57)                             | 36 1/2" (927)                                             | 15.67 (1.46)                                      |
| 4046          | 7.04 (0.65)                                      | 44" (1118)                          | 23 1/16" (585)        | 12.92 (1.20)                             | 7.04 (0.65)                             | 30 1/2" (775)                                             | 17.65 (1.64)                                      |
| 4050 ◊        | 7.96 (0.74)                                      | 44" (1118)                          | 26 1/16" (661)        | 14.64 (1.36)                             | 7.96 (0.74)                             | 24 1/2" (622)                                             | 19.63 (1.82)                                      |
| 4056 ◊        | 8.87 (0.82)                                      | 44" (1118)                          | 29 1/16" (738)        | 16.35 (1.52)                             | 8.87 (0.82)                             | 18 1/2" (470)                                             | 21.61 (2.01)                                      |
| 4060 ◊        | 9.79 (0.91)                                      | 44" (1118)                          | 32 1/16" (814)        | 18.07 (1.68)                             | 9.79 (0.91)                             | 12 1/2" (318)                                             | 23.59 (2.19)                                      |
| 4066 ◊        | 10.71 (1.00)                                     | 44" (1118)                          | 35 1/16" (890)        | 19.79 (1.84)                             | 10.70 (1.00)                            | 6 1/2" (165)                                              | 25.56 (2.38)                                      |
| 4070 ◊*       | 7.65 (0.71)                                      | 44" (1118)                          | 25 1/16" (636)        | 21.51 (2.00)                             | 7.65 (0.71)                             | 14"*** (356)**                                            | 27.54 (2.56)                                      |
| 4076 ◊*       | 8.26 (0.77)                                      | 44" (1118)                          | 27 1/16" (687)        | 23.23 (2.16)                             | 8.26 (0.77)                             | 8"*** (203)**                                             | 29.52 (2.74)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096) except for XX70 and XX76 heights, which are calculated using a header height of 8' (2438).  
• Dimensions in parentheses are in millimeters or square meters.  
◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).  
\* Available only with a 2:1 reverse cottage sash ratio.  
\*\* Calculated based upon a structural header height of 8' (2438).

## SINGLE-HUNG WINDOWS

### Table of Picture Window With Flanking 16-Wide Single-Hungs Sizes

Scale  $\frac{1}{8}"$  (3) = 1'-0" (305) – 1:96

[illegible]

Windows have one continuous outer frame.

Unobstructed glass width dimension of flanking sash is 11 1/4" (286).

For unobstructed glass height dimensions of flanking single-hungs, see page 34.

Matching transom windows are also shown. See Picture, Transom & Specialty

Windows section starting on page 68 for more information.

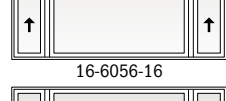
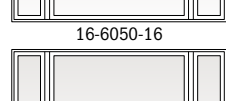
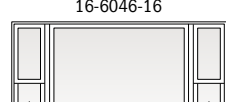
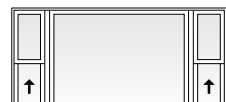
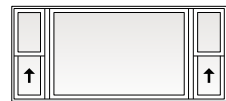
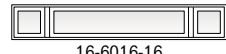
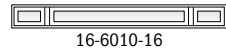
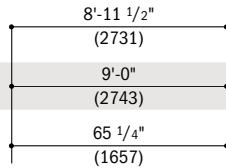
Grille patterns shown on page 49. Details shown on pages 52-54.

- Window Dimension always refers to outside frame-to-frame dimension.

• Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

• Dimensions in parentheses are in millimeters.

See notes on previous page.



## Single-Hung Window Opening and Area Specifications – 3:2 Reverse Cottage Sash Ratio

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                          |                                         |                                                           |                                                   |
| 1626          | 0.88 (0.08)                                      | 14" (356)                           | 9 1/16" (230)         | 1.65 (0.15)                              | 0.88 (0.08)                             | 54 1/2" (1384)                                            | 3.59 (0.33)                                       |
| 1630          | 1.07 (0.10)                                      | 14" (356)                           | 11 1/16" (280)        | 2.12 (0.20)                              | 1.07 (0.10)                             | 48 1/2" (1232)                                            | 4.31 (0.40)                                       |
| 1636          | 1.37 (0.13)                                      | 14" (356)                           | 14 1/16" (357)        | 2.59 (0.24)                              | 1.37 (0.13)                             | 42 1/2" (1080)                                            | 5.04 (0.47)                                       |
| 1640          | 1.56 (0.15)                                      | 14" (356)                           | 16 1/16" (407)        | 3.05 (0.28)                              | 1.56 (0.15)                             | 36 1/2" (927)                                             | 5.77 (0.54)                                       |
| 1646          | 1.85 (0.17)                                      | 14" (356)                           | 19 1/16" (484)        | 3.52 (0.33)                              | 1.85 (0.17)                             | 30 1/2" (775)                                             | 6.50 (0.60)                                       |
| 1650          | 2.05 (0.19)                                      | 14" (356)                           | 21 1/16" (534)        | 3.99 (0.37)                              | 2.05 (0.19)                             | 24 1/2" (622)                                             | 7.23 (0.67)                                       |
| 1656          | 2.24 (0.21)                                      | 14" (356)                           | 23 1/16" (585)        | 4.46 (0.41)                              | 2.24 (0.21)                             | 18 1/2" (470)                                             | 7.96 (0.74)                                       |
| 1660          | 2.53 (0.24)                                      | 14" (356)                           | 26 1/16" (661)        | 4.93 (0.46)                              | 2.53 (0.24)                             | 12 1/2" (318)                                             | 8.69 (0.81)                                       |
| 1666          | 2.73 (0.25)                                      | 14" (356)                           | 28 1/16" (712)        | 5.40 (0.50)                              | 2.73 (0.25)                             | 6 1/2" (165)                                              | 9.42 (0.88)                                       |
| 2026          | 1.26 (0.12)                                      | 20" (508)                           | 9 1/16" (230)         | 2.53 (0.24)                              | 1.26 (0.12)                             | 54 1/2" (1384)                                            | 4.81 (0.45)                                       |
| 2030          | 1.53 (0.14)                                      | 20" (508)                           | 11 1/16" (280)        | 3.25 (0.30)                              | 1.53 (0.14)                             | 48 1/2" (1232)                                            | 5.79 (0.54)                                       |
| 2036          | 1.95 (0.18)                                      | 20" (508)                           | 14 1/16" (357)        | 3.96 (0.37)                              | 1.95 (0.18)                             | 42 1/2" (1080)                                            | 6.77 (0.63)                                       |
| 2040          | 2.23 (0.21)                                      | 20" (508)                           | 16 1/16" (407)        | 4.68 (0.44)                              | 2.23 (0.21)                             | 36 1/2" (927)                                             | 7.75 (0.72)                                       |
| 2046          | 2.64 (0.25)                                      | 20" (508)                           | 19 1/16" (484)        | 5.40 (0.50)                              | 2.64 (0.25)                             | 30 1/2" (775)                                             | 8.73 (0.81)                                       |
| 2050          | 2.92 (0.27)                                      | 20" (508)                           | 21 1/16" (534)        | 6.12 (0.57)                              | 2.92 (0.27)                             | 24 1/2" (622)                                             | 9.71 (0.90)                                       |
| 2056          | 3.20 (0.30)                                      | 20" (508)                           | 23 1/16" (585)        | 6.84 (0.64)                              | 3.20 (0.30)                             | 18 1/2" (470)                                             | 10.69 (0.99)                                      |
| 2060          | 3.62 (0.34)                                      | 20" (508)                           | 26 1/16" (661)        | 7.56 (0.70)                              | 3.62 (0.34)                             | 12 1/2" (318)                                             | 11.67 (1.08)                                      |
| 2066          | 3.89 (0.36)                                      | 20" (508)                           | 28 1/16" (712)        | 8.28 (0.77)                              | 3.89 (0.36)                             | 6 1/2" (165)                                              | 12.65 (1.18)                                      |
| 2626          | 1.63 (0.15)                                      | 26" (660)                           | 9 1/16" (230)         | 3.41 (0.32)                              | 1.63 (0.15)                             | 54 1/2" (1384)                                            | 6.04 (0.56)                                       |
| 2630          | 1.99 (0.19)                                      | 26" (660)                           | 11 1/16" (280)        | 4.37 (0.41)                              | 1.99 (0.19)                             | 48 1/2" (1232)                                            | 7.27 (0.68)                                       |
| 2636          | 2.54 (0.24)                                      | 26" (660)                           | 14 1/16" (357)        | 5.34 (0.50)                              | 2.54 (0.24)                             | 42 1/2" (1080)                                            | 8.50 (0.79)                                       |
| 2640          | 2.90 (0.27)                                      | 26" (660)                           | 16 1/16" (407)        | 6.31 (0.59)                              | 2.90 (0.27)                             | 36 1/2" (927)                                             | 9.73 (0.90)                                       |
| 2646          | 3.44 (0.32)                                      | 26" (660)                           | 19 1/16" (484)        | 7.28 (0.68)                              | 3.44 (0.32)                             | 30 1/2" (775)                                             | 10.96 (1.02)                                      |
| 2650          | 3.80 (0.35)                                      | 26" (660)                           | 21 1/16" (534)        | 8.25 (0.77)                              | 3.80 (0.35)                             | 24 1/2" (622)                                             | 12.19 (1.13)                                      |
| 2656          | 4.16 (0.39)                                      | 26" (660)                           | 23 1/16" (585)        | 9.22 (0.86)                              | 4.16 (0.39)                             | 18 1/2" (470)                                             | 13.42 (1.25)                                      |
| 2660          | 4.70 (0.44)                                      | 26" (660)                           | 26 1/16" (661)        | 10.19 (0.95)                             | 4.70 (0.44)                             | 12 1/2" (318)                                             | 14.65 (1.36)                                      |
| 2666          | 5.06 (0.47)                                      | 26" (660)                           | 28 1/16" (712)        | 11.16 (1.04)                             | 5.06 (0.47)                             | 6 1/2" (165)                                              | 15.88 (1.48)                                      |
| 3026          | 2.01 (0.19)                                      | 32" (813)                           | 9 1/16" (230)         | 4.28 (0.40)                              | 2.01 (0.19)                             | 54 1/2" (1384)                                            | 7.27 (0.68)                                       |
| 3030          | 2.45 (0.23)                                      | 32" (813)                           | 11 1/16" (280)        | 5.50 (0.51)                              | 2.45 (0.23)                             | 48 1/2" (1232)                                            | 8.75 (0.81)                                       |
| 3036          | 3.12 (0.29)                                      | 32" (813)                           | 14 1/16" (357)        | 6.72 (0.62)                              | 3.12 (0.29)                             | 42 1/2" (1080)                                            | 10.23 (0.95)                                      |
| 3040          | 3.56 (0.33)                                      | 32" (813)                           | 16 1/16" (407)        | 7.94 (0.74)                              | 3.56 (0.33)                             | 36 1/2" (927)                                             | 11.71 (1.09)                                      |
| 3046          | 4.23 (0.39)                                      | 32" (813)                           | 19 1/16" (484)        | 9.16 (0.85)                              | 4.23 (0.39)                             | 30 1/2" (775)                                             | 13.19 (1.23)                                      |
| 3050          | 4.68 (0.43)                                      | 32" (813)                           | 21 1/16" (534)        | 10.38 (0.96)                             | 4.68 (0.43)                             | 24 1/2" (622)                                             | 14.67 (1.36)                                      |
| 3056          | 5.12 (0.48)                                      | 32" (813)                           | 23 1/16" (585)        | 11.60 (1.08)                             | 5.12 (0.48)                             | 18 1/2" (470)                                             | 16.15 (1.50)                                      |
| 3060 ◊        | 5.79 (0.54)                                      | 32" (813)                           | 26 1/16" (661)        | 12.82 (1.19)                             | 5.79 (0.54)                             | 12 1/2" (318)                                             | 17.63 (1.64)                                      |
| 3066 ◊        | 6.23 (0.58)                                      | 32" (813)                           | 28 1/16" (712)        | 14.03 (1.30)                             | 6.23 (0.58)                             | 6 1/2" (165)                                              | 19.11 (1.78)                                      |
| 3626          | 2.39 (0.22)                                      | 38" (965)                           | 9 1/16" (230)         | 5.16 (0.48)                              | 2.39 (0.22)                             | 54 1/2" (1384)                                            | 8.50 (0.79)                                       |
| 3630          | 2.91 (0.27)                                      | 38" (965)                           | 11 1/16" (280)        | 6.63 (0.62)                              | 2.91 (0.27)                             | 48 1/2" (1232)                                            | 10.23 (0.95)                                      |
| 3636          | 3.71 (0.34)                                      | 38" (965)                           | 14 1/16" (357)        | 8.10 (0.75)                              | 3.71 (0.34)                             | 42 1/2" (1080)                                            | 11.96 (1.11)                                      |
| 3640          | 4.23 (0.39)                                      | 38" (965)                           | 16 1/16" (407)        | 9.57 (0.89)                              | 4.23 (0.39)                             | 36 1/2" (927)                                             | 13.69 (1.27)                                      |
| 3646          | 5.02 (0.47)                                      | 38" (965)                           | 19 1/16" (484)        | 11.04 (1.03)                             | 5.02 (0.47)                             | 30 1/2" (775)                                             | 15.42 (1.43)                                      |
| 3650          | 5.55 (0.52)                                      | 38" (965)                           | 21 1/16" (534)        | 12.51 (1.16)                             | 5.55 (0.52)                             | 24 1/2" (622)                                             | 17.15 (1.59)                                      |
| 3656          | 6.08 (0.57)                                      | 38" (965)                           | 23 1/16" (585)        | 13.98 (1.30)                             | 6.08 (0.57)                             | 18 1/2" (470)                                             | 18.88 (1.75)                                      |
| 3660 ◊        | 6.87 (0.64)                                      | 38" (965)                           | 26 1/16" (661)        | 15.44 (1.44)                             | 6.87 (0.64)                             | 12 1/2" (318)                                             | 20.61 (1.91)                                      |
| 3666 ◊        | 7.40 (0.69)                                      | 38" (965)                           | 28 1/16" (712)        | 16.91 (1.57)                             | 7.40 (0.69)                             | 6 1/2" (165)                                              | 22.34 (2.08)                                      |
| 4026          | 2.76 (0.26)                                      | 44" (1118)                          | 9 1/16" (230)         | 6.04 (0.56)                              | 2.76 (0.26)                             | 54 1/2" (1384)                                            | 9.73 (0.90)                                       |
| 4030          | 3.37 (0.31)                                      | 44" (1118)                          | 11 1/16" (280)        | 7.76 (0.72)                              | 3.37 (0.31)                             | 48 1/2" (1232)                                            | 11.71 (1.09)                                      |
| 4036          | 4.29 (0.40)                                      | 44" (1118)                          | 14 1/16" (357)        | 9.48 (0.88)                              | 4.29 (0.40)                             | 42 1/2" (1080)                                            | 13.69 (1.27)                                      |
| 4040          | 4.90 (0.46)                                      | 44" (1118)                          | 16 1/16" (407)        | 11.20 (1.04)                             | 4.90 (0.46)                             | 36 1/2" (927)                                             | 15.67 (1.46)                                      |
| 4046          | 5.82 (0.54)                                      | 44" (1118)                          | 19 1/16" (484)        | 12.92 (1.20)                             | 5.82 (0.54)                             | 30 1/2" (775)                                             | 17.65 (1.64)                                      |
| 4050          | 6.43 (0.60)                                      | 44" (1118)                          | 21 1/16" (534)        | 14.64 (1.36)                             | 6.43 (0.60)                             | 24 1/2" (622)                                             | 19.63 (1.82)                                      |
| 4056          | 7.04 (0.65)                                      | 44" (1118)                          | 23 1/16" (585)        | 16.35 (1.52)                             | 7.04 (0.65)                             | 18 1/2" (470)                                             | 21.61 (2.01)                                      |
| 4060 ◊        | 7.96 (0.74)                                      | 44" (1118)                          | 26 1/16" (661)        | 18.07 (1.68)                             | 7.96 (0.74)                             | 12 1/2" (318)                                             | 23.59 (2.19)                                      |
| 4066 ◊        | 8.57 (0.80)                                      | 44" (1118)                          | 28 1/16" (712)        | 19.79 (1.84)                             | 8.57 (0.80)                             | 6 1/2" (165)                                              | 25.56 (2.38)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

• Dimensions in parentheses are in millimeters or square meters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

# SINGLE-HUNG WINDOWS

**Table of Picture Window With Flanking 20-Wide Single-Hungs Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                         | 6'-11 1/2"<br>(2121) | 7'-5 1/2"<br>(2273) | 7'-11 1/2"<br>(2426) | 8'-5 1/2"<br>(2578) | 8'-11 1/2"<br>(2731) |
|------------------------------------------|----------------------|---------------------|----------------------|---------------------|----------------------|
| Minimum Rough Opening                    | 7'-0"<br>(2134)      | 7'-6"<br>(2286)     | 8'-0"<br>(2438)      | 8'-6"<br>(2591)     | 9'-0"<br>(2743)      |
| Unobstructed Glass<br>(center sash only) | 29 1/4"<br>(743)     | 35 1/4"<br>(895)    | 41 1/4"<br>(1048)    | 47 1/4"<br>(1200)   | 53 1/4"<br>(1353)    |
| 11 1/2"<br>(292)                         | 1'-0"<br>(305)       | 1'-6"<br>(457)      | 1'-11 1/2"<br>(597)  | 1'-5 1/2"<br>(445)  | 1'-11 1/2"<br>(597)  |
| 1'-5 1/2"<br>(445)                       | 1'-6"<br>(457)       | 1'-11 1/2"<br>(597) | 1'-11 1/2"<br>(597)  | 1'-5 1/2"<br>(445)  | 1'-11 1/2"<br>(597)  |
| 1'-11 1/2"<br>(597)                      | 2'-0"<br>(610)       | 2'-0"<br>(610)      | 2'-0"<br>(610)       | 2'-0"<br>(610)      | 2'-0"<br>(610)       |
|                                          | 17 1/4"<br>(438)     | 17 1/4"<br>(438)    | 17 1/4"<br>(438)     | 17 1/4"<br>(438)    | 17 1/4"<br>(438)     |
|                                          | 20-3010-20           | 20-3610-20          | 20-4010-20           | 20-4610-20          | 20-5010-20           |
|                                          | 20-3016-20           | 20-3616-20          | 20-4016-20           | 20-4616-20          | 20-5016-20           |
|                                          | 20-3020-20           | 20-3620-20          | 20-4020-20           | 20-4620-20          | 20-5020-20           |
| 3'-11 1/2"<br>(1207)                     | 4'-0"<br>(1219)      | 4'-0"<br>(1219)     | 4'-0"<br>(1219)      | 4'-0"<br>(1219)     | 4'-0"<br>(1219)      |
| 4'-5 1/2"<br>(1359)                      | 4'-6"<br>(1372)      | 4'-6"<br>(1372)     | 4'-6"<br>(1372)      | 4'-6"<br>(1372)     | 4'-6"<br>(1372)      |
| 4'-11 1/2"<br>(1511)                     | 5'-0"<br>(1524)      | 5'-0"<br>(1524)     | 5'-0"<br>(1524)      | 5'-0"<br>(1524)     | 5'-0"<br>(1524)      |
| 5'-5 1/2"<br>(1664)                      | 5'-6"<br>(1676)      | 5'-6"<br>(1676)     | 5'-6"<br>(1676)      | 5'-6"<br>(1676)     | 5'-6"<br>(1676)      |
| 5'-11 1/2"<br>(1816)                     | 6'-0"<br>(1829)      | 6'-0"<br>(1829)     | 6'-0"<br>(1829)      | 6'-0"<br>(1829)     | 6'-0"<br>(1829)      |
|                                          | 65 1/4"<br>(1657)    | 65 1/4"<br>(1657)   | 65 1/4"<br>(1657)    | 65 1/4"<br>(1657)   | 65 1/4"<br>(1657)    |
|                                          | 20-3040-20           | 20-3640-20          | 20-4040-20           | 20-4640-20          | 20-5040-20           |
|                                          | 20-3046-20           | 20-3646-20          | 20-4046-20           | 20-4646-20          | 20-5046-20           |
|                                          | 20-3050-20           | 20-3650-20          | 20-4050-20           | 20-4650-20          | 20-5050-20           |
|                                          | 20-3056-20           | 20-3656-20          | 20-4056-20           | 20-4656-20          | 20-5056-20           |
|                                          | 20-3060-20           | 20-3660-20          | 20-4060-20           | 20-4660-20          | 20-5060-20           |

Windows have one continuous outer frame.

Unobstructed glass width dimension of flanking sash is 17 1/4" (438).

For unobstructed glass height dimensions of flanking single-hungs, see page 34.

Matching transom windows are also shown. See Picture, Transom & Specialty

Windows section starting on page 68 for more information.

Grille patterns shown on page 49. Details shown on pages 52-54.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

Notes on previous page also apply to this page.

|                     |                      |
|---------------------|----------------------|
| 9'-5 1/2"<br>(2883) | 9'-11 1/2"<br>(3035) |
| 9'-6"<br>(2896)     | 10'-0"<br>(3048)     |
| 59 1/4"<br>(1505)   | 65 1/4"<br>(1657)    |

|            |            |
|------------|------------|
| 20-5610-20 | 20-6010-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5616-20 | 20-6016-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5620-20 | 20-6020-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5640-20 | 20-6040-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5646-20 | 20-6046-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5650-20 | 20-6050-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5656-20 | 20-6056-20 |
|------------|------------|

|            |            |
|------------|------------|
| 20-5660-20 | 20-6060-20 |
|------------|------------|

## Twin Single-Hung Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                        | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|------------------------|------------------------------------------|-----------------------------------------|------------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                          |                                         |                                                            |                                                   |
| 1620-2        | 0.78 (0.07)                                      | 14" (356)                           | 8 1/16" (204)          | 2.36 (0.22)                              | 1.56 (0.15)                             | 60 1/2" (1537)                                             | 5.79 (0.54)                                       |
| 1626-2        | 1.07 (0.10)                                      | 14" (356)                           | 11 1/16" (280)         | 3.30 (0.31)                              | 2.15 (0.20)                             | 54 1/2" (1384)                                             | 7.27 (0.68)                                       |
| 1630-2        | 1.37 (0.13)                                      | 14" (356)                           | 14 1/16" (357)         | 4.23 (0.39)                              | 2.73 (0.25)                             | 48 1/2" (1232)                                             | 8.75 (0.81)                                       |
| 1636-2        | 1.66 (0.15)                                      | 14" (356)                           | 17 1/16" (433)         | 5.17 (0.48)                              | 3.31 (0.31)                             | 42 1/2" (1080)                                             | 10.23 (0.95)                                      |
| 1640-2        | 1.95 (0.18)                                      | 14" (356)                           | 20 1/16" (509)         | 6.11 (0.57)                              | 3.90 (0.36)                             | 36 1/2" (927)                                              | 11.71 (1.09)                                      |
| 1646-2        | 2.24 (0.21)                                      | 14" (356)                           | 23 1/16" (585)         | 7.05 (0.66)                              | 4.48 (0.42)                             | 30 1/2" (775)                                              | 13.19 (1.23)                                      |
| 1650-2        | 2.53 (0.24)                                      | 14" (356)                           | 26 1/16" (661)         | 7.98 (0.74)                              | 5.06 (0.47)                             | 24 1/2" (622)                                              | 14.67 (1.36)                                      |
| 1656-2        | 2.82 (0.26)                                      | 14" (356)                           | 29 1/16" (738)         | 8.92 (0.83)                              | 5.65 (0.53)                             | 18 1/2" (470)                                              | 16.15 (1.50)                                      |
| 1660-2        | 3.12 (0.29)                                      | 14" (356)                           | 32 1/16" (814)         | 9.86 (0.92)                              | 6.23 (0.58)                             | 12 1/2" (318)                                              | 17.63 (1.64)                                      |
| 2020-2        | 1.12 (0.10)                                      | 20" (508)                           | 8 1/16" (204)          | 3.62 (0.34)                              | 2.23 (0.21)                             | 60 1/2" (1537)                                             | 7.75 (0.72)                                       |
| 2026-2        | 1.53 (0.14)                                      | 20" (508)                           | 11 1/16" (280)         | 5.05 (0.47)                              | 3.07 (0.29)                             | 54 1/2" (1384)                                             | 9.73 (0.90)                                       |
| 2030-2        | 1.95 (0.18)                                      | 20" (508)                           | 14 1/16" (357)         | 6.49 (0.60)                              | 3.90 (0.36)                             | 48 1/2" (1232)                                             | 11.71 (1.09)                                      |
| 2036-2        | 2.37 (0.22)                                      | 20" (508)                           | 17 1/16" (433)         | 7.93 (0.74)                              | 4.73 (0.44)                             | 42 1/2" (1080)                                             | 13.69 (1.27)                                      |
| 2040-2        | 2.78 (0.26)                                      | 20" (508)                           | 20 1/16" (509)         | 9.37 (0.87)                              | 5.57 (0.52)                             | 36 1/2" (927)                                              | 15.67 (1.46)                                      |
| 2046-2        | 3.20 (0.30)                                      | 20" (508)                           | 23 1/16" (585)         | 10.80 (1.00)                             | 6.40 (0.60)                             | 30 1/2" (775)                                              | 17.65 (1.64)                                      |
| 2050-2        | 3.62 (0.34)                                      | 20" (508)                           | 26 1/16" (661)         | 12.24 (1.14)                             | 7.23 (0.67)                             | 24 1/2" (622)                                              | 19.63 (1.82)                                      |
| 2056-2        | 4.03 (0.38)                                      | 20" (508)                           | 29 1/16" (738)         | 13.68 (1.27)                             | 8.07 (0.75)                             | 18 1/2" (470)                                              | 21.61 (2.01)                                      |
| 2060-2        | 4.45 (0.41)                                      | 20" (508)                           | 32 1/16" (814)         | 15.12 (1.40)                             | 8.90 (0.83)                             | 12 1/2" (318)                                              | 23.59 (2.19)                                      |
| 2620-2        | 1.45 (0.14)                                      | 26" (660)                           | 8 1/16" (204)          | 4.87 (0.45)                              | 2.90 (0.27)                             | 60 1/2" (1537)                                             | 9.71 (0.90)                                       |
| 2626-2        | 1.99 (0.19)                                      | 26" (660)                           | 11 1/16" (280)         | 6.81 (0.63)                              | 3.99 (0.37)                             | 54 1/2" (1384)                                             | 12.19 (1.13)                                      |
| 2630-2        | 2.54 (0.24)                                      | 26" (660)                           | 14 1/16" (357)         | 8.75 (0.81)                              | 5.07 (0.47)                             | 48 1/2" (1232)                                             | 14.67 (1.36)                                      |
| 2636-2        | 3.08 (0.29)                                      | 26" (660)                           | 17 1/16" (433)         | 10.69 (0.99)                             | 6.15 (0.57)                             | 42 1/2" (1080)                                             | 17.15 (1.59)                                      |
| 2640-2        | 3.62 (0.34)                                      | 26" (660)                           | 20 1/16" (509)         | 12.62 (1.17)                             | 7.24 (0.67)                             | 36 1/2" (927)                                              | 19.63 (1.82)                                      |
| 2646-2        | 4.16 (0.39)                                      | 26" (660)                           | 23 1/16" (585)         | 14.56 (1.35)                             | 8.32 (0.77)                             | 30 1/2" (775)                                              | 22.11 (2.05)                                      |
| 2650-2        | 4.70 (0.44)                                      | 26" (660)                           | 26 1/16" (661)         | 16.50 (1.53)                             | 9.40 (0.87)                             | 24 1/2" (622)                                              | 24.59 (2.28)                                      |
| 2656-2        | 5.24 (0.49)                                      | 26" (660)                           | 29 1/16" (738)         | 18.44 (1.71)                             | 10.49 (0.97)                            | 18 1/2" (470)                                              | 27.06 (2.51)                                      |
| 2660-2 ◊      | 5.79 (0.54)                                      | 26" (660)                           | 32 1/16" (814)         | 20.37 (1.89)                             | 11.57 (1.08)                            | 12 1/2" (318)                                              | 29.54 (2.75)                                      |
| 3020-2        | 1.79 (0.17)                                      | 32" (813)                           | 8 1/16" (204)          | 6.13 (0.57)                              | 3.57 (0.33)                             | 60 1/2" (1537)                                             | 11.67 (1.08)                                      |
| 3026-2        | 2.45 (0.23)                                      | 32" (813)                           | 11 1/16" (280)         | 8.57 (0.80)                              | 4.91 (0.46)                             | 54 1/2" (1384)                                             | 14.65 (1.36)                                      |
| 3030-2        | 3.12 (0.29)                                      | 32" (813)                           | 14 1/16" (357)         | 11.01 (1.02)                             | 6.24 (0.58)                             | 48 1/2" (1232)                                             | 17.63 (1.64)                                      |
| 3036-2        | 3.79 (0.35)                                      | 32" (813)                           | 17 1/16" (433)         | 13.44 (1.25)                             | 7.57 (0.70)                             | 42 1/2" (1080)                                             | 20.61 (1.91)                                      |
| 3040-2        | 4.45 (0.41)                                      | 32" (813)                           | 20 1/16" (509)         | 15.88 (1.48)                             | 8.91 (0.83)                             | 36 1/2" (927)                                              | 23.59 (2.19)                                      |
| 3046-2        | 5.12 (0.48)                                      | 32" (813)                           | 23 1/16" (585)         | 18.32 (1.70)                             | 10.24 (0.95)                            | 30 1/2" (775)                                              | 26.56 (2.47)                                      |
| 3050-2 ◊      | 5.79 (0.54)                                      | 32" (813)                           | 26 1/16" (661)         | 20.76 (1.93)                             | 11.57 (1.08)                            | 24 1/2" (622)                                              | 29.54 (2.75)                                      |
| 3056-2 ◊      | 6.45 (0.60)                                      | 32" (813)                           | 29 1/16" (738)         | 23.19 (2.16)                             | 12.91 (1.20)                            | 18 1/2" (470)                                              | 32.52 (3.02)                                      |
| 3060-2 ◊      | 7.12 (0.66)                                      | 32" (813)                           | 32 1/16" (814)         | 25.63 (2.38)                             | 14.24 (1.32)                            | 12 1/2" (318)                                              | 35.50 (3.30)                                      |
| 3620-2        | 2.12 (0.20)                                      | 38" (965)                           | 8 1/16" (204)          | 7.39 (0.69)                              | 4.24 (0.39)                             | 60 1/2" (1537)                                             | 13.63 (1.27)                                      |
| 3626-2        | 2.91 (0.27)                                      | 38" (965)                           | 11 1/16" (280)         | 10.33 (0.96)                             | 5.83 (0.54)                             | 54 1/2" (1384)                                             | 17.11 (1.59)                                      |
| 3630-2        | 3.71 (0.34)                                      | 38" (965)                           | 14 1/16" (357)         | 13.26 (1.23)                             | 7.41 (0.69)                             | 48 1/2" (1232)                                             | 20.59 (1.91)                                      |
| 3636-2        | 4.50 (0.42)                                      | 38" (965)                           | 17 1/16" (433)         | 16.20 (1.51)                             | 8.99 (0.84)                             | 42 1/2" (1080)                                             | 24.06 (2.24)                                      |
| 3640-2        | 5.29 (0.49)                                      | 38" (965)                           | 20 1/16" (509)         | 19.14 (1.78)                             | 10.58 (0.98)                            | 36 1/2" (927)                                              | 27.54 (2.56)                                      |
| 3646-2        | 6.08 (0.57)                                      | 38" (965)                           | 23 1/16" (585)         | 22.08 (2.05)                             | 12.16 (1.13)                            | 30 1/2" (775)                                              | 31.02 (2.88)                                      |
| 3650-2 ◊      | 6.87 (0.64)                                      | 38" (965)                           | 26 1/16" (661)         | 25.01 (2.32)                             | 13.74 (1.28)                            | 24 1/2" (622)                                              | 34.50 (3.21)                                      |
| 3656-2 ◊      | 7.66 (0.71)                                      | 38" (965)                           | 29 1/16" (738)         | 27.95 (2.60)                             | 15.33 (1.42)                            | 18 1/2" (470)                                              | 37.98 (3.53)                                      |
| 3660-2 ◊      | 8.46 (0.79)                                      | 38" (965)                           | 32 1/16" (814)         | 30.89 (2.87)                             | 16.91 (1.57)                            | 12 1/2" (318)                                              | 41.46 (3.85)                                      |
| 4020-2        | 2.46 (0.23)                                      | 44" (1118)                          | 8 1/16" (204)          | 8.65 (0.80)                              | 4.91 (0.46)                             | 60 1/2" (1537)                                             | 15.59 (1.45)                                      |
| 4026-2        | 3.37 (0.31)                                      | 44" (1118)                          | 11 1/16" (280)         | 12.08 (1.12)                             | 6.75 (0.63)                             | 54 1/2" (1384)                                             | 19.56 (1.82)                                      |
| 4030-2        | 4.29 (0.40)                                      | 44" (1118)                          | 14 1/16" (357)         | 15.52 (1.44)                             | 8.58 (0.80)                             | 48 1/2" (1232)                                             | 23.54 (2.19)                                      |
| 4036-2        | 5.21 (0.48)                                      | 44" (1118)                          | 17 1/16" (433)         | 18.96 (1.76)                             | 10.41 (0.97)                            | 42 1/2" (1080)                                             | 27.52 (2.56)                                      |
| 4040-2        | 6.12 (0.57)                                      | 44" (1118)                          | 20 1/16" (509)         | 22.40 (2.08)                             | 12.25 (1.14)                            | 36 1/2" (927)                                              | 31.50 (2.93)                                      |
| 4046-2        | 7.04 (0.65)                                      | 44" (1118)                          | 23 1/16" (585)         | 25.83 (2.40)                             | 14.08 (1.31)                            | 30 1/2" (775)                                              | 35.48 (3.30)                                      |
| 4050-2 ◊      | 7.96 (0.74)                                      | 44" (1118)                          | 26 1/16" (661)         | 29.27 (2.72)                             | 15.91 (1.48)                            | 24 1/2" (622)                                              | 39.46 (3.67)                                      |
| 4056-2 ◊      | 8.87 (0.82)                                      | 44" (1118)                          | 29 1/16" (738)         | 32.71 (3.04)                             | 17.75 (1.65)                            | 18 1/2" (470)                                              | 43.44 (4.04)                                      |
| 4060-2 ◊      | 9.79 (0.91)                                      | 44" (1118)                          | 32 1/16" (814)         | 36.15 (3.36)                             | 19.58 (1.82)                            | 12 1/2" (318)                                              | 47.42 (4.41)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

• Dimensions in parentheses are in millimeters or square meters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).



# SINGLE-HUNG WINDOWS

**Table of Picture Window With Flanking 26-Wide Single-Hungs Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                         | 7'-11 1/2"              | 8'-5 1/2"               | 8'-11 1/2"              | 9'-5 1/2"               | 9'-11 1/2"              |
|------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                          | (2426)                  | (2578)                  | (2731)                  | (2883)                  | (3035)                  |
| <b>Minimum Rough Opening</b>             | 8'-0"                   | 8'-6"                   | 9'-0"                   | 9'-6"                   | 10'-0"                  |
|                                          | (2438)                  | (2591)                  | (2743)                  | (2896)                  | (3048)                  |
| Unobstructed Glass<br>(center sash only) | 29 1/4"                 | 35 1/4"                 | 41 1/4"                 | 47 1/4"                 | 53 1/4"                 |
|                                          | (743)                   | (895)                   | (1048)                  | (1200)                  | (1353)                  |
| 1'-1 1/2"                                | (292)                   | (305)                   | (318)                   | (331)                   | (344)                   |
|                                          | 26-3010-26              | 26-3610-26              | 26-4010-26              | 26-4610-26              | 26-5010-26              |
| 1'-5 1/2"                                | (445)                   | (457)                   | (470)                   | (483)                   | (496)                   |
|                                          | 26-3016-26              | 26-3616-26              | 26-4016-26              | 26-4616-26              | 26-5016-26              |
| 1'-11 1/2"                               | (597)                   | (610)                   | (623)                   | (636)                   | (649)                   |
|                                          | 26-3020-26              | 26-3620-26              | 26-4020-26              | 26-4620-26              | 26-5020-26              |
| 3'-11 1/2"                               | (1207)                  | (1219)                  | (1231)                  | (1244)                  | (1257)                  |
|                                          | 26-3040-26              | 26-3640-26              | 26-4040-26              | 26-4640-26              | 26-5040-26              |
| 4'-5 1/2"                                | (1359)                  | (1372)                  | (1385)                  | (1398)                  | (1411)                  |
|                                          | 26-3046-26              | 26-3646-26              | 26-4046-26              | 26-4646-26              | 26-5046-26              |
| 4'-11 1/2"                               | (1511)                  | (1524)                  | (1537)                  | (1550)                  | (1563)                  |
|                                          | 26-3050-26              | 26-3650-26              | 26-4050-26              | 26-4650-26              | 26-5050-26              |
| 5'-5 1/2"                                | (1664)                  | (1676)                  | (1689)                  | (1702)                  | (1715)                  |
|                                          | 26-3056-26              | 26-3656-26              | 26-4056-26              | 26-4656-26              | 26-5056-26              |
| 5'-11 1/2"                               | (1816)                  | (1829)                  | (1842)                  | (1855)                  | (1868)                  |
|                                          | 26-3060-26 <sup>ø</sup> | 26-3660-26 <sup>ø</sup> | 26-4060-26 <sup>ø</sup> | 26-4660-26 <sup>ø</sup> | 26-5060-26 <sup>ø</sup> |

Windows have one continuous outer frame.

Unobstructed glass width dimension of flanking sash is 23 1/4" (591).

For unobstructed glass height dimensions of flanking single-hungs, see page 34.

Matching transom windows are also shown. See Picture, Transom & Specialty

Windows section starting on page 68 for more information.

Grille patterns shown on page 49. Details shown on pages 52-54.

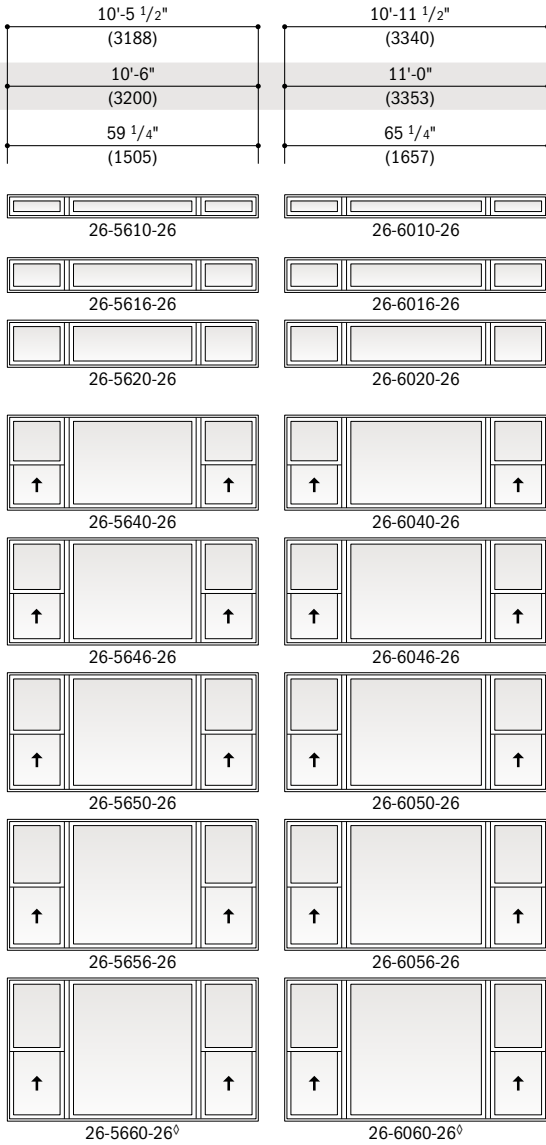
\* Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

Notes on previous page also apply to this page.



### Triple Single-Hung Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                        | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|------------------------|------------------------------------------|-----------------------------------------|------------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                          |                                         |                                                            |                                                   |
| 1620-3        | 0.78 (0.07)                                      | 14" (356)                           | 8 1/16" (204)          | 3.54 (0.33)                              | 2.35 (0.22)                             | 60 1/2" (1537)                                             | 8.73 (0.81)                                       |
| 1626-3        | 1.07 (0.10)                                      | 14" (356)                           | 11 1/16" (280)         | 4.94 (0.46)                              | 3.22 (0.30)                             | 54 1/2" (1384)                                             | 10.96 (1.02)                                      |
| 1630-3        | 1.37 (0.13)                                      | 14" (356)                           | 14 1/16" (357)         | 6.35 (0.59)                              | 4.10 (0.38)                             | 48 1/2" (1232)                                             | 13.19 (1.23)                                      |
| 1636-3        | 1.66 (0.15)                                      | 14" (356)                           | 17 1/16" (433)         | 7.76 (0.72)                              | 4.97 (0.46)                             | 42 1/2" (1080)                                             | 15.42 (1.43)                                      |
| 1640-3        | 1.95 (0.18)                                      | 14" (356)                           | 20 1/16" (509)         | 9.16 (0.85)                              | 5.85 (0.54)                             | 36 1/2" (927)                                              | 17.65 (1.64)                                      |
| 1646-3        | 2.24 (0.21)                                      | 14" (356)                           | 23 1/16" (585)         | 10.57 (0.98)                             | 6.72 (0.62)                             | 30 1/2" (775)                                              | 19.88 (1.85)                                      |
| 1650-3        | 2.53 (0.24)                                      | 14" (356)                           | 26 1/16" (661)         | 11.97 (1.11)                             | 7.60 (0.71)                             | 24 1/2" (622)                                              | 22.11 (2.05)                                      |
| 1656-3        | 2.82 (0.26)                                      | 14" (356)                           | 29 1/16" (738)         | 13.38 (1.24)                             | 8.47 (0.79)                             | 18 1/2" (470)                                              | 24.34 (2.26)                                      |
| 1660-3        | 3.12 (0.29)                                      | 14" (356)                           | 32 1/16" (814)         | 14.79 (1.37)                             | 9.35 (0.87)                             | 12 1/2" (318)                                              | 26.56 (2.47)                                      |
| 2020-3        | 1.12 (0.10)                                      | 20" (508)                           | 8 1/16" (204)          | 5.42 (0.50)                              | 3.35 (0.31)                             | 60 1/2" (1537)                                             | 11.67 (1.08)                                      |
| 2026-3        | 1.53 (0.14)                                      | 20" (508)                           | 11 1/16" (280)         | 7.58 (0.70)                              | 4.60 (0.43)                             | 54 1/2" (1384)                                             | 14.65 (1.36)                                      |
| 2030-3        | 1.95 (0.18)                                      | 20" (508)                           | 14 1/16" (357)         | 9.74 (0.90)                              | 5.85 (0.54)                             | 48 1/2" (1232)                                             | 17.63 (1.64)                                      |
| 2036-3        | 2.37 (0.22)                                      | 20" (508)                           | 17 1/16" (433)         | 11.89 (1.11)                             | 7.10 (0.66)                             | 42 1/2" (1080)                                             | 20.61 (1.91)                                      |
| 2040-3        | 2.78 (0.26)                                      | 20" (508)                           | 20 1/16" (509)         | 14.05 (1.31)                             | 8.35 (0.78)                             | 36 1/2" (927)                                              | 23.59 (2.19)                                      |
| 2046-3        | 3.20 (0.30)                                      | 20" (508)                           | 23 1/16" (585)         | 16.20 (1.51)                             | 9.60 (0.89)                             | 30 1/2" (775)                                              | 26.56 (2.47)                                      |
| 2050-3        | 3.62 (0.34)                                      | 20" (508)                           | 26 1/16" (661)         | 18.36 (1.71)                             | 10.85 (1.01)                            | 24 1/2" (622)                                              | 29.54 (2.75)                                      |
| 2056-3        | 4.03 (0.38)                                      | 20" (508)                           | 29 1/16" (738)         | 20.52 (1.91)                             | 12.10 (1.12)                            | 18 1/2" (470)                                              | 32.52 (3.02)                                      |
| 2060-3        | 4.45 (0.41)                                      | 20" (508)                           | 32 1/16" (814)         | 22.67 (2.11)                             | 13.35 (1.24)                            | 12 1/2" (318)                                              | 35.50 (3.30)                                      |
| 2620-3        | 1.45 (0.14)                                      | 26" (660)                           | 8 1/16" (204)          | 7.31 (0.68)                              | 4.35 (0.41)                             | 60 1/2" (1537)                                             | 14.61 (1.36)                                      |
| 2626-3        | 1.99 (0.19)                                      | 26" (660)                           | 11 1/16" (280)         | 10.22 (0.95)                             | 5.98 (0.56)                             | 54 1/2" (1384)                                             | 18.34 (1.70)                                      |
| 2630-3        | 2.54 (0.24)                                      | 26" (660)                           | 14 1/16" (357)         | 13.12 (1.22)                             | 7.60 (0.71)                             | 48 1/2" (1232)                                             | 22.06 (2.05)                                      |
| 2636-3        | 3.08 (0.29)                                      | 26" (660)                           | 17 1/16" (433)         | 16.03 (1.49)                             | 9.23 (0.86)                             | 42 1/2" (1080)                                             | 25.79 (2.40)                                      |
| 2640-3        | 3.62 (0.34)                                      | 26" (660)                           | 20 1/16" (509)         | 18.93 (1.76)                             | 10.85 (1.01)                            | 36 1/2" (927)                                              | 29.52 (2.74)                                      |
| 2646-3        | 4.16 (0.39)                                      | 26" (660)                           | 23 1/16" (585)         | 21.84 (2.03)                             | 12.48 (1.16)                            | 30 1/2" (775)                                              | 33.25 (3.09)                                      |
| 2650-3        | 4.70 (0.44)                                      | 26" (660)                           | 26 1/16" (661)         | 24.75 (2.30)                             | 14.10 (1.31)                            | 24 1/2" (622)                                              | 36.98 (3.44)                                      |
| 2656-3        | 5.24 (0.49)                                      | 26" (660)                           | 29 1/16" (738)         | 27.65 (2.57)                             | 15.73 (1.46)                            | 18 1/2" (470)                                              | 40.71 (3.78)                                      |
| 2660-3        | 5.79 (0.54)                                      | 26" (660)                           | 32 1/16" (814)         | 30.56 (2.84)                             | 17.35 (1.61)                            | 12 1/2" (318)                                              | 44.44 (4.13)                                      |
| 3020-3        | 1.79 (0.17)                                      | 32" (813)                           | 8 1/16" (204)          | 9.20 (0.85)                              | 5.36 (0.50)                             | 60 1/2" (1537)                                             | 17.54 (1.63)                                      |
| 3026-3        | 2.45 (0.23)                                      | 32" (813)                           | 11 1/16" (280)         | 12.85 (1.19)                             | 7.36 (0.68)                             | 54 1/2" (1384)                                             | 22.02 (2.05)                                      |
| 3030-3        | 3.12 (0.29)                                      | 32" (813)                           | 14 1/16" (357)         | 16.51 (1.53)                             | 9.36 (0.87)                             | 48 1/2" (1232)                                             | 26.50 (2.46)                                      |
| 3036-3        | 3.79 (0.35)                                      | 32" (813)                           | 17 1/16" (433)         | 20.16 (1.87)                             | 11.36 (1.06)                            | 42 1/2" (1080)                                             | 30.98 (2.88)                                      |
| 3040-3        | 4.45 (0.41)                                      | 32" (813)                           | 20 1/16" (509)         | 23.82 (2.21)                             | 13.36 (1.24)                            | 36 1/2" (927)                                              | 35.46 (3.29)                                      |
| 3046-3        | 5.12 (0.48)                                      | 32" (813)                           | 23 1/16" (585)         | 27.48 (2.55)                             | 15.36 (1.43)                            | 30 1/2" (775)                                              | 39.94 (3.71)                                      |
| 3050-3        | 5.79 (0.54)                                      | 32" (813)                           | 26 1/16" (661)         | 31.13 (2.89)                             | 17.36 (1.61)                            | 24 1/2" (622)                                              | 44.42 (4.13)                                      |
| 3056-3        | 6.45 (0.60)                                      | 32" (813)                           | 29 1/16" (738)         | 34.79 (3.23)                             | 19.36 (1.80)                            | 18 1/2" (470)                                              | 48.90 (4.54)                                      |
| 3060-3        | 7.12 (0.66)                                      | 32" (813)                           | 32 1/2" (814)          | 38.45 (3.57)                             | 21.36 (1.98)                            | 12 1/2" (318)                                              | 53.38 (4.96)                                      |
| 3620-3        | 2.12 (0.20)                                      | 38" (965)                           | 8 1/16" (204)          | 11.08 (1.03)                             | 6.36 (0.59)                             | 60 1/2" (1537)                                             | 20.48 (1.90)                                      |
| 3626-3        | 2.91 (0.27)                                      | 38" (965)                           | 11 1/16" (280)         | 15.49 (1.44)                             | 8.74 (0.81)                             | 54 1/2" (1384)                                             | 25.71 (2.39)                                      |
| 3630-3        | 3.71 (0.34)                                      | 38" (965)                           | 14 1/16" (357)         | 19.89 (1.85)                             | 11.11 (1.03)                            | 48 1/2" (1232)                                             | 30.94 (2.87)                                      |
| 3636-3        | 4.50 (0.42)                                      | 38" (965)                           | 17 1/16" (433)         | 24.30 (2.26)                             | 13.49 (1.25)                            | 42 1/2" (1080)                                             | 36.17 (3.36)                                      |
| 3640-3        | 5.29 (0.49)                                      | 38" (965)                           | 20 1/16" (509)         | 28.71 (2.67)                             | 15.86 (1.47)                            | 36 1/2" (927)                                              | 41.40 (3.85)                                      |
| 3646-3        | 6.08 (0.57)                                      | 38" (965)                           | 23 1/16" (585)         | 33.11 (3.08)                             | 18.24 (1.69)                            | 30 1/2" (775)                                              | 46.63 (4.33)                                      |
| 3650-3        | 6.87 (0.64)                                      | 38" (965)                           | 26 1/16" (661)         | 37.52 (3.49)                             | 20.61 (1.92)                            | 24 1/2" (622)                                              | 51.86 (4.82)                                      |
| 3656-3        | 7.66 (0.71)                                      | 38" (965)                           | 29 1/16" (738)         | 41.93 (3.90)                             | 22.99 (2.14)                            | 18 1/2" (470)                                              | 57.09 (5.30)                                      |
| 3660-3        | 8.46 (0.79)                                      | 38" (965)                           | 32 1/16" (814)         | 46.33 (4.30)                             | 25.36 (2.36)                            | 12 1/2" (318)                                              | 62.31 (5.79)                                      |
| 4020-3        | 2.46 (0.23)                                      | 44" (1118)                          | 8 1/16" (204)          | 12.97 (1.21)                             | 7.37 (0.69)                             | 60 1/2" (1537)                                             | 23.42 (2.18)                                      |
| 4026-3        | 3.37 (0.31)                                      | 44" (1118)                          | 11 1/16" (280)         | 18.12 (1.68)                             | 10.12 (0.94)                            | 54 1/2" (1384)                                             | 29.40 (2.73)                                      |
| 4030-3        | 4.29 (0.40)                                      | 44" (1118)                          | 14 1/16" (357)         | 23.28 (2.16)                             | 12.87 (1.20)                            | 48 1/2" (1232)                                             | 35.38 (3.29)                                      |
| 4036-3        | 5.21 (0.48)                                      | 44" (1118)                          | 17 1/16" (433)         | 28.44 (2.64)                             | 15.62 (1.45)                            | 42 1/2" (1080)                                             | 41.36 (3.84)                                      |
| 4040-3        | 6.12 (0.57)                                      | 44" (1118)                          | 20 1/16" (509)         | 33.59 (3.12)                             | 18.37 (1.71)                            | 36 1/2" (927)                                              | 47.34 (4.40)                                      |
| 4046-3        | 7.04 (0.65)                                      | 44" (1118)                          | 23 1/16" (585)         | 38.75 (3.60)                             | 21.12 (1.96)                            | 30 1/2" (775)                                              | 53.31 (4.95)                                      |
| 4050-3        | 7.96 (0.74)                                      | 44" (1118)                          | 26 1/16" (661)         | 43.91 (4.08)                             | 23.87 (2.22)                            | 24 1/2" (622)                                              | 59.29 (5.51)                                      |
| 4056-3        | 8.87 (0.82)                                      | 44" (1118)                          | 29 1/16" (738)         | 49.06 (4.56)                             | 26.62 (2.47)                            | 18 1/2" (470)                                              | 65.27 (6.06)                                      |
| 4060-3        | 9.79 (0.91)                                      | 44" (1118)                          | 32 1/16" (814)         | 54.22 (5.04)                             | 29.37 (2.73)                            | 12 1/2" (318)                                              | 71.25 (6.62)                                      |

\* Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

\* Dimensions in parentheses are in millimeters or square meters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

# SINGLE-HUNG WINDOWS

**Table of Picture Window With Flanking 30-Wide Single-Hungs Sizes**

Notes on next page also apply to this page.

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                         | 8'-11 1/2"<br>(2731)    | 9'-5 1/2"<br>(2883)     | 9'-11 1/2"<br>(3035)    | 10'-5 1/2"<br>(3188)    |
|------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Minimum<br>Rough Opening                 | 9'-0"<br>(2743)         | 9'-6"<br>(2896)         | 10'-0"<br>(3048)        | 10'-6"<br>(3200)        |
| Unobstructed Glass<br>(center sash only) | 29 1/4"<br>(743)        | 35 1/4"<br>(895)        | 41 1/4"<br>(1048)       | 47 1/4"<br>(1200)       |
| 1'-1 1/2"<br>(445)                       | 1'-0"<br>(305)          | 1'-0"<br>(305)          | 1'-0"<br>(305)          | 1'-0"<br>(305)          |
| 1'-5 1/2"<br>(465)                       | 1'-6"<br>(457)          | 1'-6"<br>(457)          | 1'-6"<br>(457)          | 1'-6"<br>(457)          |
| 1'-11 1/2"<br>(597)                      | 2'-0"<br>(610)          | 2'-0"<br>(610)          | 2'-0"<br>(610)          | 2'-0"<br>(610)          |
| 3'-11 1/2"<br>(1207)                     | 4'-0"<br>(1219)         | 4'-0"<br>(1219)         | 4'-0"<br>(1219)         | 4'-0"<br>(1219)         |
| 4'-5 1/2"<br>(1359)                      | 4'-6"<br>(1372)         | 4'-6"<br>(1372)         | 4'-6"<br>(1372)         | 4'-6"<br>(1372)         |
| 4'-11 1/2"<br>(1511)                     | 5'-0"<br>(1524)         | 5'-0"<br>(1524)         | 5'-0"<br>(1524)         | 5'-0"<br>(1524)         |
| 5'-5 1/2"<br>(1664)                      | 5'-6"<br>(1676)         | 5'-6"<br>(1676)         | 5'-6"<br>(1676)         | 5'-6"<br>(1676)         |
| 5'-11 1/2"<br>(1816)                     | 6'-0"<br>(1829)         | 6'-0"<br>(1829)         | 6'-0"<br>(1829)         | 6'-0"<br>(1829)         |
|                                          | 65 1/4"<br>(1657)       | 65 1/4"<br>(1657)       | 65 1/4"<br>(1657)       | 65 1/4"<br>(1657)       |
|                                          | 30-3010-30              | 30-3610-30              | 30-4010-30              | 30-4610-30              |
|                                          | 30-3016-30              | 30-3616-30              | 30-4016-30              | 30-4616-30              |
|                                          | 30-3020-30              | 30-3620-30              | 30-4020-30              | 30-4620-30              |
|                                          | 30-3040-30              | 30-3640-30              | 30-4040-30              | 30-4640-30              |
|                                          | 30-3046-30              | 30-3646-30              | 30-4046-30              | 30-4646-30              |
|                                          | 30-3050-30 <sup>Ø</sup> | 30-3650-30 <sup>Ø</sup> | 30-4050-30 <sup>Ø</sup> | 30-4650-30 <sup>Ø</sup> |
|                                          | 30-3056-30 <sup>Ø</sup> | 30-3656-30 <sup>Ø</sup> | 30-4056-30 <sup>Ø</sup> | 30-4656-30 <sup>Ø</sup> |
|                                          | 30-3060-30 <sup>Ø</sup> | 30-3660-30 <sup>Ø</sup> | 30-4060-30 <sup>Ø</sup> | 30-4660-30 <sup>Ø</sup> |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

Ø Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div> <div>10'-11 1/2"</div> <div>(3340)</div> </div> <div> <div>11'-0"</div> <div>(3353)</div> </div> <div> <div>53 1/4"</div> <div>(1353)</div> </div> | <div> <div>11'-5 1/2"</div> <div>(3493)</div> </div> <div> <div>11'-6"</div> <div>(3505)</div> </div> <div> <div>59 1/4"</div> <div>(1505)</div> </div> | <div> <div>11'-11 1/2"</div> <div>(3645)</div> </div> <div> <div>12'-0"</div> <div>(3658)</div> </div> <div> <div>65 1/4"</div> <div>(1657)</div> </div> |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5010-30                                                                                                                                               | 30-5610-30                                                                                                                                              | 30-6010-30                                                                                                                                               |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5016-30                                                                                                                                               | 30-5616-30                                                                                                                                              | 30-6016-30                                                                                                                                               |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5020-30                                                                                                                                               | 30-5620-30                                                                                                                                              | 30-6020-30                                                                                                                                               |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5040-30                                                                                                                                               | 30-5640-30                                                                                                                                              | 30-6040-30                                                                                                                                               |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5046-30                                                                                                                                               | 30-5646-30                                                                                                                                              | 30-6046-30                                                                                                                                               |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5050-30 <sup>Φ</sup>                                                                                                                                  | 30-5650-30 <sup>Φ</sup>                                                                                                                                 | 30-6050-30 <sup>Φ</sup>                                                                                                                                  |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5056-30 <sup>Φ</sup>                                                                                                                                  | 30-5656-30 <sup>Φ</sup>                                                                                                                                 | 30-6056-30 <sup>Φ</sup>                                                                                                                                  |
|                                                                                                                                                          |                                                                                                                                                         |                                                                                                                                                          |
| 30-5060-30 <sup>Φ</sup>                                                                                                                                  | 30-5660-30 <sup>Φ</sup>                                                                                                                                 | 30-6060-30 <sup>Φ</sup>                                                                                                                                  |

Windows have one continuous outer frame.

Unobstructed glass width dimension of flanking sash is 29 1/4" (743). For unobstructed glass height dimensions of flanking single-hungs, see page 34.

Matching transom windows are also shown.

See Picture, Transom & Specialty Windows section starting on page 68 for more information.

Grille patterns shown below.

Details shown on pages 52-54.

- Window Dimension always refers to outside frame-to-frame dimension.
- Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- Dimensions in parentheses are in millimeters.
- Φ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

## Grille Patterns

|                                | Prairie A | Colonial | Short Fractional |
|--------------------------------|-----------|----------|------------------|
| Single-Hung                    |           |          |                  |
| Specified Equal Light Examples |           |          |                  |
| Custom Example*                |           |          |                  |

- \*Grille illustration reflects a window taller than 6'-5 1/2" (1969) with a 2:1 sash ratio.
- Dimensions in parentheses are in millimeters.

Single-hung window patterns are also available in Upper Sash Only (USO) configurations.

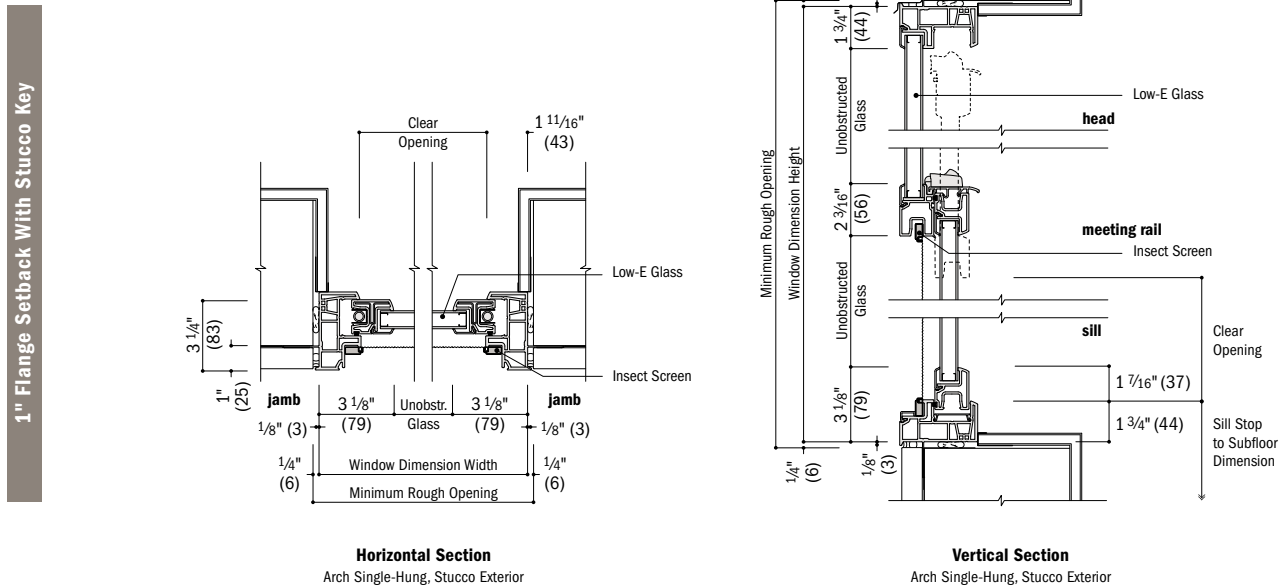
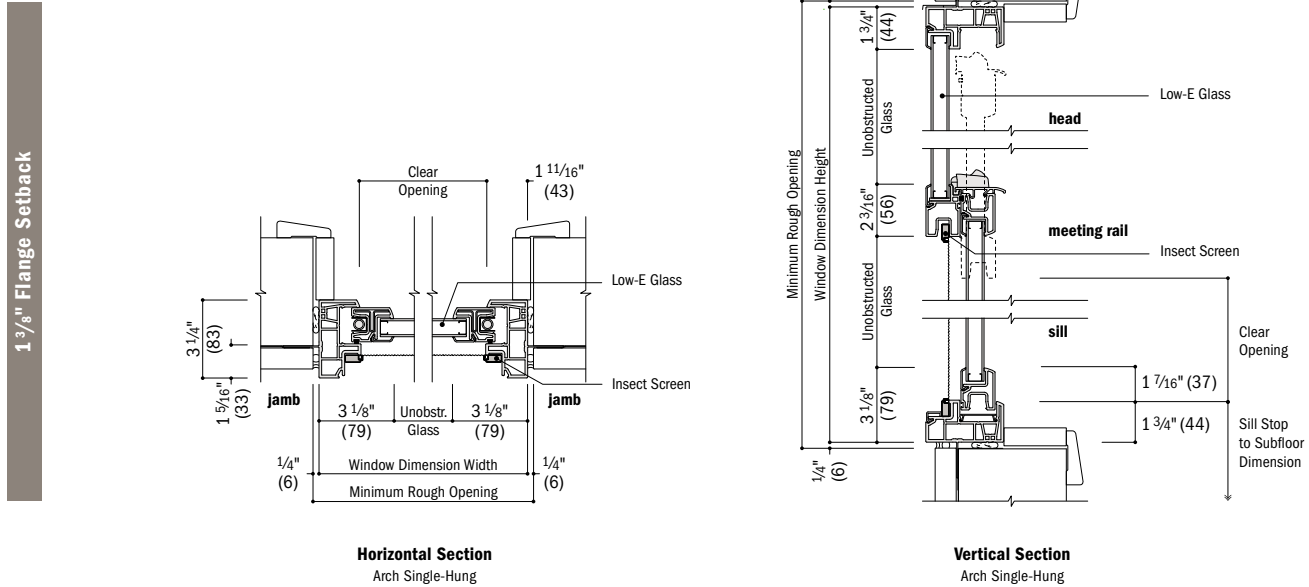
For picture window patterns that require alignment with single-hung patterns, identify the single-hung sash style (equal or reverse cottage) when ordering.

**Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes.** Specified equal light and custom grille patterns are also available. For specified equal light, specify number of same-size rectangles across or down. For more grille options, see page 14 or visit [andersenwindows.com/grilles](http://andersenwindows.com/grilles).

# SINGLE-HUNG WINDOWS

## Arch Single-Hung Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

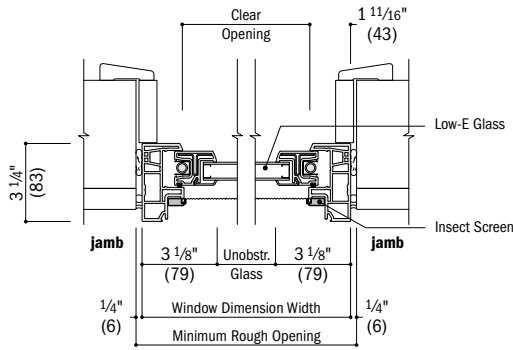


- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

## Arch Single-Hung Window Details – Replacement

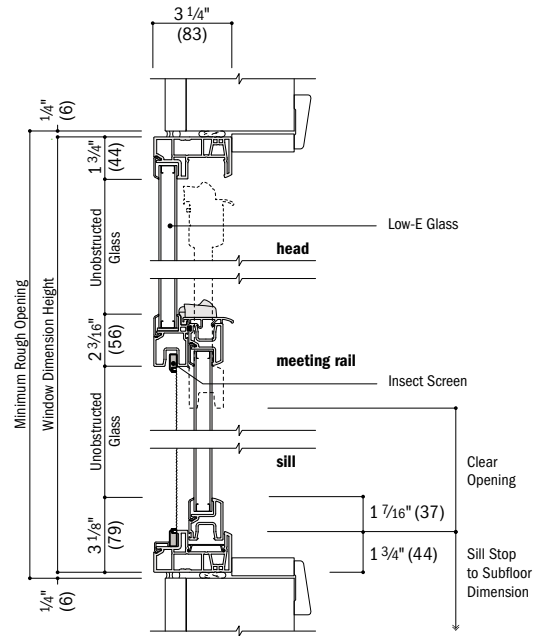
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

No Flange



**Horizontal Section**

Arch Single-Hung, Existing Framed Opening



**Vertical Section**

Arch Single-Hung, Existing Framed Opening

100 Series Single-Hung  
Windows

Arch single-hung windows are not available with insert or flush fin frames.

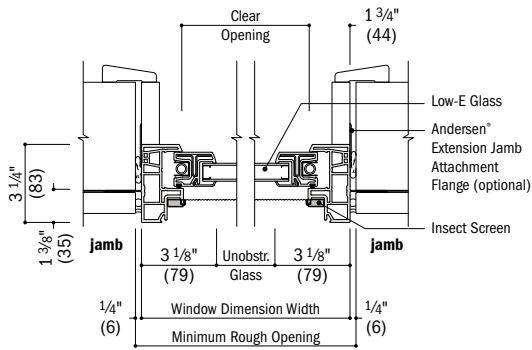
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

# SINGLE-HUNG WINDOWS

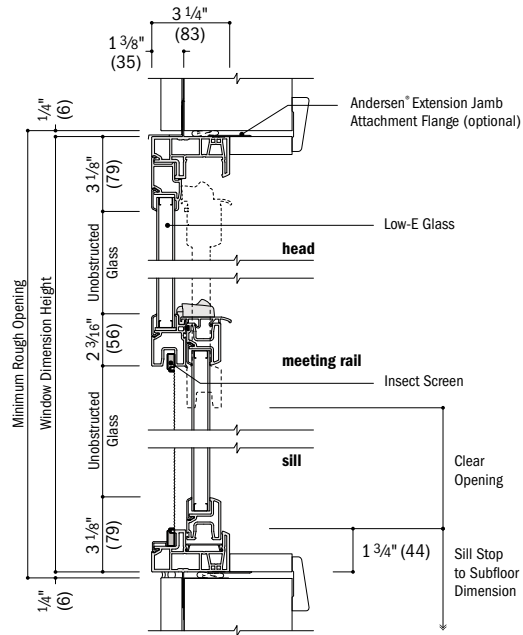
## Single-Hung Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

1 3/8" Flange Setback

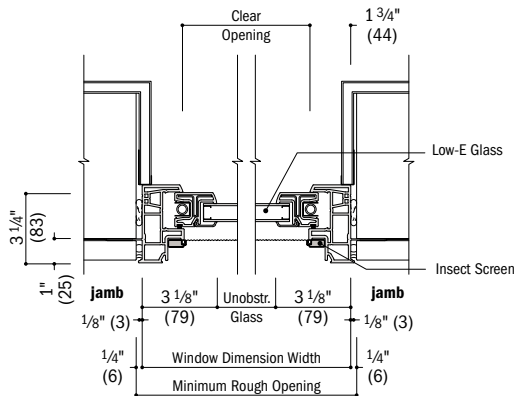


Horizontal Section

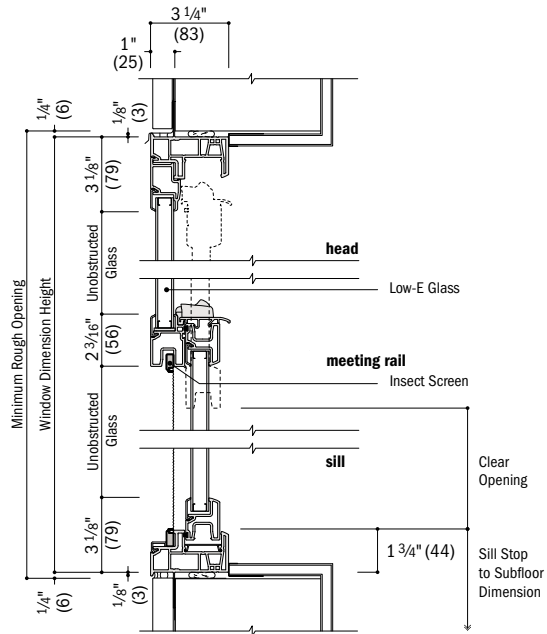


Vertical Section

1" Flange Setback With Stucco Key

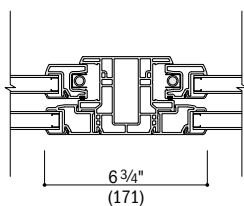


Horizontal Section  
Stucco Exterior

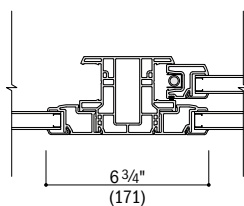


Vertical Section  
Stucco Exterior

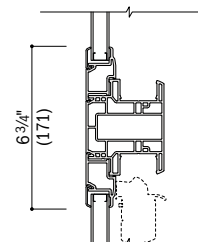
Integrals



Horizontal Section  
Twin or Triple Single-Hung



Horizontal Section  
Picture With Flanking Single-Hung



Vertical Section  
Transom Over Single-Hung

See pages 88-93 for joining details.

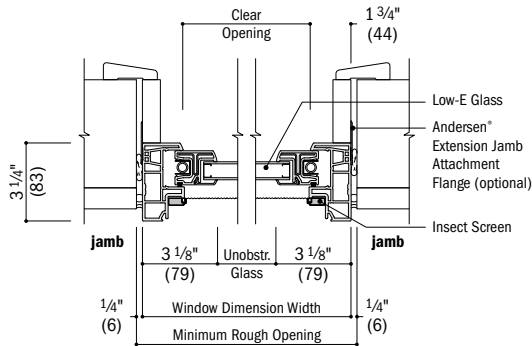
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.



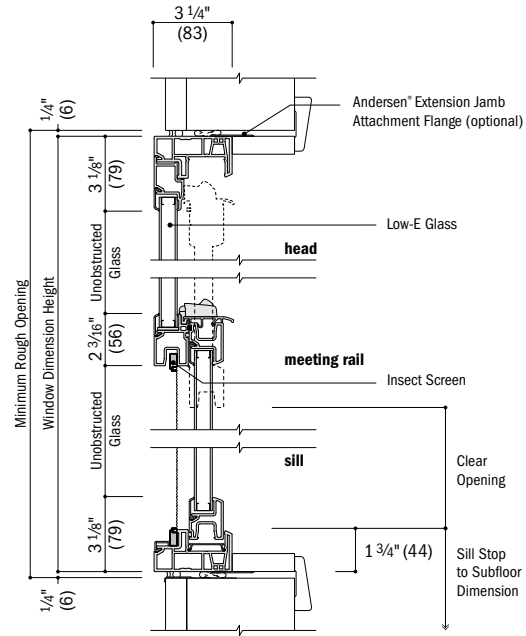
# Single-Hung Window Details – Replacement

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

No Flange

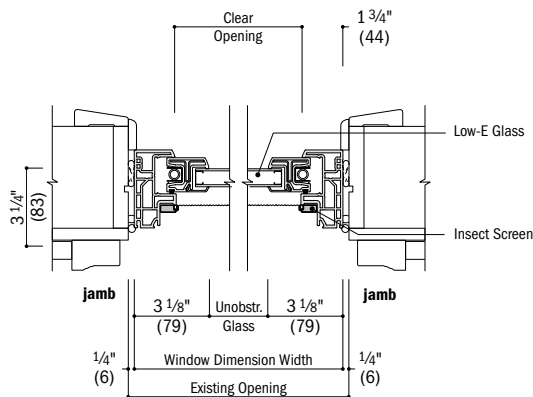


**Horizontal Section**  
Existing Framed Opening

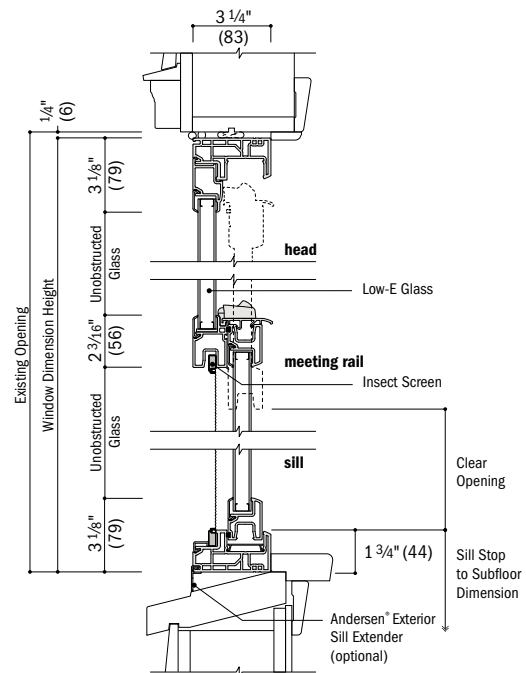


**Vertical Section**  
Existing Framed Opening

Insert



**Horizontal Section**  
Existing Window Opening



**Vertical Section**  
Existing Window Opening

continued on next page

Integral details shown on previous page. Installation accessories are available for windows with insert frame; see page 120.

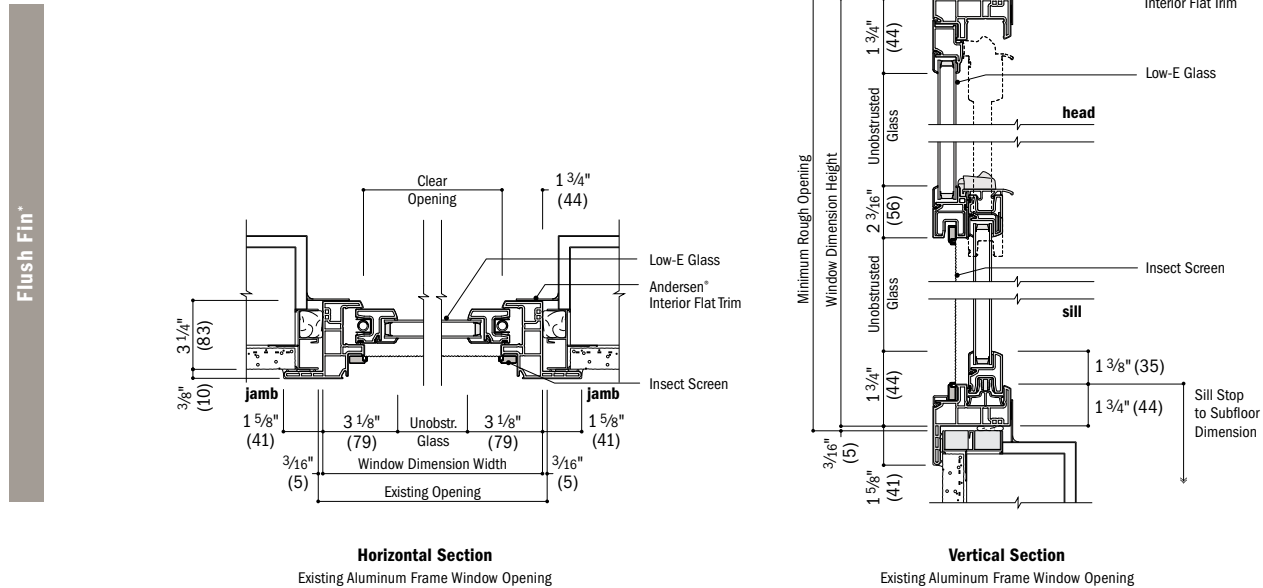
See pages 88-93 for joining details.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

# SINGLE-HUNG WINDOWS

## Single-Hung Window Details – Replacement *(continued)*

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Integral details shown on page 52. Installation accessories are available for windows with flush fin frame; see page 120.

See pages 88-93 for joining details.

\* Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

\* **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).

\* Dimensions in parentheses are in millimeters.

\* Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# Table of Gliding Active-Stationary or Stationary-Active Window Sizes

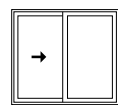
Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                             | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" | 5'-11 1/2" |
|----------------------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|
|                                              | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    | (1816)     |
| <b>Minimum Rough Opening</b>                 | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     | 6'-0"      |
|                                              | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    | (1829)     |
| Unobstructed Glass<br>(width of single sash) | 7 9/16"    | 10 9/16"  | 13 9/16"   | 16 9/16"  | 19 9/16"   | 22 9/16"  | 25 9/16"   | 28 9/16"  | 31 9/16"   |
|                                              | (192)      | (268)     | (344)      | (420)     | (496)      | (573)     | (649)      | (725)     | (801)      |

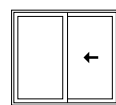
## CUSTOM WIDTHS – 23 1/2" to 71 1/2"

| CUSTOM HEIGHTS – 11 1/2" to 71 1/2" | 2010 | 2610 | 3010 | 3610 | 4010 | 4610 | 5010 | 5610 | 6010 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|
| 11 1/2" (292)                       |      |      |      |      |      |      |      |      |      |
| 1'-5 1/2" (445)                     |      |      |      |      |      |      |      |      |      |
| 1'-11 1/2" (597)                    |      |      |      |      |      |      |      |      |      |
| 2'-5 1/2" (749)                     |      |      |      |      |      |      |      |      |      |
| 2'-11 1/2" (902)                    |      |      |      |      |      |      |      |      |      |
| 3'-5 1/2" (1054)                    |      |      |      |      |      |      |      |      |      |
| 3'-11 1/2" (1207)                   |      |      |      |      |      |      |      |      |      |
| 4'-5 1/2" (1359)                    |      |      |      |      |      |      |      |      |      |
| 4'-11 1/2" (1511)                   |      |      |      |      |      |      |      |      |      |
| 5'-5 1/2" (1664)                    |      |      |      |      |      |      |      |      |      |
| 5'-11 1/2" (1816)                   |      |      |      |      |      |      |      |      |      |

Custom-size windows are available in 1/8" (3) increments. See page 97 for custom sizes and specifications.



Active-Stationary



Stationary-Active

Choose active-stationary (XO) sash or stationary-active (OX) sash as viewed from the exterior. Two locks are standard on all heights greater than 4'-2" (1270). Grille patterns shown on page 65. Details shown on pages 66-67.

• Window Dimension always refers to outside frame-to-frame dimension.

• Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

• Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on pages 60-61.

# GLIDING WINDOWS

**Table of Gliding Active-Stationary-Active 1:2:1 Sash Ratio Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

| Window Dimension                                     | 4'-11 1/2"<br>(1511) | 5'-11 1/2"<br>(1816) | 6'-11 1/2"<br>(2121) | 7'-5 1/2"<br>(2273) | 7'-11 1/2"<br>(2426) | 8'-5 1/2"<br>(2578) |
|------------------------------------------------------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
| <b>Minimum<br/>Rough Opening</b>                     | 5'-0"<br>(1524)      | 6'-0"<br>(1829)      | 7'-0"<br>(2134)      | 7'-6"<br>(2286)     | 8'-0"<br>(2438)      | 8'-6"<br>(2591)     |
| Unobstructed Glass<br>(width of center sash)         | 27 7/8"<br>(708)     | 33 7/8"<br>(861)     | 39 7/8"<br>(1013)    | 42 7/8"<br>(1089)   | 45 7/8"<br>(1165)    | 48 7/8"<br>(1242)   |
| Unobstructed Glass<br>(width of single venting sash) | 10 17/32"<br>(267)   | 13 17/32"<br>(344)   | 16 17/32"<br>(420)   | 18 1/32"<br>(458)   | 19 17/32"<br>(496)   | 21 1/32"<br>(534)   |

**CUSTOM WIDTHS – 59 1/2" to 143 1/2"**

| CUSTOM HEIGHTS — 17 1/2" to 71 1/2" |      | 1'-5 1/2"<br>(445) | 1'-6"<br>(457) | 1'-11 1/2"<br>(597) | 2'-0"<br>(610) | 2'-5 1/2"<br>(749) | 2'-6"<br>(762) | 2'-11 1/2"<br>(902) | 3'-0"<br>(914) | 3'-5 1/2"<br>(1054) | 3'-6"<br>(1067) | 3'-11 1/2"<br>(1207) | 4'-0"<br>(1219) | 4'-5 1/2"<br>(1359) | 4'-6"<br>(1372) | 4'-11 1/2"<br>(1511) | 5'-0"<br>(1524) | 5'-5 1/2"<br>(1664) | 5'-6"<br>(1676) | 5'-11 1/2"<br>(1816) |      |      |      |      |      |      |      |      |                   |      |      |      |      |                   |                   |      |      |      |      |                   |                   |      |      |      |      |                   |                   |      |      |      |      |                   |                   |      |      |      |      |                   |                   |
|-------------------------------------|------|--------------------|----------------|---------------------|----------------|--------------------|----------------|---------------------|----------------|---------------------|-----------------|----------------------|-----------------|---------------------|-----------------|----------------------|-----------------|---------------------|-----------------|----------------------|------|------|------|------|------|------|------|------|-------------------|------|------|------|------|-------------------|-------------------|------|------|------|------|-------------------|-------------------|------|------|------|------|-------------------|-------------------|------|------|------|------|-------------------|-------------------|------|------|------|------|-------------------|-------------------|
| 5016                                | 6016 | 7016               | 7616           | 8016                | 8616           | 5020               | 6020           | 7020                | 7620           | 8020                | 8620            | 5026                 | 6026            | 7026                | 7626            | 8026                 | 8626            | 5030                | 6030            | 7030                 | 7630 | 8030 | 8630 | 5036 | 6036 | 7036 | 7636 | 8036 | 8636 <sup>ø</sup> | 5040 | 6040 | 7040 | 7640 | 8040 <sup>ø</sup> | 8640 <sup>ø</sup> | 5046 | 6046 | 7046 | 7646 | 8046 <sup>ø</sup> | 8646 <sup>ø</sup> | 5050 | 6050 | 7050 | 7650 | 8050 <sup>ø</sup> | 8650 <sup>ø</sup> | 5056 | 6056 | 7056 | 7656 | 8056 <sup>ø</sup> | 8656 <sup>ø</sup> | 5060 | 6060 | 7060 | 7660 | 8060 <sup>ø</sup> | 8660 <sup>ø</sup> |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

\* Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on pages 62-63.

|                      |                      |                       |                       |
|----------------------|----------------------|-----------------------|-----------------------|
| 8'-11 1/2"<br>(2731) | 9'-11 1/2"<br>(3035) | 10'-11 1/2"<br>(3340) | 11'-11 1/2"<br>(3645) |
| 9'-0"<br>(2743)      | 10'-0"<br>(3048)     | 11'-0"<br>(3353)      | 12'-0"<br>(3658)      |
| 51 7/8"<br>(1318)    | 57 7/8"<br>(1470)    | 63 7/8"<br>(1623)     | 69 7/8"<br>(1775)     |
| 22 17/32"<br>(572)   | 25 17/32"<br>(648)   | 28 17/32"<br>(725)    | 31 17/32"<br>(801)    |



Custom-size windows are available in 1/8" (3) increments. See page 97 for custom sizes and specifications.

|                   |                    |                    |                    |
|-------------------|--------------------|--------------------|--------------------|
|                   |                    |                    |                    |
| 9016              | 10016              | 11016              | 12016              |
|                   |                    |                    |                    |
| 9020              | 10020              | 11020              | 12020              |
|                   |                    |                    |                    |
| 9026              | 10026              | 11026              | 12026 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9030              | 10030              | 11030 <sup>Ø</sup> | 12030 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9036 <sup>Ø</sup> | 10036 <sup>Ø</sup> | 11036 <sup>Ø</sup> | 12036 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9040 <sup>Ø</sup> | 10040 <sup>Ø</sup> | 11040 <sup>Ø</sup> | 12040 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9046 <sup>Ø</sup> | 10046 <sup>Ø</sup> | 11046 <sup>Ø</sup> | 12046 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9050 <sup>Ø</sup> | 10050 <sup>Ø</sup> | 11050 <sup>Ø</sup> | 12050 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9056 <sup>Ø</sup> | 10056 <sup>Ø</sup> | 11056 <sup>Ø</sup> | 12056 <sup>Ø</sup> |
|                   |                    |                    |                    |
| 9060 <sup>Ø</sup> | 10060 <sup>Ø</sup> | 11060 <sup>Ø</sup> | 12060 <sup>Ø</sup> |



Active-Stationary-Active

Exterior view shown. Active-stationary-active (XOX) sash with a 1:2:1 sash ratio. Two locks for each sash are standard on all heights greater than 4'-2" (1270).

Grille patterns shown on page 65. Details shown on pages 66-67.

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

Ø Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on pages 62-63.

# GLIDING WINDOWS

**Table of Gliding Active-Stationary-Active 1:1:1 Sash Ratio Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                                     | 3'-11 1/2" | 4'-11 1/2" | 5'-11 1/2" | 6'-11 1/2" | 7'-5 1/2" | 7'-11 1/2" | 8'-5 1/2" |
|------------------------------------------------------|------------|------------|------------|------------|-----------|------------|-----------|
|                                                      | (1207)     | (1511)     | (1816)     | (2121)     | (2273)    | (2426)     | (2578)    |
| <b>Minimum Rough Opening</b>                         | 4'-0"      | 5'-0"      | 6'-0"      | 7'-0"      | 7'-6"     | 8'-0"      | 8'-6"     |
|                                                      | (1219)     | (1524)     | (1829)     | (2134)     | (2286)    | (2438)     | (2591)    |
| Unobstructed Glass<br>(width of center sash)         | 12 11/32"  | 16 11/32"  | 20 11/32"  | 24 11/32"  | 26 11/32" | 28 11/32"  | 30 11/32" |
|                                                      | (313)      | (415)      | (517)      | (618)      | (669)     | (720)      | (771)     |
| Unobstructed Glass<br>(width of single venting sash) | 12 9/32"   | 16 9/32"   | 20 9/32"   | 24 9/32"   | 26 9/32"  | 28 9/32"   | 30 9/32"  |
|                                                      | (312)      | (414)      | (516)      | (617)      | (668)     | (719)      | (770)     |

| CUSTOM WIDTHS – 47 1/2" to 101 1/2" |                      |      |      |      |                   |                   |                   |                   |
|-------------------------------------|----------------------|------|------|------|-------------------|-------------------|-------------------|-------------------|
| CUSTOM HEIGHTS – 17 1/2" to 71 1/2" | 1'-5 1/2"<br>(445)   | 4016 | 5016 | 6016 | 7016              | 7616              | 8016              | 8616              |
|                                     | 1'-11 1/2"<br>(597)  | 4020 | 5020 | 6020 | 7020              | 7620              | 8020              | 8620              |
|                                     | 2'-5 1/2"<br>(749)   | 4026 | 5026 | 6026 | 7026              | 7626              | 8026              | 8626              |
|                                     | 2'-11 1/2"<br>(902)  | 4030 | 5030 | 6030 | 7030              | 7630              | 8030 <sup>◊</sup> | 8630 <sup>◊</sup> |
|                                     | 3'-5 1/2"<br>(1054)  | 4036 | 5036 | 6036 | 7036 <sup>◊</sup> | 7636 <sup>◊</sup> | 8036 <sup>◊</sup> | 8636 <sup>◊</sup> |
|                                     | 3'-11 1/2"<br>(1207) | 4040 | 5040 | 6040 | 7040 <sup>◊</sup> | 7640 <sup>◊</sup> | 8040 <sup>◊</sup> | 8640 <sup>◊</sup> |
|                                     | 4'-5 1/2"<br>(1359)  | 4046 | 5046 | 6046 | 7046 <sup>◊</sup> | 7646 <sup>◊</sup> | 8046 <sup>◊</sup> | 8646 <sup>◊</sup> |
|                                     | 4'-11 1/2"<br>(1511) | 4050 | 5050 | 6050 | 7050 <sup>◊</sup> | 7650 <sup>◊</sup> | 8050 <sup>◊</sup> | 8650 <sup>◊</sup> |
|                                     | 5'-5 1/2"<br>(1664)  | 4056 | 5056 | 6056 | 7056 <sup>◊</sup> | 7656 <sup>◊</sup> | 8056 <sup>◊</sup> | 8656 <sup>◊</sup> |
|                                     | 5'-11 1/2"<br>(1816) | 4060 | 5060 | 6060 | 7060 <sup>◊</sup> | 7660 <sup>◊</sup> | 8060 <sup>◊</sup> | 8660 <sup>◊</sup> |



Custom-size windows are available in 1/8" (3) increments. See page 97 for custom sizes and specifications.



Active-Stationary-Active

Exterior view shown. Sash configuration is active-stationary-active (XOX) with a 1:1:1 equal sash ratio. Two locks are standard on all heights greater than 4'-2" (1270). Details shown on pages 66-67.

\* Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610). See table on pages 64-65.

### Table of Picture Over Gliding Window With Active-Stationary or Stationary-Active Sash Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

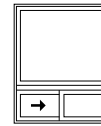
| Window Dimension                        | 2'-11 1/2"<br>(902) | 3'-11 1/2"<br>(1207) | 4'-11 1/2"<br>(1511) | 5'-11 1/2"<br>(1816) |
|-----------------------------------------|---------------------|----------------------|----------------------|----------------------|
| Minimum Rough Opening                   | 3'-0"<br>(914)      | 4'-0"<br>(1219)      | 5'-0"<br>(1524)      | 6'-0"<br>(1829)      |
| Unobstructed Glass<br>(upper sash only) | 29 1/4"<br>(743)    | 41 1/4"<br>(1048)    | 53 1/4"<br>(1353)    | 65 1/4"<br>(1657)    |

|                      |                   |                      |                   |                      |
|----------------------|-------------------|----------------------|-------------------|----------------------|
| 4'-11 1/2"<br>(1511) | 5'-0"<br>(1524)   | 5'-11 1/2"<br>(1816) | 6'-0"<br>(1829)   | 6'-11 1/2"<br>(2121) |
| 35 1/4"<br>(895)     | 41 1/4"<br>(1048) | 53 1/4"<br>(1353)    | 65 1/4"<br>(1657) | 77 1/4"<br>(1962)    |

|              |              |              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 3036<br>3016 | 4036<br>4016 | 5036<br>5016 | 6036<br>6016 | 3040<br>3020 | 4040<br>4020 | 5040<br>5020 | 6040<br>6020 | 3050<br>3020 | 4050<br>4020 | 5050<br>5020 | 6050<br>6020 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|



Picture Over Gliding With Active-Stationary Sash



Picture Over Gliding With Stationary-Active Sash

Choose picture over gliding active-stationary (XO) sash or picture over gliding stationary-active (OX) sash as viewed from the exterior. Windows have one continuous outer frame.

For unobstructed glass dimensions of lower sash, see page 55.

Grille patterns shown on page 65. Details shown on pages 66-67.

### Table of Picture Window Over Gliding With Active-Stationary-Active 1:2:1 Sash Ratio Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension                        | 5'-11 1/2"<br>(1816) | 6'-11 1/2"<br>(2121) | 7'-11 1/2"<br>(2426) | 8'-11 1/2"<br>(2731) |
|-----------------------------------------|----------------------|----------------------|----------------------|----------------------|
| Minimum Rough Opening                   | 6'-0"<br>(1829)      | 7'-0"<br>(2134)      | 8'-0"<br>(2438)      | 9'-0"<br>(2743)      |
| Unobstructed Glass<br>(upper sash only) | 65 1/4"<br>(1657)    | 77 1/4"<br>(1962)    | 89 1/4"<br>(2267)    | 101 1/4"<br>(2572)   |

|                      |                   |                      |                   |                      |                   |                      |                    |                      |                    |
|----------------------|-------------------|----------------------|-------------------|----------------------|-------------------|----------------------|--------------------|----------------------|--------------------|
| 4'-11 1/2"<br>(1511) | 5'-0"<br>(1524)   | 5'-11 1/2"<br>(1816) | 6'-0"<br>(1829)   | 6'-11 1/2"<br>(2121) | 7'-0"<br>(2134)   | 7'-11 1/2"<br>(2426) | 8'-0"<br>(2438)    | 8'-11 1/2"<br>(2731) | 9'-0"<br>(2743)    |
| 35 1/4"<br>(895)     | 41 1/4"<br>(1048) | 53 1/4"<br>(1353)    | 65 1/4"<br>(1657) | 77 1/4"<br>(1962)    | 89 1/4"<br>(2267) | 101 1/4"<br>(2572)   | 113 1/4"<br>(2887) | 125 1/4"<br>(3192)   | 137 1/4"<br>(3497) |

|              |              |              |              |              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 6036<br>6016 | 7036<br>7016 | 8036<br>8016 | 9036<br>9016 | 6040<br>6020 | 7040<br>7020 | 8040<br>8020 | 9040<br>9020 | 6050<br>6020 | 7050<br>7020 | 8050<br>8020 | 9050<br>9020 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|



Active-Stationary-Active

Exterior view shown. Picture over active-stationary-active (XOX) sash with a 1:2:1 sash ratio. Windows have one continuous outer frame.

For unobstructed glass dimensions of lower sash, see pages 56-57.

Grille patterns shown on page 65.

Details shown on pages 66-67.

• Window Dimension always refers to outside frame-to-frame dimension.

• Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

• Dimensions in parentheses are in millimeters.



# GLIDING WINDOWS

## Gliding Active-Stationary or Stationary-Active Sash Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Clear Opening in Full Open Position |                       | Total Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Fixed Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Active Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) |  | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|--------|-------------------------------------|-----------------------|------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------|--|---------------------------------------------------|
|               |                                                  |        | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                                |                                                     |                                                      |                                         |                                                           |  |                                                   |
| 2010          | 0.45                                             | (0.04) | 8 1/16" (204)                       | 8" (203)              | 0.55 (0.05)                                    | 0.28 (0.03)                                         | 0.27 (0.03)                                          | 0.45 (0.04)                             | 72 1/2" (1842)                                            |  | 1.88 (0.17)                                       |
| 2016          | 0.78                                             | (0.07) | 8 1/16" (204)                       | 14" (356)             | 1.18 (0.11)                                    | 0.59 (0.05)                                         | 0.59 (0.05)                                          | 0.78 (0.07)                             | 66 1/2" (1689)                                            |  | 2.86 (0.27)                                       |
| 2020          | 1.12                                             | (0.10) | 8 1/16" (204)                       | 20" (508)             | 1.81 (0.17)                                    | 0.91 (0.08)                                         | 0.90 (0.08)                                          | 1.12 (0.10)                             | 60 1/2" (1537)                                            |  | 3.84 (0.36)                                       |
| 2026          | 1.45                                             | (0.13) | 8 1/16" (204)                       | 26" (660)             | 2.44 (0.23)                                    | 1.22 (0.11)                                         | 1.21 (0.11)                                          | 1.45 (0.13)                             | 54 1/2" (1384)                                            |  | 4.81 (0.45)                                       |
| 2030          | 1.79                                             | (0.17) | 8 1/16" (204)                       | 32" (813)             | 3.07 (0.28)                                    | 1.54 (0.14)                                         | 1.53 (0.14)                                          | 1.79 (0.17)                             | 48 1/2" (1232)                                            |  | 5.79 (0.54)                                       |
| 2036          | 2.12                                             | (0.20) | 8 1/16" (204)                       | 38" (965)             | 3.69 (0.34)                                    | 1.85 (0.17)                                         | 1.84 (0.17)                                          | 2.12 (0.20)                             | 42 1/2" (1080)                                            |  | 6.77 (0.63)                                       |
| 2040          | 2.46                                             | (0.23) | 8 1/16" (204)                       | 44" (1118)            | 4.32 (0.40)                                    | 2.17 (0.20)                                         | 2.16 (0.20)                                          | 2.46 (0.23)                             | 36 1/2" (927)                                             |  | 7.75 (0.72)                                       |
| 2046          | 2.79                                             | (0.26) | 8 1/16" (204)                       | 50" (1270)            | 4.95 (0.46)                                    | 2.48 (0.23)                                         | 2.47 (0.23)                                          | 2.79 (0.26)                             | 30 1/2" (775)                                             |  | 8.73 (0.81)                                       |
| 2050          | 3.13                                             | (0.29) | 8 1/16" (204)                       | 56" (1422)            | 5.58 (0.52)                                    | 2.80 (0.26)                                         | 2.78 (0.26)                                          | 3.13 (0.29)                             | 24 1/2" (622)                                             |  | 9.71 (0.90)                                       |
| 2056          | 3.46                                             | (0.32) | 8 1/16" (204)                       | 62" (1575)            | 6.21 (0.58)                                    | 3.11 (0.29)                                         | 3.10 (0.29)                                          | 3.46 (0.32)                             | 18 1/2" (470)                                             |  | 10.69 (0.99)                                      |
| 2060          | 3.80                                             | (0.35) | 8 1/16" (204)                       | 68" (1727)            | 6.84 (0.64)                                    | 3.43 (0.32)                                         | 3.41 (0.32)                                          | 3.80 (0.35)                             | 12 1/2" (318)                                             |  | 11.67 (1.08)                                      |
| 2610          | 0.61                                             | (0.06) | 11 1/16" (280)                      | 8" (203)              | 0.77 (0.07)                                    | 0.39 (0.04)                                         | 0.38 (0.04)                                          | 0.61 (0.06)                             | 72 1/2" (1842)                                            |  | 2.36 (0.22)                                       |
| 2616          | 1.07                                             | (0.10) | 11 1/16" (280)                      | 14" (356)             | 1.65 (0.15)                                    | 0.83 (0.08)                                         | 0.82 (0.08)                                          | 1.07 (0.10)                             | 66 1/2" (1689)                                            |  | 3.59 (0.33)                                       |
| 2620          | 1.53                                             | (0.14) | 11 1/16" (280)                      | 20" (508)             | 2.53 (0.23)                                    | 1.27 (0.12)                                         | 1.26 (0.12)                                          | 1.53 (0.14)                             | 60 1/2" (1537)                                            |  | 4.81 (0.45)                                       |
| 2626          | 1.99                                             | (0.19) | 11 1/16" (280)                      | 26" (660)             | 3.41 (0.32)                                    | 1.71 (0.16)                                         | 1.70 (0.16)                                          | 1.99 (0.19)                             | 54 1/2" (1384)                                            |  | 6.04 (0.56)                                       |
| 2630          | 2.45                                             | (0.23) | 11 1/16" (280)                      | 32" (813)             | 4.28 (0.40)                                    | 2.15 (0.20)                                         | 2.14 (0.20)                                          | 2.45 (0.23)                             | 48 1/2" (1232)                                            |  | 7.27 (0.68)                                       |
| 2636          | 2.91                                             | (0.27) | 11 1/16" (280)                      | 38" (965)             | 5.16 (0.48)                                    | 2.59 (0.24)                                         | 2.58 (0.24)                                          | 2.91 (0.27)                             | 42 1/2" (1080)                                            |  | 8.50 (0.79)                                       |
| 2640          | 3.37                                             | (0.31) | 11 1/16" (280)                      | 44" (1118)            | 6.04 (0.56)                                    | 3.03 (0.28)                                         | 3.01 (0.28)                                          | 3.37 (0.31)                             | 36 1/2" (927)                                             |  | 9.73 (0.90)                                       |
| 2646          | 3.83                                             | (0.36) | 11 1/16" (280)                      | 50" (1270)            | 6.92 (0.64)                                    | 3.47 (0.32)                                         | 3.45 (0.32)                                          | 3.83 (0.36)                             | 30 1/2" (775)                                             |  | 10.96 (1.02)                                      |
| 2650          | 4.29                                             | (0.40) | 11 1/16" (280)                      | 56" (1422)            | 7.80 (0.72)                                    | 3.91 (0.36)                                         | 3.89 (0.36)                                          | 4.29 (0.40)                             | 24 1/2" (622)                                             |  | 12.19 (1.13)                                      |
| 2656          | 4.75                                             | (0.44) | 11 1/16" (280)                      | 62" (1575)            | 8.68 (0.81)                                    | 4.35 (0.40)                                         | 4.33 (0.40)                                          | 4.75 (0.44)                             | 18 1/2" (470)                                             |  | 13.42 (1.25)                                      |
| 2660          | 5.21                                             | (0.48) | 11 1/16" (280)                      | 68" (1727)            | 9.56 (0.89)                                    | 4.79 (0.44)                                         | 4.77 (0.44)                                          | 5.21 (0.48)                             | 12 1/2" (318)                                             |  | 14.65 (1.36)                                      |
| 3010          | 0.78                                             | (0.07) | 14 1/16" (357)                      | 8" (203)              | 0.99 (0.09)                                    | 0.49 (0.05)                                         | 0.49 (0.05)                                          | 0.78 (0.07)                             | 72 1/2" (1842)                                            |  | 2.84 (0.26)                                       |
| 3016          | 1.36                                             | (0.13) | 14 1/16" (357)                      | 14" (356)             | 2.12 (0.20)                                    | 1.06 (0.10)                                         | 1.06 (0.10)                                          | 1.36 (0.13)                             | 66 1/2" (1689)                                            |  | 4.31 (0.40)                                       |
| 3020          | 1.95                                             | (0.18) | 14 1/16" (357)                      | 20" (508)             | 3.25 (0.30)                                    | 1.63 (0.15)                                         | 1.62 (0.15)                                          | 1.95 (0.18)                             | 60 1/2" (1537)                                            |  | 5.79 (0.54)                                       |
| 3026          | 2.53                                             | (0.24) | 14 1/16" (357)                      | 26" (660)             | 4.37 (0.41)                                    | 2.19 (0.20)                                         | 2.18 (0.20)                                          | 2.53 (0.24)                             | 54 1/2" (1384)                                            |  | 7.27 (0.68)                                       |
| 3030          | 3.12                                             | (0.29) | 14 1/16" (357)                      | 32" (813)             | 5.50 (0.51)                                    | 2.76 (0.26)                                         | 2.75 (0.26)                                          | 3.12 (0.29)                             | 48 1/2" (1232)                                            |  | 8.75 (0.81)                                       |
| 3036          | 3.70                                             | (0.34) | 14 1/16" (357)                      | 38" (965)             | 6.63 (0.62)                                    | 3.32 (0.31)                                         | 3.31 (0.31)                                          | 3.70 (0.34)                             | 42 1/2" (1080)                                            |  | 10.23 (0.95)                                      |
| 3040          | 4.29                                             | (0.40) | 14 1/16" (357)                      | 44" (1118)            | 7.76 (0.72)                                    | 3.89 (0.36)                                         | 3.87 (0.36)                                          | 4.29 (0.40)                             | 36 1/2" (927)                                             |  | 11.71 (1.09)                                      |
| 3046          | 4.87                                             | (0.45) | 14 1/16" (357)                      | 50" (1270)            | 8.89 (0.83)                                    | 4.45 (0.41)                                         | 4.44 (0.41)                                          | 4.87 (0.45)                             | 30 1/2" (775)                                             |  | 13.19 (1.23)                                      |
| 3050          | 5.46                                             | (0.51) | 14 1/16" (357)                      | 56" (1422)            | 10.02 (0.93)                                   | 5.02 (0.47)                                         | 5.00 (0.46)                                          | 5.46 (0.51)                             | 24 1/2" (622)                                             |  | 14.67 (1.36)                                      |
| 3056          | 6.04                                             | (0.56) | 14 1/16" (357)                      | 62" (1575)            | 11.15 (1.04)                                   | 5.58 (0.52)                                         | 5.56 (0.52)                                          | 6.04 (0.56)                             | 18 1/2" (470)                                             |  | 16.15 (1.50)                                      |
| 3060          | 6.63                                             | (0.62) | 14 1/16" (357)                      | 68" (1727)            | 12.28 (1.14)                                   | 6.15 (0.57)                                         | 6.13 (0.57)                                          | 6.63 (0.62)                             | 12 1/2" (318)                                             |  | 17.63 (1.64)                                      |
| 3610          | 0.95                                             | (0.09) | 17 1/16" (433)                      | 8" (203)              | 1.21 (0.11)                                    | 0.60 (0.06)                                         | 0.60 (0.06)                                          | 0.95 (0.09)                             | 72 1/2" (1842)                                            |  | 3.31 (0.31)                                       |
| 3616          | 1.66                                             | (0.15) | 17 1/16" (433)                      | 14" (356)             | 2.59 (0.24)                                    | 1.29 (0.12)                                         | 1.29 (0.12)                                          | 1.66 (0.15)                             | 66 1/2" (1689)                                            |  | 5.04 (0.47)                                       |
| 3620          | 2.37                                             | (0.22) | 17 1/16" (433)                      | 20" (508)             | 3.96 (0.37)                                    | 1.98 (0.18)                                         | 1.98 (0.18)                                          | 2.37 (0.22)                             | 60 1/2" (1537)                                            |  | 6.77 (0.63)                                       |
| 3626          | 3.08                                             | (0.29) | 17 1/16" (433)                      | 26" (660)             | 5.34 (0.50)                                    | 2.67 (0.25)                                         | 2.67 (0.25)                                          | 3.08 (0.29)                             | 54 1/2" (1384)                                            |  | 8.50 (0.79)                                       |
| 3630          | 3.79                                             | (0.35) | 17 1/16" (433)                      | 32" (813)             | 6.72 (0.62)                                    | 3.36 (0.31)                                         | 3.36 (0.31)                                          | 3.79 (0.35)                             | 48 1/2" (1232)                                            |  | 10.23 (0.95)                                      |
| 3636          | 4.50                                             | (0.42) | 17 1/16" (433)                      | 38" (965)             | 8.10 (0.75)                                    | 4.06 (0.38)                                         | 4.04 (0.38)                                          | 4.50 (0.42)                             | 42 1/2" (1080)                                            |  | 11.96 (1.11)                                      |
| 3640          | 5.21                                             | (0.48) | 17 1/16" (433)                      | 44" (1118)            | 9.48 (0.88)                                    | 4.75 (0.44)                                         | 4.73 (0.44)                                          | 5.21 (0.48)                             | 36 1/2" (927)                                             |  | 13.69 (1.27)                                      |
| 3646          | 5.92                                             | (0.55) | 17 1/16" (433)                      | 50" (1270)            | 10.86 (1.01)                                   | 5.44 (0.50)                                         | 5.42 (0.50)                                          | 5.92 (0.55)                             | 30 1/2" (775)                                             |  | 15.42 (1.43)                                      |
| 3650          | 6.63                                             | (0.62) | 17 1/16" (433)                      | 56" (1422)            | 12.24 (1.14)                                   | 6.13 (0.57)                                         | 6.11 (0.57)                                          | 6.63 (0.62)                             | 24 1/2" (622)                                             |  | 17.15 (1.59)                                      |
| 3656          | 7.34                                             | (0.68) | 17 1/16" (433)                      | 62" (1575)            | 13.62 (1.26)                                   | 6.82 (0.63)                                         | 6.80 (0.63)                                          | 7.34 (0.68)                             | 18 1/2" (470)                                             |  | 18.88 (1.75)                                      |
| 3660          | 8.05                                             | (0.75) | 17 1/16" (433)                      | 68" (1727)            | 14.99 (1.39)                                   | 7.51 (0.70)                                         | 7.49 (0.70)                                          | 8.05 (0.75)                             | 12 1/2" (318)                                             |  | 20.61 (1.91)                                      |
| 4010          | 1.11                                             | (0.10) | 20 1/16" (509)                      | 8" (203)              | 1.43 (0.13)                                    | 0.71 (0.07)                                         | 0.71 (0.07)                                          | 1.11 (0.10)                             | 72 1/2" (1842)                                            |  | 3.79 (0.35)                                       |
| 4016          | 1.95                                             | (0.18) | 20 1/16" (509)                      | 14" (356)             | 3.05 (0.28)                                    | 1.53 (0.14)                                         | 1.53 (0.14)                                          | 1.95 (0.18)                             | 66 1/2" (1689)                                            |  | 5.77 (0.54)                                       |
| 4020          | 2.78                                             | (0.26) | 20 1/16" (509)                      | 20" (508)             | 4.68 (0.44)                                    | 2.34 (0.22)                                         | 2.34 (0.22)                                          | 2.78 (0.26)                             | 60 1/2" (1537)                                            |  | 7.75 (0.72)                                       |
| 4026          | 3.62                                             | (0.34) | 20 1/16" (509)                      | 26" (660)             | 6.31 (0.59)                                    | 3.16 (0.29)                                         | 3.15 (0.29)                                          | 3.62 (0.34)                             | 54 1/2" (1384)                                            |  | 9.73 (0.90)                                       |
| 4030          | 4.45                                             | (0.41) | 20 1/16" (509)                      | 32" (813)             | 7.94 (0.74)                                    | 3.97 (0.37)                                         | 3.97 (0.37)                                          | 4.45 (0.41)                             | 48 1/2" (1232)                                            |  | 11.71 (1.09)                                      |
| 4036          | 5.29                                             | (0.49) | 20 1/16" (509)                      | 38" (965)             | 9.57 (0.89)                                    | 4.79 (0.44)                                         | 4.78 (0.44)                                          | 5.29 (0.49)                             | 42 1/2" (1080)                                            |  | 13.69 (1.27)                                      |
| 4040 ♦        | 6.12                                             | (0.57) | 20 1/16" (509)                      | 44" (1118)            | 11.20 (1.04)                                   | 5.60 (0.52)                                         | 5.59 (0.52)                                          | 6.12 (0.57)                             | 36 1/2" (927)                                             |  | 15.67 (1.46)                                      |
| 4046 ♦        | 6.96                                             | (0.65) | 20 1/16" (509)                      | 50" (1270)            | 12.83 (1.19)                                   | 6.42 (0.60)                                         | 6.41 (0.60)                                          | 6.96 (0.65)                             | 30 1/2" (775)                                             |  | 17.65 (1.64)                                      |
| 4050 ♦        | 7.79                                             | (0.72) | 20 1/16" (509)                      | 56" (1422)            | 14.46 (1.34)                                   | 7.24 (0.67)                                         | 7.22 (0.67)                                          | 7.79 (0.72)                             | 24 1/2" (622)                                             |  | 19.63 (1.82)                                      |
| 4056 ♦        | 8.63                                             | (0.80) | 20 1/16" (509)                      | 62" (1575)            | 16.08 (1.49)                                   | 8.05 (0.75)                                         | 8.03 (0.75)                                          | 8.63 (0.80)                             | 18 1/2" (470)                                             |  | 21.61 (2.01)                                      |
| 4060 ♦        | 9.46                                             | (0.88) | 20 1/16" (509)                      | 68" (1727)            | 17.71 (1.65)                                   | 8.87 (0.82)                                         | 8.85 (0.82)                                          | 9.46 (0.88)                             | 12 1/2" (318)                                             |  | 23.59 (2.19)                                      |
| 4610          | 1.28                                             | (0.12) | 23 1/16" (585)                      | 8" (203)              | 1.64 (0.15)                                    | 0.82 (0.08)                                         | 0.82 (0.08)                                          | 1.28 (0.12)                             | 72 1/2" (1842)                                            |  | 4.27 (0.40)                                       |
| 4616          | 2.24                                             | (0.21) | 23 1/16" (585)                      | 14" (356)             | 3.52 (0.33)                                    | 1.76 (0.16)                                         | 1.76 (0.16)                                          | 2.24 (0.21)                             | 66 1/2" (1689)                                            |  | 6.50 (0.60)                                       |
| 4620          | 3.20                                             | (0.30) | 23 1/16" (585)                      | 20" (508)             | 5.40 (0.50)                                    | 2.70 (0.25)                                         | 2.70 (0.25)                                          | 3.20 (0.30)                             | 60 1/2" (1537)                                            |  | 8.73 (0.81)                                       |

\* Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

*continued on next page*

♦ Dimensions in parentheses are in millimeters or square meters.

♦ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

## Gliding Active-Stationary or Stationary-Active Sash Window Opening and Area Specifications (continued)

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Total Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Fixed Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Active Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------------|-----------------------------------------------------|------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                                |                                                     |                                                      |                                         |                                                           |                                                   |
| 4626          | 4.16 (0.39)                                      | 23 1/16" (585)                      | 26" (660)             | 7.28 (0.68)                                    | 3.64 (0.34)                                         | 3.64 (0.34)                                          | 4.16 (0.39)                             | 54 1/2" (1384)                                            | 10.96 (1.02)                                      |
| 4630          | 5.12 (0.48)                                      | 23 1/16" (585)                      | 32" (813)             | 9.16 (0.85)                                    | 4.58 (0.43)                                         | 4.58 (0.43)                                          | 5.12 (0.48)                             | 48 1/2" (1232)                                            | 13.19 (1.23)                                      |
| 4636 ◊        | 6.08 (0.56)                                      | 23 1/16" (585)                      | 38" (965)             | 11.04 (1.03)                                   | 5.52 (0.51)                                         | 5.51 (0.51)                                          | 6.08 (0.56)                             | 42 1/2" (1080)                                            | 15.42 (1.43)                                      |
| 4640 ◊        | 7.04 (0.65)                                      | 23 1/16" (585)                      | 44" (1118)            | 12.92 (1.20)                                   | 6.46 (0.60)                                         | 6.45 (0.60)                                          | 7.04 (0.65)                             | 36 1/2" (927)                                             | 17.65 (1.64)                                      |
| 4646 ◊        | 8.00 (0.74)                                      | 23 1/16" (585)                      | 50" (1270)            | 14.80 (1.37)                                   | 7.40 (0.69)                                         | 7.39 (0.69)                                          | 8.00 (0.74)                             | 30 1/2" (775)                                             | 19.88 (1.85)                                      |
| 4650 ◊        | 8.96 (0.83)                                      | 23 1/16" (585)                      | 56" (1422)            | 16.67 (1.55)                                   | 8.34 (0.78)                                         | 8.33 (0.77)                                          | 8.96 (0.83)                             | 24 1/2" (622)                                             | 22.11 (2.05)                                      |
| 4656 ◊        | 9.92 (0.92)                                      | 23 1/16" (585)                      | 62" (1575)            | 18.55 (1.72)                                   | 9.28 (0.86)                                         | 9.27 (0.86)                                          | 9.92 (0.92)                             | 18 1/2" (470)                                             | 24.34 (2.26)                                      |
| 4660 ◊        | 10.88 (1.01)                                     | 23 1/16" (585)                      | 68" (1727)            | 20.43 (1.90)                                   | 10.23 (0.95)                                        | 10.21 (0.95)                                         | 10.88 (1.01)                            | 12 1/2" (318)                                             | 26.56 (2.47)                                      |
| 5010          | 1.45 (0.13)                                      | 26 1/16" (661)                      | 8" (203)              | 1.86 (0.17)                                    | 0.93 (0.09)                                         | 0.93 (0.09)                                          | 1.45 (0.13)                             | 72 1/2" (1842)                                            | 4.75 (0.44)                                       |
| 5016          | 2.53 (0.24)                                      | 26 1/16" (661)                      | 14" (356)             | 3.99 (0.37)                                    | 2.00 (0.19)                                         | 1.99 (0.19)                                          | 2.53 (0.24)                             | 66 1/2" (1689)                                            | 7.23 (0.67)                                       |
| 5020          | 3.62 (0.34)                                      | 26 1/16" (661)                      | 20" (508)             | 6.12 (0.57)                                    | 3.06 (0.28)                                         | 3.06 (0.28)                                          | 3.62 (0.34)                             | 60 1/2" (1537)                                            | 9.71 (0.90)                                       |
| 5026          | 4.70 (0.44)                                      | 26 1/16" (661)                      | 26" (660)             | 8.25 (0.77)                                    | 4.13 (0.38)                                         | 4.12 (0.38)                                          | 4.70 (0.44)                             | 54 1/2" (1384)                                            | 12.19 (1.13)                                      |
| 5030 ◊        | 5.79 (0.54)                                      | 26 1/16" (661)                      | 32" (813)             | 10.38 (0.96)                                   | 5.19 (0.48)                                         | 5.18 (0.48)                                          | 5.79 (0.54)                             | 48 1/2" (1232)                                            | 14.67 (1.36)                                      |
| 5036 ◊        | 6.87 (0.64)                                      | 26 1/16" (661)                      | 38" (965)             | 12.51 (1.16)                                   | 6.26 (0.58)                                         | 6.25 (0.58)                                          | 6.87 (0.64)                             | 42 1/2" (1080)                                            | 17.15 (1.59)                                      |
| 5040 ◊        | 7.96 (0.74)                                      | 26 1/16" (661)                      | 44" (1118)            | 14.64 (1.36)                                   | 7.32 (0.68)                                         | 7.31 (0.68)                                          | 7.96 (0.74)                             | 36 1/2" (927)                                             | 19.63 (1.82)                                      |
| 5046 ◊        | 9.04 (0.84)                                      | 26 1/16" (661)                      | 50" (1270)            | 16.76 (1.56)                                   | 8.39 (0.78)                                         | 8.38 (0.78)                                          | 9.04 (0.84)                             | 30 1/2" (775)                                             | 22.11 (2.05)                                      |
| 5050 ◊        | 10.13 (0.94)                                     | 26 1/16" (661)                      | 56" (1422)            | 18.89 (1.76)                                   | 9.45 (0.88)                                         | 9.44 (0.88)                                          | 10.13 (0.94)                            | 24 1/2" (622)                                             | 24.59 (2.28)                                      |
| 5056 ◊        | 11.21 (1.04)                                     | 26 1/16" (661)                      | 62" (1575)            | 21.02 (1.95)                                   | 10.52 (0.98)                                        | 10.50 (0.98)                                         | 11.21 (1.04)                            | 18 1/2" (470)                                             | 27.06 (2.51)                                      |
| 5060 ◊        | 12.30 (1.14)                                     | 26 1/16" (661)                      | 68" (1727)            | 23.15 (2.15)                                   | 11.58 (1.08)                                        | 11.57 (1.07)                                         | 12.30 (1.14)                            | 12 1/2" (318)                                             | 29.54 (2.74)                                      |
| 5610          | 1.61 (0.15)                                      | 29 1/16" (738)                      | 8" (203)              | 2.08 (0.19)                                    | 1.04 (0.10)                                         | 1.04 (0.10)                                          | 1.61 (0.15)                             | 72 1/2" (1842)                                            | 5.23 (0.49)                                       |
| 5616          | 2.82 (0.26)                                      | 29 1/16" (738)                      | 14" (356)             | 4.46 (0.41)                                    | 2.23 (0.21)                                         | 2.23 (0.21)                                          | 2.82 (0.26)                             | 66 1/2" (1689)                                            | 7.96 (0.74)                                       |
| 5620          | 4.03 (0.37)                                      | 29 1/16" (738)                      | 20" (508)             | 6.84 (0.64)                                    | 3.42 (0.32)                                         | 3.42 (0.32)                                          | 4.03 (0.37)                             | 60 1/2" (1537)                                            | 10.69 (0.99)                                      |
| 5626          | 5.24 (0.49)                                      | 29 1/16" (738)                      | 26" (660)             | 9.22 (0.86)                                    | 4.61 (0.43)                                         | 4.61 (0.43)                                          | 5.24 (0.49)                             | 54 1/2" (1384)                                            | 13.42 (1.25)                                      |
| 5630 ◊        | 6.45 (0.60)                                      | 29 1/16" (738)                      | 32" (813)             | 11.60 (1.08)                                   | 5.80 (0.54)                                         | 5.79 (0.54)                                          | 6.45 (0.60)                             | 48 1/2" (1232)                                            | 16.15 (1.50)                                      |
| 5636 ◊        | 7.66 (0.71)                                      | 29 1/16" (738)                      | 38" (965)             | 13.98 (1.30)                                   | 6.99 (0.65)                                         | 6.98 (0.65)                                          | 7.66 (0.71)                             | 42 1/2" (1080)                                            | 18.88 (1.75)                                      |
| 5640 ◊        | 8.87 (0.82)                                      | 29 1/16" (738)                      | 44" (1118)            | 16.35 (1.52)                                   | 8.18 (0.76)                                         | 8.17 (0.76)                                          | 8.87 (0.82)                             | 36 1/2" (927)                                             | 21.61 (2.01)                                      |
| 5646 ◊        | 10.08 (0.94)                                     | 29 1/16" (738)                      | 50" (1270)            | 18.73 (1.74)                                   | 9.37 (0.87)                                         | 9.36 (0.87)                                          | 10.08 (0.94)                            | 30 1/2" (775)                                             | 24.34 (2.26)                                      |
| 5650 ◊        | 11.29 (1.05)                                     | 29 1/16" (738)                      | 56" (1422)            | 21.11 (1.96)                                   | 10.56 (0.98)                                        | 10.55 (0.98)                                         | 11.29 (1.05)                            | 24 1/2" (622)                                             | 27.06 (2.51)                                      |
| 5656 ◊        | 12.50 (1.16)                                     | 29 1/16" (738)                      | 62" (1575)            | 23.49 (2.18)                                   | 11.75 (1.09)                                        | 11.74 (1.09)                                         | 12.50 (1.16)                            | 18 1/2" (470)                                             | 29.79 (2.77)                                      |
| 5660 ◊        | 13.71 (1.27)                                     | 29 1/16" (738)                      | 68" (1727)            | 25.87 (2.40)                                   | 12.94 (1.20)                                        | 12.92 (1.20)                                         | 13.71 (1.27)                            | 12 1/2" (318)                                             | 32.52 (3.02)                                      |
| 6010          | 1.78 (0.17)                                      | 32 1/16" (814)                      | 8" (203)              | 2.30 (0.21)                                    | 1.15 (0.11)                                         | 1.15 (0.11)                                          | 1.78 (0.17)                             | 72 1/2" (1842)                                            | 5.71 (0.53)                                       |
| 6016          | 3.11 (0.29)                                      | 32 1/16" (814)                      | 14" (356)             | 4.93 (0.46)                                    | 2.47 (0.23)                                         | 2.46 (0.23)                                          | 3.11 (0.29)                             | 66 1/2" (1689)                                            | 8.69 (0.81)                                       |
| 6020          | 4.45 (0.41)                                      | 32 1/16" (814)                      | 20" (508)             | 7.56 (0.70)                                    | 3.78 (0.35)                                         | 3.78 (0.35)                                          | 4.45 (0.41)                             | 60 1/2" (1537)                                            | 11.67 (1.08)                                      |
| 6026 ◊        | 5.78 (0.54)                                      | 32 1/16" (814)                      | 26" (660)             | 10.19 (0.95)                                   | 5.10 (0.47)                                         | 5.09 (0.47)                                          | 5.78 (0.54)                             | 54 1/2" (1384)                                            | 14.65 (1.36)                                      |
| 6030 ◊        | 7.12 (0.66)                                      | 32 1/16" (814)                      | 32" (813)             | 12.82 (1.19)                                   | 6.41 (0.60)                                         | 6.40 (0.59)                                          | 7.12 (0.66)                             | 48 1/2" (1232)                                            | 17.63 (1.64)                                      |
| 6036 ◊        | 8.45 (0.79)                                      | 32 1/16" (814)                      | 38" (965)             | 15.44 (1.43)                                   | 7.73 (0.72)                                         | 7.72 (0.72)                                          | 8.45 (0.79)                             | 42 1/2" (1080)                                            | 20.61 (1.91)                                      |
| 6040 ◊        | 9.79 (0.91)                                      | 32 1/16" (814)                      | 44" (1118)            | 18.07 (1.68)                                   | 9.04 (0.84)                                         | 9.03 (0.84)                                          | 9.79 (0.91)                             | 36 1/2" (927)                                             | 23.59 (2.19)                                      |
| 6046 ◊        | 11.12 (1.03)                                     | 32 1/16" (814)                      | 50" (1270)            | 20.70 (1.92)                                   | 10.36 (0.96)                                        | 10.34 (0.96)                                         | 11.12 (1.03)                            | 30 1/2" (775)                                             | 26.56 (2.47)                                      |
| 6050 ◊        | 12.46 (1.16)                                     | 32 1/16" (814)                      | 56" (1422)            | 23.33 (2.17)                                   | 11.67 (1.08)                                        | 11.66 (1.08)                                         | 12.46 (1.16)                            | 24 1/2" (622)                                             | 29.54 (2.74)                                      |
| 6056 ◊        | 13.79 (1.28)                                     | 32 1/16" (814)                      | 62" (1575)            | 25.96 (2.41)                                   | 12.99 (1.21)                                        | 12.97 (1.21)                                         | 13.79 (1.28)                            | 18 1/2" (470)                                             | 32.52 (3.02)                                      |
| 6060 ◊        | 15.13 (1.41)                                     | 32 1/16" (814)                      | 68" (1727)            | 28.59 (2.66)                                   | 14.30 (1.33)                                        | 14.28 (1.33)                                         | 15.13 (1.41)                            | 12 1/2" (318)                                             | 35.50 (3.30)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

• Dimensions in parentheses are in millimeters or square meters.

◊ Meets or exceeds clear opening area of 5.7 sq.ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

Gliding Active-Stationary-Active 1:2:1 Sash Ratio Window Opening and Area Specifications

| Window Number | Clear Opening Area<br>Sq. Ft./ (m²) |        | Clear Opening in Full Open Position |                        | Total Glass Area<br>Sq. Ft./ (m²) | Fixed Sash Glass Area<br>Sq. Ft./ (m²) | Single Active Sash Glass Area<br>Sq. Ft./ (m²) | Vent Area<br>Sq. Ft./ (m²) |  | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) | Overall Window Area<br>Sq. Ft./ (m²) |
|---------------|-------------------------------------|--------|-------------------------------------|------------------------|-----------------------------------|----------------------------------------|------------------------------------------------|----------------------------|--|------------------------------------------------------------|--------------------------------------|
|               |                                     |        | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                   |                                        |                                                |                            |  |                                                            |                                      |
| 5016          | 1.16                                | (0.11) | 11 7/8" (302)                       | 14" (356)              | 3.82 (0.36)                       | 2.18 (0.20)                            | 0.82 (0.08)                                    | 2.31 (0.21)                |  | 66 1/2" (1689)                                             | 7.23 (0.67)                          |
| 5020          | 1.65                                | (0.15) | 11 7/8" (302)                       | 20" (508)              | 5.86 (0.54)                       | 3.34 (0.31)                            | 1.26 (0.12)                                    | 3.31 (0.31)                |  | 60 1/2" (1537)                                             | 9.71 (0.90)                          |
| 5026          | 2.15                                | (0.20) | 11 7/8" (302)                       | 26" (660)              | 7.90 (0.73)                       | 4.50 (0.42)                            | 1.70 (0.16)                                    | 4.30 (0.40)                |  | 54 1/2" (1384)                                             | 12.19 (1.13)                         |
| 5030          | 2.64                                | (0.25) | 11 7/8" (302)                       | 32" (813)              | 9.94 (0.92)                       | 5.66 (0.53)                            | 2.14 (0.20)                                    | 5.29 (0.49)                |  | 48 1/2" (1232)                                             | 14.67 (1.36)                         |
| 5036          | 3.14                                | (0.29) | 11 7/8" (302)                       | 38" (965)              | 11.98 (1.11)                      | 6.83 (0.63)                            | 2.58 (0.24)                                    | 6.28 (0.58)                |  | 42 1/2" (1080)                                             | 17.15 (1.59)                         |
| 5040          | 3.64                                | (0.34) | 11 7/8" (302)                       | 44" (1118)             | 14.02 (1.30)                      | 7.99 (0.74)                            | 3.01 (0.28)                                    | 7.27 (0.68)                |  | 36 1/2" (927)                                              | 19.63 (1.82)                         |
| 5046          | 4.13                                | (0.38) | 11 7/8" (302)                       | 50" (1270)             | 16.06 (1.49)                      | 9.15 (0.85)                            | 3.45 (0.32)                                    | 8.26 (0.77)                |  | 30 1/2" (775)                                              | 22.11 (2.05)                         |
| 5050          | 4.63                                | (0.43) | 11 7/8" (302)                       | 56" (1422)             | 18.09 (1.68)                      | 10.31 (0.96)                           | 3.89 (0.36)                                    | 9.25 (0.86)                |  | 24 1/2" (622)                                              | 24.59 (2.28)                         |
| 5056          | 5.12                                | (0.48) | 11 7/8" (302)                       | 62" (1575)             | 20.13 (1.87)                      | 11.47 (1.07)                           | 4.33 (0.40)                                    | 10.25 (0.95)               |  | 18 1/2" (470)                                              | 27.06 (2.51)                         |
| 5060          | 5.62                                | (0.52) | 11 7/8" (302)                       | 68" (1727)             | 22.17 (2.06)                      | 12.63 (1.17)                           | 4.77 (0.44)                                    | 11.24 (1.04)               |  | 12 1/2" (318)                                              | 29.54 (2.74)                         |
| 6016          | 1.45                                | (0.13) | 14 7/8" (378)                       | 14" (356)              | 4.76 (0.44)                       | 2.65 (0.25)                            | 1.06 (0.10)                                    | 2.90 (0.27)                |  | 66 1/2" (1689)                                             | 8.69 (0.81)                          |
| 6020          | 2.07                                | (0.19) | 14 7/8" (378)                       | 20" (508)              | 7.30 (0.68)                       | 4.06 (0.38)                            | 1.62 (0.15)                                    | 4.14 (0.38)                |  | 60 1/2" (1537)                                             | 11.67 (1.08)                         |
| 6026          | 2.69                                | (0.25) | 14 7/8" (378)                       | 26" (660)              | 9.84 (0.91)                       | 5.47 (0.51)                            | 2.18 (0.20)                                    | 5.38 (0.50)                |  | 54 1/2" (1384)                                             | 14.65 (1.36)                         |
| 6030          | 3.31                                | (0.31) | 14 7/8" (378)                       | 32" (813)              | 12.38 (1.15)                      | 6.88 (0.64)                            | 2.75 (0.26)                                    | 6.62 (0.62)                |  | 48 1/2" (1232)                                             | 17.63 (1.64)                         |
| 6036          | 3.93                                | (0.37) | 14 7/8" (378)                       | 38" (965)              | 14.92 (1.39)                      | 8.29 (0.77)                            | 3.31 (0.31)                                    | 7.86 (0.73)                |  | 42 1/2" (1080)                                             | 20.61 (1.91)                         |
| 6040          | 4.55                                | (0.42) | 14 7/8" (378)                       | 44" (1118)             | 17.45 (1.62)                      | 9.71 (0.90)                            | 3.87 (0.36)                                    | 9.10 (0.85)                |  | 36 1/2" (927)                                              | 23.59 (2.19)                         |
| 6046          | 5.17                                | (0.48) | 14 7/8" (378)                       | 50" (1270)             | 19.99 (1.86)                      | 11.12 (1.03)                           | 4.44 (0.41)                                    | 10.35 (0.96)               |  | 30 1/2" (775)                                              | 26.56 (2.47)                         |
| 6050          | 5.79                                | (0.54) | 14 7/8" (378)                       | 56" (1422)             | 22.53 (2.09)                      | 12.53 (1.16)                           | 5.00 (0.46)                                    | 11.59 (1.08)               |  | 24 1/2" (622)                                              | 29.54 (2.74)                         |
| 6056          | 6.41                                | (0.60) | 14 7/8" (378)                       | 62" (1575)             | 25.07 (2.33)                      | 13.94 (1.30)                           | 5.56 (0.52)                                    | 12.83 (1.19)               |  | 18 1/2" (470)                                              | 32.52 (3.02)                         |
| 6060          | 7.04                                | (0.65) | 14 7/8" (378)                       | 68" (1727)             | 27.61 (2.56)                      | 15.35 (1.43)                           | 6.13 (0.57)                                    | 14.07 (1.31)               |  | 12 1/2" (318)                                              | 35.50 (3.30)                         |
| 7016          | 1.74                                | (0.16) | 17 7/8" (455)                       | 14" (356)              | 5.70 (0.53)                       | 3.12 (0.29)                            | 1.29 (0.12)                                    | 3.48 (0.32)                |  | 66 1/2" (1689)                                             | 10.15 (0.94)                         |
| 7020          | 2.49                                | (0.23) | 17 7/8" (455)                       | 20" (508)              | 8.74 (0.81)                       | 4.78 (0.44)                            | 1.98 (0.18)                                    | 4.97 (0.46)                |  | 60 1/2" (1537)                                             | 13.63 (1.27)                         |
| 7026          | 3.23                                | (0.30) | 17 7/8" (455)                       | 26" (660)              | 11.78 (1.09)                      | 6.44 (0.60)                            | 2.67 (0.25)                                    | 6.46 (0.60)                |  | 54 1/2" (1384)                                             | 17.11 (1.59)                         |
| 7030          | 3.98                                | (0.37) | 17 7/8" (455)                       | 32" (813)              | 14.81 (1.38)                      | 8.10 (0.75)                            | 3.36 (0.31)                                    | 7.96 (0.74)                |  | 48 1/2" (1232)                                             | 20.59 (1.91)                         |
| 7036          | 4.72                                | (0.44) | 17 7/8" (455)                       | 38" (965)              | 17.85 (1.66)                      | 9.76 (0.91)                            | 4.04 (0.38)                                    | 9.45 (0.88)                |  | 42 1/2" (1080)                                             | 24.06 (2.24)                         |
| 7040          | 5.47                                | (0.51) | 17 7/8" (455)                       | 44" (1118)             | 20.89 (1.94)                      | 11.42 (1.06)                           | 4.73 (0.44)                                    | 10.94 (1.02)               |  | 36 1/2" (927)                                              | 27.54 (2.56)                         |
| 7046          | 6.21                                | (0.58) | 17 7/8" (455)                       | 50" (1270)             | 23.93 (2.22)                      | 13.09 (1.22)                           | 5.42 (0.50)                                    | 12.43 (1.15)               |  | 30 1/2" (775)                                              | 31.02 (2.88)                         |
| 7050          | 6.96                                | (0.65) | 17 7/8" (455)                       | 56" (1422)             | 26.97 (2.51)                      | 14.75 (1.37)                           | 6.11 (0.57)                                    | 13.92 (1.29)               |  | 24 1/2" (622)                                              | 34.50 (3.21)                         |
| 7056          | 7.71                                | (0.72) | 17 7/8" (455)                       | 62" (1575)             | 30.01 (2.79)                      | 16.41 (1.52)                           | 6.80 (0.63)                                    | 15.41 (1.43)               |  | 18 1/2" (470)                                              | 37.98 (3.53)                         |
| 7060          | 8.45                                | (0.79) | 17 7/8" (455)                       | 68" (1727)             | 33.05 (3.07)                      | 18.07 (1.68)                           | 7.49 (0.70)                                    | 16.90 (1.57)               |  | 12 1/2" (318)                                              | 41.46 (3.85)                         |
| 7616          | 1.89                                | (0.18) | 19 3/8" (493)                       | 14" (356)              | 6.17 (0.57)                       | 3.35 (0.31)                            | 1.41 (0.13)                                    | 3.77 (0.35)                |  | 66 1/2" (1689)                                             | 10.88 (1.01)                         |
| 7620          | 2.69                                | (0.25) | 19 3/8" (493)                       | 20" (508)              | 9.46 (0.88)                       | 5.14 (0.48)                            | 2.16 (0.20)                                    | 5.39 (0.50)                |  | 60 1/2" (1537)                                             | 14.61 (1.36)                         |
| 7626          | 3.50                                | (0.33) | 19 3/8" (493)                       | 26" (660)              | 12.74 (1.18)                      | 6.92 (0.64)                            | 2.91 (0.27)                                    | 7.01 (0.65)                |  | 54 1/2" (1384)                                             | 18.34 (1.70)                         |
| 7630          | 4.31                                | (0.40) | 19 3/8" (493)                       | 32" (813)              | 16.03 (1.49)                      | 8.71 (0.81)                            | 3.66 (0.34)                                    | 8.62 (0.80)                |  | 48 1/2" (1232)                                             | 22.06 (2.05)                         |
| 7636          | 5.12                                | (0.48) | 19 3/8" (493)                       | 38" (965)              | 19.32 (1.80)                      | 10.50 (0.98)                           | 4.41 (0.41)                                    | 10.24 (0.95)               |  | 42 1/2" (1080)                                             | 25.79 (2.40)                         |
| 7640          | 5.93                                | (0.55) | 19 3/8" (493)                       | 44" (1118)             | 22.61 (2.10)                      | 12.28 (1.14)                           | 5.16 (0.48)                                    | 11.85 (1.10)               |  | 36 1/2" (927)                                              | 29.52 (2.74)                         |
| 7646          | 6.74                                | (0.63) | 19 3/8" (493)                       | 50" (1270)             | 25.90 (2.41)                      | 14.07 (1.31)                           | 5.91 (0.55)                                    | 13.47 (1.25)               |  | 30 1/2" (775)                                              | 33.25 (3.09)                         |
| 7650          | 7.54                                | (0.70) | 19 3/8" (493)                       | 56" (1422)             | 29.19 (2.71)                      | 15.86 (1.47)                           | 6.67 (0.62)                                    | 15.09 (1.40)               |  | 24 1/2" (622)                                              | 36.98 (3.44)                         |
| 7656          | 8.35                                | (0.78) | 19 3/8" (493)                       | 62" (1575)             | 32.48 (3.02)                      | 17.64 (1.64)                           | 7.42 (0.69)                                    | 16.70 (1.55)               |  | 18 1/2" (470)                                              | 40.71 (3.78)                         |
| 7660          | 9.16                                | (0.85) | 19 3/8" (493)                       | 68" (1727)             | 35.77 (3.32)                      | 19.43 (1.81)                           | 8.17 (0.76)                                    | 18.32 (1.70)               |  | 12 1/2" (318)                                              | 44.44 (4.13)                         |
| 8016          | 2.03                                | (0.19) | 20 7/8" (531)                       | 14" (356)              | 6.64 (0.62)                       | 3.58 (0.33)                            | 1.53 (0.14)                                    | 4.06 (0.38)                |  | 66 1/2" (1689)                                             | 11.61 (1.08)                         |
| 8020          | 2.90                                | (0.27) | 20 7/8" (531)                       | 20" (508)              | 10.17 (0.95)                      | 5.50 (0.51)                            | 2.34 (0.22)                                    | 5.81 (0.54)                |  | 60 1/2" (1537)                                             | 15.59 (1.45)                         |
| 8026          | 3.77                                | (0.35) | 20 7/8" (531)                       | 26" (660)              | 13.71 (1.27)                      | 7.41 (0.69)                            | 3.15 (0.29)                                    | 7.55 (0.70)                |  | 54 1/2" (1384)                                             | 19.56 (1.82)                         |
| 8030          | 4.64                                | (0.43) | 20 7/8" (531)                       | 32" (813)              | 17.25 (1.60)                      | 9.32 (0.87)                            | 3.97 (0.37)                                    | 9.29 (0.86)                |  | 48 1/2" (1232)                                             | 23.54 (2.19)                         |
| 8036          | 5.52                                | (0.51) | 20 7/8" (531)                       | 38" (965)              | 20.79 (1.93)                      | 11.23 (1.04)                           | 4.78 (0.44)                                    | 11.03 (1.02)               |  | 42 1/2" (1080)                                             | 27.52 (2.56)                         |
| 8040 ♦        | 6.39                                | (0.59) | 20 7/8" (531)                       | 44" (1118)             | 24.33 (2.26)                      | 13.14 (1.22)                           | 5.59 (0.52)                                    | 12.77 (1.19)               |  | 36 1/2" (927)                                              | 31.50 (2.93)                         |
| 8046 ♦        | 7.26                                | (0.67) | 20 7/8" (531)                       | 50" (1270)             | 27.87 (2.59)                      | 15.06 (1.40)                           | 6.41 (0.60)                                    | 14.51 (1.35)               |  | 30 1/2" (775)                                              | 35.48 (3.30)                         |
| 8050 ♦        | 8.13                                | (0.76) | 20 7/8" (531)                       | 56" (1422)             | 31.41 (2.92)                      | 16.97 (1.58)                           | 7.22 (0.67)                                    | 16.25 (1.51)               |  | 24 1/2" (622)                                              | 39.46 (3.67)                         |
| 8056 ♦        | 9.00                                | (0.84) | 20 7/8" (531)                       | 62" (1575)             | 34.95 (3.25)                      | 18.88 (1.75)                           | 8.03 (0.75)                                    | 18.00 (1.67)               |  | 18 1/2" (470)                                              | 43.44 (4.04)                         |
| 8060 ♦        | 9.87                                | (0.92) | 20 7/8" (531)                       | 68" (1727)             | 38.48 (3.58)                      | 20.79 (1.93)                           | 8.85 (0.82)                                    | 19.74 (1.83)               |  | 12 1/2" (318)                                              | 47.42 (4.41)                         |
| 8616          | 2.18                                | (0.20) | 22 3/8" (569)                       | 14" (356)              | 7.10 (0.66)                       | 3.82 (0.35)                            | 1.64 (0.15)                                    | 4.36 (0.40)                |  | 66 1/2" (1689)                                             | 12.34 (1.15)                         |
| 8620          | 3.11                                | (0.29) | 22 3/8" (569)                       | 20" (508)              | 10.89 (1.01)                      | 5.86 (0.54)                            | 2.52 (0.23)                                    | 6.22 (0.58)                |  | 60 1/2" (1537)                                             | 16.56 (1.54)                         |
| 8626          | 4.04                                | (0.38) | 22 3/8" (569)                       | 26" (660)              | 14.68 (1.36)                      | 7.89 (0.73)                            | 3.39 (0.32)                                    | 8.09 (0.75)                |  | 54 1/2" (1384)                                             | 20.79 (1.93)                         |
| 8630          | 4.98                                | (0.46) | 22 3/8" (569)                       | 32" (813)              | 18.47 (1.72)                      | 9.93 (0.92)                            | 4.27 (0.40)                                    | 9.96 (0.92)                |  | 48 1/2" (1232)                                             | 25.02 (2.32)                         |
| 8636 ♦        | 5.91                                | (0.55) | 22 3/8" (569)                       | 38" (965)              | 22.26 (2.07)                      | 11.97 (1.11)                           | 5.15 (0.48)                                    | 11.82 (1.10)               |  | 42 1/2" (1080)                                             | 29.25 (2.72)                         |
| 8640 ♦        | 6.84                                | (0.64) | 22 3/8" (569)                       | 44" (1118)             | 26.05 (2.42)                      | 14.00 (1.30)                           | 6.02 (0.56)                                    | 13.69 (1.27)               |  | 36 1/2" (927)                                              | 33.48 (3.11)                         |
| 8646 ♦        | 7.78                                | (0.72) | 22 3/8" (569)                       | 50" (1270)             | 29.84 (2.77)                      | 16.04 (1.49)                           | 6.90 (0.64)                                    | 15.55 (1.45)               |  | 30 1/2" (775)                                              | 37.71 (3.50)                         |
| 8650 ♦        | 8.71                                | (0.81) | 22 3/8" (569)                       | 56" (1422)             | 33.63 (3.12)                      | 18.08 (1.68)                           | 7.77 (0.72)                                    | 17.42 (1.62)               |  | 24 1/2" (622)                                              | 41.94 (3.90)                         |

\*Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

\*Dimensions in parentheses are in millimeters or square meters.

♦Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

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## Gliding Active-Stationary-Active 1:2:1 Sash Ratio Window Opening and Area Specifications (continued)

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                        | Total Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Fixed Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Single Active Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|------------------------|------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                                |                                                     |                                                             |                                         |                                                            |                                                   |
| 8656 ◊        | 9.64 (0.90)                                      | 22 3/8" (569)                       | 62" (1575)             | 37.41 (3.48)                                   | 20.11 (1.87)                                        | 8.65 (0.80)                                                 | 19.29 (1.79)                            | 18 1/2" (470)                                              | 46.17 (4.29)                                      |
| 8660 ◊        | 10.58 (0.98)                                     | 22 3/8" (569)                       | 68" (1727)             | 41.20 (3.83)                                   | 22.15 (2.06)                                        | 9.53 (0.89)                                                 | 21.15 (1.97)                            | 12 1/2" (318)                                              | 50.40 (4.68)                                      |
| 9016          | 2.32 (0.22)                                      | 23 7/8" (607)                       | 14" (356)              | 7.57 (0.70)                                    | 4.05 (0.38)                                         | 1.76 (0.16)                                                 | 4.65 (0.43)                             | 66 1/2" (1689)                                             | 13.06 (1.21)                                      |
| 9020          | 3.32 (0.31)                                      | 23 7/8" (607)                       | 20" (508)              | 11.61 (1.08)                                   | 6.22 (0.58)                                         | 2.70 (0.25)                                                 | 6.64 (0.62)                             | 60 1/2" (1537)                                             | 17.54 (1.63)                                      |
| 9026          | 4.32 (0.40)                                      | 23 7/8" (607)                       | 26" (660)              | 15.65 (1.45)                                   | 8.38 (0.78)                                         | 3.64 (0.34)                                                 | 8.63 (0.80)                             | 54 1/2" (1384)                                             | 22.02 (2.05)                                      |
| 9030          | 5.31 (0.49)                                      | 23 7/8" (607)                       | 32" (813)              | 19.69 (1.83)                                   | 10.54 (0.98)                                        | 4.58 (0.43)                                                 | 10.62 (0.99)                            | 48 1/2" (1232)                                             | 26.50 (2.46)                                      |
| 9036 ◊        | 6.31 (0.59)                                      | 23 7/8" (607)                       | 38" (965)              | 23.73 (2.20)                                   | 12.70 (1.18)                                        | 5.51 (0.51)                                                 | 12.61 (1.17)                            | 42 1/2" (1080)                                             | 30.98 (2.88)                                      |
| 9040 ◊        | 7.30 (0.68)                                      | 23 7/8" (607)                       | 44" (1118)             | 27.77 (2.58)                                   | 14.86 (1.38)                                        | 6.45 (0.60)                                                 | 14.60 (1.36)                            | 36 1/2" (927)                                              | 35.46 (3.29)                                      |
| 9046 ◊        | 8.30 (0.77)                                      | 23 7/8" (607)                       | 50" (1270)             | 31.81 (2.95)                                   | 17.02 (1.58)                                        | 7.39 (0.69)                                                 | 16.60 (1.54)                            | 30 1/2" (775)                                              | 39.94 (3.71)                                      |
| 9050 ◊        | 9.29 (0.86)                                      | 23 7/8" (607)                       | 56" (1422)             | 35.84 (3.33)                                   | 19.19 (1.78)                                        | 8.33 (0.77)                                                 | 18.59 (1.73)                            | 24 1/2" (622)                                              | 44.42 (4.13)                                      |
| 9056 ◊        | 10.29 (0.96)                                     | 23 7/8" (607)                       | 62" (1575)             | 39.88 (3.71)                                   | 21.35 (1.98)                                        | 9.27 (0.86)                                                 | 20.58 (1.91)                            | 18 1/2" (470)                                              | 48.90 (4.54)                                      |
| 9060 ◊        | 11.29 (1.05)                                     | 23 7/8" (607)                       | 68" (1727)             | 43.92 (4.08)                                   | 23.51 (2.18)                                        | 10.21 (0.95)                                                | 22.57 (2.10)                            | 12 1/2" (318)                                              | 53.38 (4.96)                                      |
| 10016         | 2.62 (0.24)                                      | 26 7/8" (683)                       | 14" (356)              | 8.51 (0.79)                                    | 4.52 (0.42)                                         | 1.99 (0.19)                                                 | 5.23 (0.49)                             | 66 1/2" (1689)                                             | 14.52 (1.35)                                      |
| 10020         | 3.74 (0.35)                                      | 26 7/8" (683)                       | 20" (508)              | 13.05 (1.21)                                   | 6.93 (0.64)                                         | 3.06 (0.28)                                                 | 7.47 (0.69)                             | 60 1/2" (1537)                                             | 19.50 (1.81)                                      |
| 10026         | 4.86 (0.45)                                      | 26 7/8" (683)                       | 26" (660)              | 17.59 (1.63)                                   | 9.35 (0.87)                                         | 4.12 (0.38)                                                 | 9.71 (0.90)                             | 54 1/2" (1384)                                             | 24.48 (2.27)                                      |
| 10030         | 5.98 (0.56)                                      | 26 7/8" (683)                       | 32" (813)              | 22.13 (2.06)                                   | 11.76 (1.09)                                        | 5.18 (0.48)                                                 | 11.96 (1.11)                            | 48 1/2" (1232)                                             | 29.46 (2.74)                                      |
| 10036 ◊       | 7.10 (0.66)                                      | 26 7/8" (683)                       | 38" (965)              | 26.67 (2.48)                                   | 14.17 (1.32)                                        | 6.25 (0.58)                                                 | 14.20 (1.32)                            | 42 1/2" (1080)                                             | 34.44 (3.20)                                      |
| 10040 ◊       | 8.22 (0.76)                                      | 26 7/8" (683)                       | 44" (1118)             | 31.20 (2.90)                                   | 16.58 (1.54)                                        | 7.31 (0.68)                                                 | 16.44 (1.53)                            | 36 1/2" (927)                                              | 39.42 (3.66)                                      |
| 10046 ◊       | 9.34 (0.87)                                      | 26 7/8" (683)                       | 50" (1270)             | 35.74 (3.32)                                   | 18.99 (1.76)                                        | 8.38 (0.78)                                                 | 18.68 (1.74)                            | 30 1/2" (775)                                              | 44.40 (4.12)                                      |
| 10050 ◊       | 10.46 (0.97)                                     | 26 7/8" (683)                       | 56" (1422)             | 40.28 (3.74)                                   | 21.40 (1.99)                                        | 9.44 (0.88)                                                 | 20.92 (1.94)                            | 24 1/2" (622)                                              | 49.38 (4.59)                                      |
| 10056 ◊       | 11.58 (1.08)                                     | 26 7/8" (683)                       | 62" (1575)             | 44.82 (4.16)                                   | 23.82 (2.21)                                        | 10.50 (0.98)                                                | 23.16 (2.15)                            | 18 1/2" (470)                                              | 54.36 (5.05)                                      |
| 10060 ◊       | 12.70 (1.18)                                     | 26 7/8" (683)                       | 68" (1727)             | 49.36 (4.59)                                   | 26.23 (2.44)                                        | 11.57 (1.07)                                                | 25.40 (2.36)                            | 12 1/2" (318)                                              | 59.34 (5.51)                                      |
| 11016         | 2.91 (0.27)                                      | 29 7/8" (759)                       | 14" (356)              | 9.45 (0.88)                                    | 4.99 (0.46)                                         | 2.23 (0.21)                                                 | 5.81 (0.54)                             | 66 1/2" (1689)                                             | 15.98 (1.48)                                      |
| 11020         | 4.15 (0.39)                                      | 29 7/8" (759)                       | 20" (508)              | 14.49 (1.35)                                   | 7.65 (0.71)                                         | 3.42 (0.32)                                                 | 8.31 (0.77)                             | 60 1/2" (1537)                                             | 21.46 (1.99)                                      |
| 11026         | 5.40 (0.50)                                      | 29 7/8" (759)                       | 26" (660)              | 19.53 (1.81)                                   | 10.31 (0.96)                                        | 4.61 (0.43)                                                 | 10.80 (1.00)                            | 54 1/2" (1384)                                             | 26.94 (2.50)                                      |
| 11030 ◊       | 6.64 (0.62)                                      | 29 7/8" (759)                       | 32" (813)              | 24.56 (2.28)                                   | 12.98 (1.21)                                        | 5.79 (0.54)                                                 | 13.29 (1.23)                            | 48 1/2" (1232)                                             | 32.42 (3.01)                                      |
| 11036 ◊       | 7.89 (0.73)                                      | 29 7/8" (759)                       | 38" (965)              | 29.60 (2.75)                                   | 15.64 (1.45)                                        | 6.98 (0.65)                                                 | 15.78 (1.47)                            | 42 1/2" (1080)                                             | 37.90 (3.52)                                      |
| 11040 ◊       | 9.14 (0.85)                                      | 29 7/8" (759)                       | 44" (1118)             | 34.64 (3.22)                                   | 18.30 (1.70)                                        | 8.17 (0.76)                                                 | 18.27 (1.70)                            | 36 1/2" (927)                                              | 43.38 (4.03)                                      |
| 11046 ◊       | 10.38 (0.96)                                     | 29 7/8" (759)                       | 50" (1270)             | 39.68 (3.69)                                   | 20.96 (1.95)                                        | 9.36 (0.87)                                                 | 20.76 (1.93)                            | 30 1/2" (775)                                              | 48.86 (4.54)                                      |
| 11050 ◊       | 11.63 (1.08)                                     | 29 7/8" (759)                       | 56" (1422)             | 44.72 (4.15)                                   | 23.62 (2.19)                                        | 10.55 (0.98)                                                | 23.25 (2.16)                            | 24 1/2" (622)                                              | 54.34 (5.05)                                      |
| 11056 ◊       | 12.87 (1.20)                                     | 29 7/8" (759)                       | 62" (1575)             | 49.76 (4.62)                                   | 26.28 (2.44)                                        | 11.74 (1.09)                                                | 25.75 (2.39)                            | 18 1/2" (470)                                              | 59.81 (5.56)                                      |
| 11060 ◊       | 14.12 (1.31)                                     | 29 7/8" (759)                       | 68" (1727)             | 54.80 (5.09)                                   | 28.95 (2.69)                                        | 12.92 (1.20)                                                | 28.24 (2.62)                            | 12 1/2" (318)                                              | 65.29 (6.07)                                      |
| 12016         | 3.20 (0.30)                                      | 32 7/8" (836)                       | 14" (356)              | 10.39 (0.96)                                   | 5.46 (0.51)                                         | 2.46 (0.23)                                                 | 6.40 (0.59)                             | 66 1/2" (1689)                                             | 17.44 (1.62)                                      |
| 12020         | 4.57 (0.42)                                      | 32 7/8" (836)                       | 20" (508)              | 15.92 (1.48)                                   | 8.37 (0.78)                                         | 3.78 (0.35)                                                 | 9.14 (0.85)                             | 60 1/2" (1537)                                             | 23.42 (2.18)                                      |
| 12026 ◊       | 5.94 (0.55)                                      | 32 7/8" (836)                       | 26" (660)              | 21.46 (1.99)                                   | 11.28 (1.05)                                        | 5.09 (0.47)                                                 | 11.88 (1.10)                            | 54 1/2" (1384)                                             | 29.40 (2.73)                                      |
| 12030 ◊       | 7.31 (0.68)                                      | 32 7/8" (836)                       | 32" (813)              | 27.00 (2.51)                                   | 14.19 (1.32)                                        | 6.40 (0.59)                                                 | 14.62 (1.36)                            | 48 1/2" (1232)                                             | 35.38 (3.29)                                      |
| 12036 ◊       | 8.68 (0.81)                                      | 32 7/8" (836)                       | 38" (965)              | 32.54 (3.02)                                   | 17.11 (1.59)                                        | 7.72 (0.72)                                                 | 17.36 (1.61)                            | 42 1/2" (1080)                                             | 41.36 (3.84)                                      |
| 12040 ◊       | 10.05 (0.93)                                     | 32 7/8" (836)                       | 44" (1118)             | 38.08 (3.54)                                   | 20.02 (1.86)                                        | 9.03 (0.84)                                                 | 20.10 (1.87)                            | 36 1/2" (927)                                              | 47.34 (4.40)                                      |
| 12046 ◊       | 11.42 (1.06)                                     | 32 7/8" (836)                       | 50" (1270)             | 43.62 (4.05)                                   | 22.93 (2.13)                                        | 10.34 (0.96)                                                | 22.85 (2.12)                            | 30 1/2" (775)                                              | 53.31 (4.95)                                      |
| 12050 ◊       | 12.79 (1.19)                                     | 32 7/8" (836)                       | 56" (1422)             | 49.16 (4.57)                                   | 25.84 (2.40)                                        | 11.66 (1.08)                                                | 25.59 (2.38)                            | 24 1/2" (622)                                              | 59.29 (5.51)                                      |
| 12056 ◊       | 14.16 (1.32)                                     | 32 7/8" (836)                       | 62" (1575)             | 54.70 (5.08)                                   | 28.75 (2.67)                                        | 12.97 (1.21)                                                | 28.33 (2.63)                            | 18 1/2" (470)                                              | 65.27 (6.06)                                      |
| 12060 ◊       | 15.54 (1.44)                                     | 32 7/8" (836)                       | 68" (1727)             | 60.23 (5.60)                                   | 31.67 (2.94)                                        | 14.28 (1.33)                                                | 31.07 (2.89)                            | 12 1/2" (318)                                              | 71.25 (6.62)                                      |

• Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

• Dimensions in parentheses are in millimeters or square meters.

◊ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

Gliding Active-Stationary-Active 1:1:1 Sash Ratio Window Opening and Area Specification

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Clear Opening in Full Open Position |                        | Total Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Fixed Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Single Active Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) |        | Top of Subfloor to Top of Inside Sill Stop<br>Inches/ (mm) |       | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |  |
|---------------|--------------------------------------------------|--------|-------------------------------------|------------------------|------------------------------------------------|--------|-----------------------------------------------------|--------|-------------------------------------------------------------|--------|-----------------------------------------|--------|------------------------------------------------------------|-------|---------------------------------------------------|--|
|               |                                                  |        | Width<br>Inches/ (mm)               | Height<br>Inches/ (mm) |                                                |        |                                                     |        |                                                             |        |                                         |        |                                                            |       |                                                   |  |
| 4016          | 1.04                                             | (0.10) | 10 5/8" (271)                       | 14" (356)              | 2.89                                           | (0.27) | 0.96                                                | (0.09) | 0.96                                                        | (0.09) | 2.07                                    | (0.19) | 66 1/2" (1689)                                             | 5.77  | (0.54)                                            |  |
| 4020          | 1.48                                             | (0.14) | 10 5/8" (271)                       | 20" (508)              | 4.42                                           | (0.41) | 1.48                                                | (0.14) | 1.47                                                        | (0.14) | 2.96                                    | (0.28) | 60 1/2" (1537)                                             | 7.75  | (0.72)                                            |  |
| 4026          | 1.93                                             | (0.18) | 10 5/8" (271)                       | 26" (660)              | 5.96                                           | (0.55) | 1.99                                                | (0.19) | 1.99                                                        | (0.18) | 3.85                                    | (0.36) | 54 1/2" (1384)                                             | 9.73  | (0.90)                                            |  |
| 4030          | 2.37                                             | (0.22) | 10 5/8" (271)                       | 32" (813)              | 7.50                                           | (0.70) | 2.51                                                | (0.23) | 2.50                                                        | (0.23) | 4.74                                    | (0.44) | 48 1/2" (1232)                                             | 11.71 | (1.09)                                            |  |
| 4036          | 2.82                                             | (0.26) | 10 5/8" (271)                       | 38" (965)              | 9.04                                           | (0.84) | 3.02                                                | (0.28) | 3.01                                                        | (0.28) | 5.63                                    | (0.52) | 42 1/2" (1080)                                             | 13.69 | (1.27)                                            |  |
| 4040          | 3.26                                             | (0.30) | 10 5/8" (271)                       | 44" (1118)             | 10.58                                          | (0.98) | 3.53                                                | (0.33) | 3.52                                                        | (0.33) | 6.52                                    | (0.61) | 36 1/2" (927)                                              | 15.67 | (1.46)                                            |  |
| 4046          | 3.70                                             | (0.34) | 10 5/8" (271)                       | 50" (1270)             | 12.12                                          | (1.13) | 4.05                                                | (0.38) | 4.03                                                        | (0.37) | 7.41                                    | (0.69) | 30 1/2" (775)                                              | 17.65 | (1.64)                                            |  |
| 4050          | 4.15                                             | (0.39) | 10 5/8" (271)                       | 56" (1422)             | 13.66                                          | (1.27) | 4.56                                                | (0.42) | 4.55                                                        | (0.42) | 8.30                                    | (0.77) | 24 1/2" (622)                                              | 19.63 | (1.82)                                            |  |
| 4056          | 4.59                                             | (0.43) | 10 5/8" (271)                       | 62" (1575)             | 15.20                                          | (1.41) | 5.08                                                | (0.47) | 5.06                                                        | (0.47) | 9.19                                    | (0.85) | 18 1/2" (470)                                              | 21.61 | (2.01)                                            |  |
| 4060          | 5.04                                             | (0.47) | 10 5/8" (271)                       | 68" (1727)             | 16.73                                          | (1.55) | 5.59                                                | (0.52) | 5.57                                                        | (0.52) | 10.08                                   | (0.94) | 12 1/2" (318)                                              | 23.59 | (2.19)                                            |  |
| 5016          | 1.43                                             | (0.13) | 14 5/8" (373)                       | 14" (356)              | 3.82                                           | (0.36) | 1.28                                                | (0.12) | 1.27                                                        | (0.12) | 2.85                                    | (0.26) | 66 1/2" (1689)                                             | 7.23  | (0.67)                                            |  |
| 5020          | 2.04                                             | (0.19) | 14 5/8" (373)                       | 20" (508)              | 5.86                                           | (0.54) | 1.96                                                | (0.18) | 1.95                                                        | (0.18) | 4.07                                    | (0.38) | 60 1/2" (1537)                                             | 9.71  | (0.90)                                            |  |
| 5026          | 2.65                                             | (0.25) | 14 5/8" (373)                       | 26" (660)              | 7.90                                           | (0.73) | 2.64                                                | (0.25) | 2.63                                                        | (0.24) | 5.30                                    | (0.49) | 54 1/2" (1384)                                             | 12.19 | (1.13)                                            |  |
| 5030          | 3.26                                             | (0.30) | 14 5/8" (373)                       | 32" (813)              | 9.94                                           | (0.92) | 3.32                                                | (0.31) | 3.31                                                        | (0.31) | 6.52                                    | (0.61) | 48 1/2" (1232)                                             | 14.67 | (1.36)                                            |  |
| 5036          | 3.87                                             | (0.36) | 14 5/8" (373)                       | 38" (965)              | 11.98                                          | (1.11) | 4.00                                                | (0.37) | 3.99                                                        | (0.37) | 7.74                                    | (0.72) | 42 1/2" (1080)                                             | 17.15 | (1.59)                                            |  |
| 5040          | 4.48                                             | (0.42) | 14 5/8" (373)                       | 44" (1118)             | 14.02                                          | (1.30) | 4.68                                                | (0.43) | 4.67                                                        | (0.43) | 8.96                                    | (0.83) | 36 1/2" (927)                                              | 19.63 | (1.82)                                            |  |
| 5046          | 5.09                                             | (0.47) | 14 5/8" (373)                       | 50" (1270)             | 16.06                                          | (1.49) | 5.36                                                | (0.50) | 5.35                                                        | (0.50) | 10.19                                   | (0.95) | 30 1/2" (775)                                              | 22.11 | (2.05)                                            |  |
| 5050          | 5.70                                             | (0.53) | 14 5/8" (373)                       | 56" (1422)             | 18.09                                          | (1.68) | 6.04                                                | (0.56) | 6.03                                                        | (0.56) | 11.41                                   | (1.06) | 24 1/2" (622)                                              | 24.59 | (2.28)                                            |  |
| 5056          | 6.32                                             | (0.59) | 14 5/8" (373)                       | 62" (1575)             | 20.13                                          | (1.87) | 6.72                                                | (0.62) | 6.71                                                        | (0.62) | 12.63                                   | (1.17) | 18 1/2" (470)                                              | 27.06 | (2.51)                                            |  |
| 5060          | 6.93                                             | (0.64) | 14 5/8" (373)                       | 68" (1727)             | 22.17                                          | (2.06) | 7.40                                                | (0.69) | 7.38                                                        | (0.69) | 13.85                                   | (1.29) | 12 1/2" (318)                                              | 29.54 | (2.74)                                            |  |
| 6016          | 1.82                                             | (0.17) | 18 5/8" (474)                       | 14" (356)              | 4.76                                           | (0.44) | 1.59                                                | (0.15) | 1.59                                                        | (0.15) | 3.63                                    | (0.34) | 66 1/2" (1689)                                             | 8.69  | (0.81)                                            |  |
| 6020          | 2.59                                             | (0.24) | 18 5/8" (474)                       | 20" (508)              | 7.30                                           | (0.68) | 2.44                                                | (0.23) | 2.43                                                        | (0.23) | 5.19                                    | (0.48) | 60 1/2" (1537)                                             | 11.67 | (1.08)                                            |  |
| 6026          | 3.37                                             | (0.31) | 18 5/8" (474)                       | 26" (660)              | 9.84                                           | (0.91) | 3.28                                                | (0.31) | 3.28                                                        | (0.30) | 6.74                                    | (0.63) | 54 1/2" (1384)                                             | 14.65 | (1.36)                                            |  |
| 6030          | 4.15                                             | (0.39) | 18 5/8" (474)                       | 32" (813)              | 12.38                                          | (1.15) | 4.13                                                | (0.38) | 4.12                                                        | (0.38) | 8.30                                    | (0.77) | 48 1/2" (1232)                                             | 17.63 | (1.64)                                            |  |
| 6036          | 4.93                                             | (0.46) | 18 5/8" (474)                       | 38" (965)              | 14.92                                          | (1.39) | 4.98                                                | (0.46) | 4.97                                                        | (0.46) | 9.85                                    | (0.92) | 42 1/2" (1080)                                             | 20.61 | (1.91)                                            |  |
| 6040          | 5.70                                             | (0.53) | 18 5/8" (474)                       | 44" (1118)             | 17.45                                          | (1.62) | 5.83                                                | (0.54) | 5.81                                                        | (0.54) | 11.41                                   | (1.06) | 36 1/2" (927)                                              | 23.59 | (2.19)                                            |  |
| 6046          | 6.48                                             | (0.60) | 18 5/8" (474)                       | 50" (1270)             | 19.99                                          | (1.86) | 6.67                                                | (0.62) | 6.66                                                        | (0.62) | 12.96                                   | (1.20) | 30 1/2" (775)                                              | 26.56 | (2.47)                                            |  |
| 6050          | 7.26                                             | (0.67) | 18 5/8" (474)                       | 56" (1422)             | 22.53                                          | (2.09) | 7.52                                                | (0.70) | 7.51                                                        | (0.70) | 14.52                                   | (1.35) | 24 1/2" (622)                                              | 29.54 | (2.74)                                            |  |
| 6056          | 8.04                                             | (0.75) | 18 5/8" (474)                       | 62" (1575)             | 25.07                                          | (2.33) | 8.37                                                | (0.78) | 8.35                                                        | (0.78) | 16.08                                   | (1.49) | 18 1/2" (470)                                              | 32.52 | (3.02)                                            |  |
| 6060          | 8.82                                             | (0.82) | 18 5/8" (474)                       | 68" (1727)             | 27.61                                          | (2.56) | 9.22                                                | (0.86) | 9.20                                                        | (0.85) | 17.63                                   | (1.64) | 12 1/2" (318)                                              | 35.50 | (3.30)                                            |  |
| 7016          | 2.20                                             | (0.20) | 22 5/8" (576)                       | 14" (356)              | 5.70                                           | (0.53) | 1.90                                                | (0.18) | 1.90                                                        | (0.18) | 4.41                                    | (0.41) | 66 1/2" (1689)                                             | 10.15 | (0.94)                                            |  |
| 7020          | 3.15                                             | (0.29) | 22 5/8" (576)                       | 20" (508)              | 8.74                                           | (0.81) | 2.92                                                | (0.27) | 2.91                                                        | (0.27) | 6.30                                    | (0.59) | 60 1/2" (1537)                                             | 13.63 | (1.27)                                            |  |
| 7026          | 4.09                                             | (0.38) | 22 5/8" (576)                       | 26" (660)              | 11.78                                          | (1.09) | 3.93                                                | (0.37) | 3.92                                                        | (0.36) | 8.19                                    | (0.76) | 54 1/2" (1384)                                             | 17.11 | (1.59)                                            |  |
| 7030          | 5.04                                             | (0.47) | 22 5/8" (576)                       | 32" (813)              | 14.81                                          | (1.38) | 4.94                                                | (0.46) | 4.94                                                        | (0.46) | 10.08                                   | (0.94) | 48 1/2" (1232)                                             | 20.59 | (1.91)                                            |  |
| 7036 ♦        | 5.98                                             | (0.56) | 22 5/8" (576)                       | 38" (965)              | 17.85                                          | (1.66) | 5.96                                                | (0.55) | 5.95                                                        | (0.55) | 11.96                                   | (1.11) | 42 1/2" (1080)                                             | 24.06 | (2.24)                                            |  |
| 7040 ♦        | 6.93                                             | (0.64) | 22 5/8" (576)                       | 44" (1118)             | 20.89                                          | (1.94) | 6.97                                                | (0.65) | 6.96                                                        | (0.65) | 13.85                                   | (1.29) | 36 1/2" (927)                                              | 27.54 | (2.56)                                            |  |
| 7046 ♦        | 7.87                                             | (0.73) | 22 5/8" (576)                       | 50" (1270)             | 23.93                                          | (2.22) | 7.99                                                | (0.74) | 7.97                                                        | (0.74) | 15.74                                   | (1.46) | 30 1/2" (775)                                              | 31.02 | (2.88)                                            |  |
| 7050 ♦        | 8.82                                             | (0.82) | 22 5/8" (576)                       | 56" (1422)             | 26.97                                          | (2.51) | 9.00                                                | (0.84) | 8.98                                                        | (0.83) | 17.63                                   | (1.64) | 24 1/2" (622)                                              | 34.50 | (3.21)                                            |  |
| 7056 ♦        | 9.76                                             | (0.91) | 22 5/8" (576)                       | 62" (1575)             | 30.01                                          | (2.79) | 10.01                                               | (0.93) | 10.00                                                       | (0.93) | 19.52                                   | (1.81) | 18 1/2" (470)                                              | 37.98 | (3.53)                                            |  |
| 7060 ♦        | 10.70                                            | (0.99) | 22 5/8" (576)                       | 68" (1727)             | 33.05                                          | (3.07) | 11.03                                               | (1.02) | 11.01                                                       | (1.02) | 21.41                                   | (1.99) | 12 1/2" (318)                                              | 41.46 | (3.85)                                            |  |
| 7616          | 2.40                                             | (0.22) | 24 5/8" (627)                       | 14" (356)              | 6.17                                           | (0.57) | 2.06                                                | (0.19) | 2.05                                                        | (0.19) | 4.80                                    | (0.45) | 66 1/2" (1689)                                             | 10.88 | (1.01)                                            |  |
| 7620          | 3.43                                             | (0.32) | 24 5/8" (627)                       | 20" (508)              | 9.46                                           | (0.88) | 3.15                                                | (0.29) | 3.15                                                        | (0.29) | 6.85                                    | (0.64) | 60 1/2" (1537)                                             | 14.61 | (1.36)                                            |  |
| 7626          | 4.45                                             | (0.41) | 24 5/8" (627)                       | 26" (660)              | 12.74                                          | (1.18) | 4.25                                                | (0.40) | 4.25                                                        | (0.39) | 8.91                                    | (0.83) | 54 1/2" (1384)                                             | 18.34 | (1.70)                                            |  |
| 7630          | 5.48                                             | (0.51) | 24 5/8" (627)                       | 32" (813)              | 16.03                                          | (1.49) | 5.35                                                | (0.50) | 5.34                                                        | (0.50) | 10.96                                   | (1.02) | 48 1/2" (1232)                                             | 22.06 | (2.05)                                            |  |
| 7636 ♦        | 6.51                                             | (0.60) | 24 5/8" (627)                       | 38" (965)              | 19.32                                          | (1.80) | 6.45                                                | (0.60) | 6.44                                                        | (0.60) | 13.02                                   | (1.21) | 42 1/2" (1080)                                             | 25.79 | (2.40)                                            |  |
| 7640 ♦        | 7.54                                             | (0.70) | 24 5/8" (627)                       | 44" (1118)             | 22.61                                          | (2.10) | 7.54                                                | (0.70) | 7.53                                                        | (0.70) | 15.08                                   | (1.40) | 36 1/2" (927)                                              | 29.52 | (2.74)                                            |  |
| 7646 ♦        | 8.57                                             | (0.80) | 24 5/8" (627)                       | 50" (1270)             | 25.90                                          | (2.41) | 8.64                                                | (0.80) | 8.63                                                        | (0.80) | 17.13                                   | (1.59) | 30 1/2" (775)                                              | 33.25 | (3.09)                                            |  |
| 7650 ♦        | 9.59                                             | (0.89) | 24 5/8" (627)                       | 56" (1422)             | 29.19                                          | (2.71) | 9.74                                                | (0.90) | 9.72                                                        | (0.90) | 19.19                                   | (1.78) | 24 1/2" (622)                                              | 36.98 | (3.44)                                            |  |
| 7656 ♦        | 10.62                                            | (0.99) | 24 5/8" (627)                       | 62" (1575)             | 32.48                                          | (3.02) | 10.84                                               | (1.01) | 10.82                                                       | (1.01) | 21.24                                   | (1.97) | 18 1/2" (470)                                              | 40.71 | (3.78)                                            |  |
| 7660 ♦        | 11.65                                            | (1.08) | 24 5/8" (627)                       | 68" (1727)             | 35.77                                          | (3.32) | 11.93                                               | (1.11) | 11.92                                                       | (1.11) | 23.30                                   | (2.16) | 12 1/2" (318)                                              | 44.44 | (4.13)                                            |  |
| 8016          | 2.59                                             | (0.24) | 26 5/8" (677)                       | 14" (356)              | 6.64                                           | (0.62) | 2.21                                                | (0.21) | 2.21                                                        | (0.21) | 5.19                                    | (0.48) | 66 1/2" (1689)                                             | 11.61 | (1.08)                                            |  |
| 8020          | 3.70                                             | (0.34) | 26 5/8" (677)                       | 20" (508)              | 10.17                                          | (0.95) | 3.39                                                | (0.32) | 3.39                                                        | (0.31) | 7.41                                    | (0.69) | 60 1/2" (1537)                                             | 15.59 | (1.45)                                            |  |
| 8026          | 4.82                                             | (0.45) | 26 5/8" (677)                       | 26" (660)              | 13.71                                          | (1.27) | 4.58                                                | (0.43) | 4.57                                                        | (0.42) | 9.63                                    | (0.89) | 54 1/2" (1384)                                             | 19.56 | (1.82)                                            |  |
| 8030 ♦        | 5.93                                             | (0.55) | 26 5/8" (677)                       | 32" (813)              | 17.25                                          | (1.60) | 5.76                                                | (0.53) | 5.75                                                        | (0.53) | 11.85                                   | (1.10) | 48 1/2" (1232)                                             | 23.54 | (2.19)                                            |  |
| 8036 ♦        | 7.04                                             | (0.65) | 26 5/8" (677)                       | 38" (965)              | 20.79                                          | (1.93) | 6.94                                                | (0.64) | 6.93                                                        | (0.64) | 14.08                                   | (1.31) | 42 1/2" (1080)                                             | 27.52 | (2.56)                                            |  |
| 8040 ♦        | 8.15                                             | (0.76) | 26 5/8" (677)                       | 44" (1118)             | 24.33                                          | (2.26) | 8.12                                                | (0.75) | 8.11                                                        | (0.75) | 16.30                                   | (1.51) | 36 1/2" (927)                                              | 31.50 | (2.93)                                            |  |
| 8046 ♦        | 9.26                                             | (0.86) | 26 5/8" (677)                       | 50" (1270)             | 27.87                                          | (2.59) | 9.30                                                | (0.86) | 9.28                                                        | (0.86) | 18.52                                   | (1.72) | 30 1/2" (775)                                              | 35.48 | (3.30)                                            |  |
| 8050 ♦        | 10.37                                            | (0.96) | 26 5/8" (677)                       | 56" (1422)             | 31.41                                          | (2.92) | 10.48                                               | (0.97) | 10.46                                                       | (0.97) | 20.74                                   | (1.93) | 24 1/2" (622)                                              | 39.46 | (3.67)                                            |  |

\* Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

♦ Meets or exceeds clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610).

continued on next page

## Gliding Active-Stationary-Active 1:1:1 Sash Ratio Window Opening and Area Specification (continued)

| Window Number | Clear Opening Area<br>Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                       | Total Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Fixed Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Single Active Sash Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Vent Area<br>Sq. Ft./ (m <sup>2</sup> ) | Top of Subfloor to Top of Inside Sill Stop<br>Inches/(mm) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|--------------------------------------------------|-------------------------------------|-----------------------|------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------|-----------------------------------------|-----------------------------------------------------------|---------------------------------------------------|
|               |                                                  | Width<br>Inches/(mm)                | Height<br>Inches/(mm) |                                                |                                                     |                                                             |                                         |                                                           |                                                   |
| 8056 ♦        | 11.48 (1.07)                                     | 26 5/8" (677)                       | 62" (1575)            | 34.95 (3.25)                                   | 11.66 (1.08)                                        | 11.64 (1.08)                                                | 22.97 (2.13)                            | 18 1/2" (470)                                             | 43.44 (4.04)                                      |
| 8060 ♦        | 12.59 (1.17)                                     | 26 5/8" (677)                       | 68" (1727)            | 38.48 (3.58)                                   | 12.84 (1.19)                                        | 12.82 (1.19)                                                | 25.19 (2.34)                            | 12 1/2" (318)                                             | 47.42 (4.41)                                      |
| 8616          | 2.79 (0.26)                                      | 28 5/8" (728)                       | 14" (356)             | 7.10 (0.66)                                    | 2.37 (0.22)                                         | 2.37 (0.22)                                                 | 5.57 (0.52)                             | 66 1/2" (1689)                                            | 12.34 (1.15)                                      |
| 8620          | 3.98 (0.37)                                      | 28 5/8" (728)                       | 20" (508)             | 10.89 (1.01)                                   | 3.63 (0.34)                                         | 3.63 (0.34)                                                 | 7.96 (0.74)                             | 60 1/2" (1537)                                            | 16.56 (1.54)                                      |
| 8626          | 5.18 (0.48)                                      | 28 5/8" (728)                       | 26" (660)             | 14.68 (1.36)                                   | 4.90 (0.46)                                         | 4.89 (0.45)                                                 | 10.35 (0.96)                            | 54 1/2" (1384)                                            | 20.79 (1.93)                                      |
| 8630 ♦        | 6.37 (0.59)                                      | 28 5/8" (728)                       | 32" (813)             | 18.47 (1.72)                                   | 6.16 (0.57)                                         | 6.15 (0.57)                                                 | 12.74 (1.18)                            | 48 1/2" (1232)                                            | 25.02 (2.32)                                      |
| 8636 ♦        | 7.57 (0.70)                                      | 28 5/8" (728)                       | 38" (965)             | 22.26 (2.07)                                   | 7.43 (0.69)                                         | 7.42 (0.69)                                                 | 15.13 (1.41)                            | 42 1/2" (1080)                                            | 29.25 (2.72)                                      |
| 8640 ♦        | 8.76 (0.81)                                      | 28 5/8" (728)                       | 44" (1118)            | 26.05 (2.42)                                   | 8.69 (0.81)                                         | 8.68 (0.81)                                                 | 17.52 (1.63)                            | 36 1/2" (927)                                             | 33.48 (3.11)                                      |
| 8646 ♦        | 9.95 (0.92)                                      | 28 5/8" (728)                       | 50" (1270)            | 29.84 (2.77)                                   | 9.95 (0.92)                                         | 9.94 (0.92)                                                 | 19.91 (1.85)                            | 30 1/2" (775)                                             | 37.71 (3.50)                                      |
| 8650 ♦        | 11.15 (1.04)                                     | 28 5/8" (728)                       | 56" (1422)            | 33.63 (3.12)                                   | 11.22 (1.04)                                        | 11.20 (1.04)                                                | 22.30 (2.07)                            | 24 1/2" (622)                                             | 41.94 (3.90)                                      |
| 8656 ♦        | 12.34 (1.15)                                     | 28 5/8" (728)                       | 62" (1575)            | 37.41 (3.48)                                   | 12.48 (1.16)                                        | 12.47 (1.16)                                                | 24.69 (2.29)                            | 18 1/2" (470)                                             | 46.17 (4.29)                                      |
| 8660 ♦        | 13.54 (1.26)                                     | 28 5/8" (728)                       | 68" (1727)            | 41.20 (3.83)                                   | 13.75 (1.28)                                        | 13.73 (1.28)                                                | 27.08 (2.52)                            | 12 1/2" (318)                                             | 50.40 (4.68)                                      |

♦ Top of Subfloor to Top of Inside Sill Stop is calculated based upon a structural header height of 6'-10 1/2" (2096).

♦ Dimensions in parentheses are in millimeters or square meters.

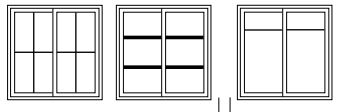
♦ Meets or exceeds clear opening area of 5.7 sq.ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

## Grille Patterns

|         | Prairie A | Colonial | Modified Colonial | Tall Fractional | Short Fractional |
|---------|-----------|----------|-------------------|-----------------|------------------|
| Gliding |           |          |                   |                 |                  |

**Number of lights and overall pattern varies with window size. Patterns**

**may not be available in all configurations or sizes.** Specified equal light and custom patterns are also available. For specified equal light, specify number of same-size rectangles across or down. For more grille options, see page 14 or visit [andersenwindows.com/grilles](http://andersenwindows.com/grilles).



Specified Equal Light Examples Custom Example

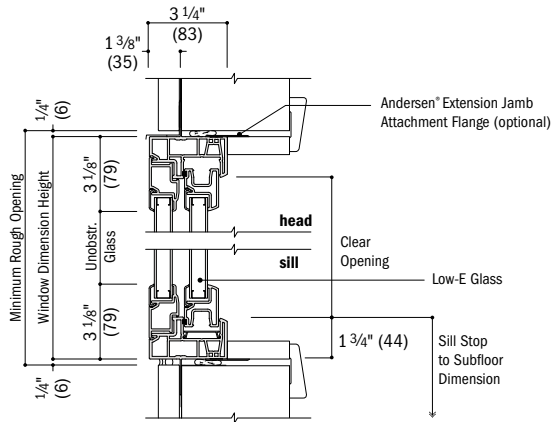


# GLIDING WINDOWS

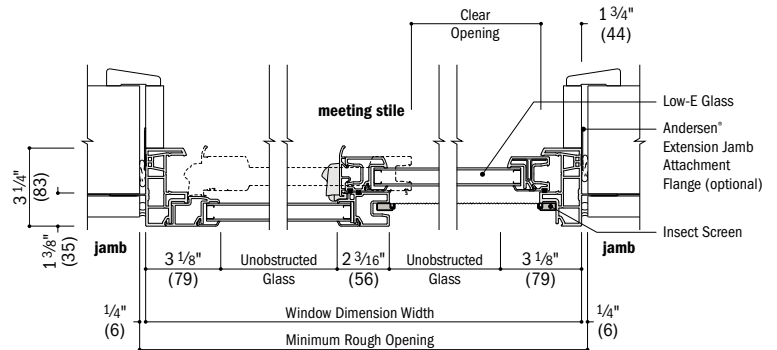
## Gliding Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

### 1 3/8" Flange Setback

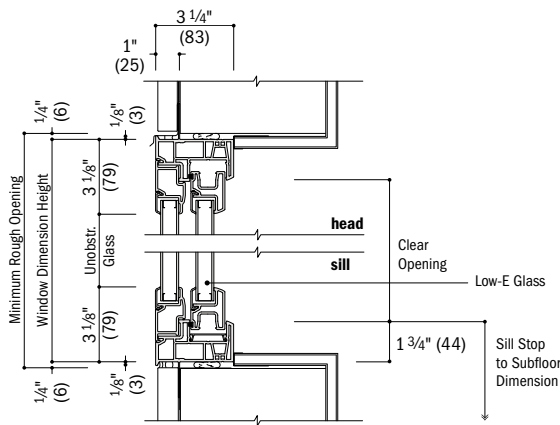


Vertical Section

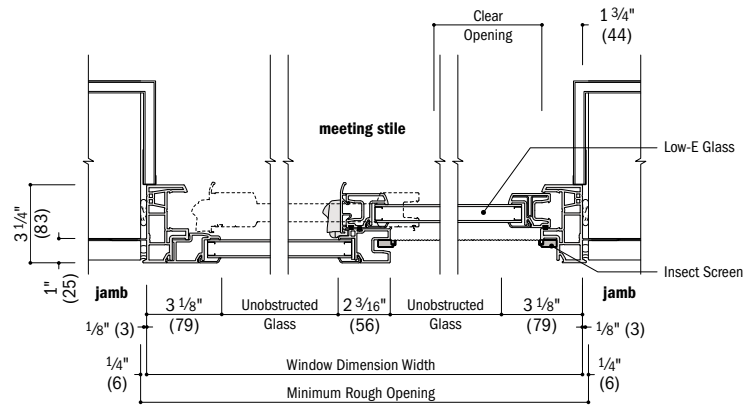


Horizontal Section

### 1" Flange Setback With Stucco Key

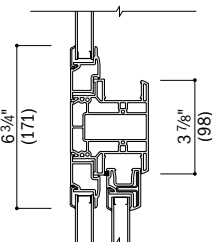


Vertical Section  
Stucco Exterior



Horizontal Section  
Stucco Exterior

### Integral



Vertical Section  
Picture Over Gliding

See pages 88-93 for joining details.

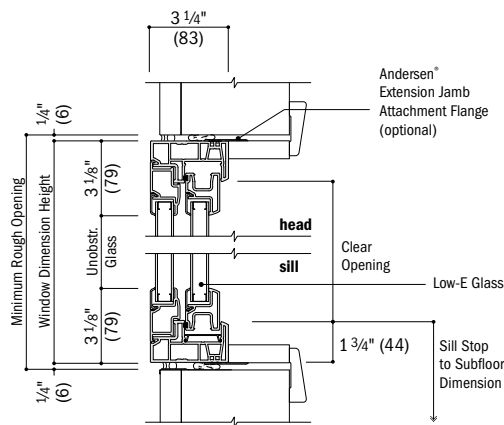
- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.



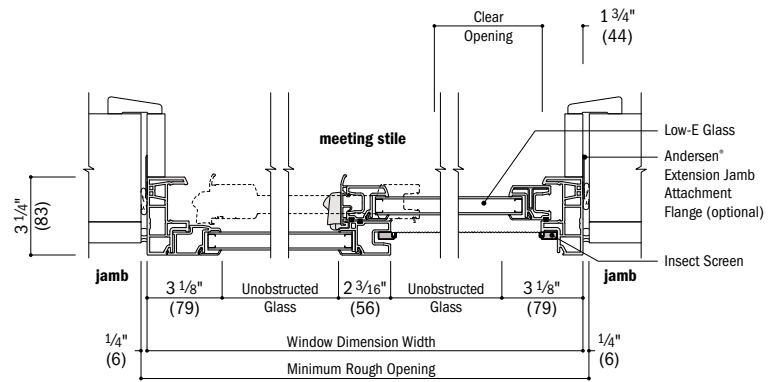
## Gliding Window Details - Replacement

Scale 1 1/2" (38) = 1'-0" (305) - 1:8

No Flange

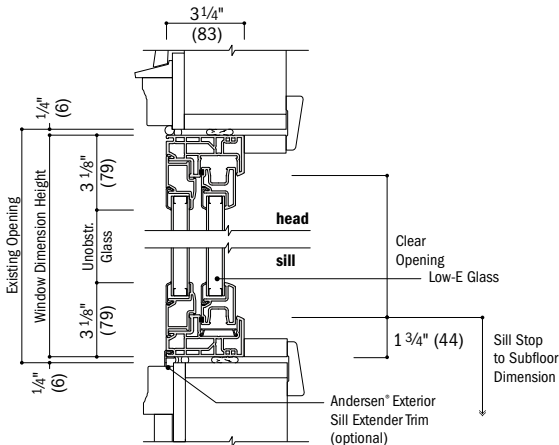


**Vertical Section**  
Existing Framed Opening

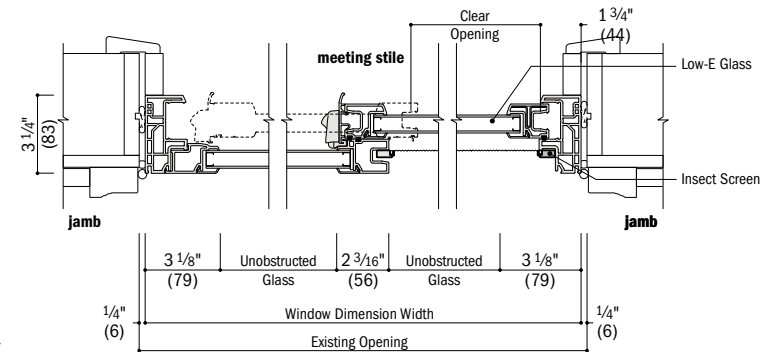


**Horizontal Section**  
Existing Framed Opening

Insert

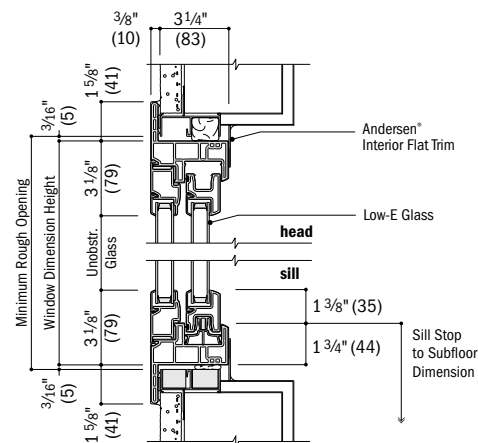


**Vertical Section**  
Existing Window Opening

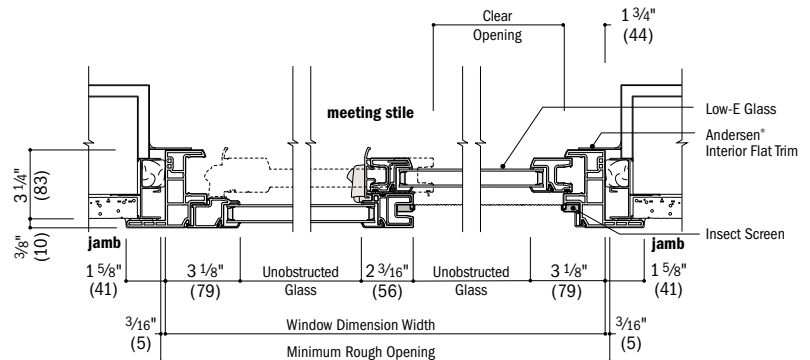


**Horizontal Section**  
Existing Window Opening

Flush Fin\*



**Vertical Section**  
Existing Aluminum Frame Window Opening



**Horizontal Section**  
Existing Aluminum Frame Window Opening

Integral detail shown on previous page. Installation accessories are available for insert and flush fin frames; see page 120. **See pages 88-93 for joining details.**

- \*Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- \*Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.
- \*Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- \*Dimensions in parentheses are in millimeters.
- \*Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# PICTURE, TRANSOM & SPECIALTY WINDOWS

**Table of Picture and Transom Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

| Window Dimension             | 11 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" |
|------------------------------|---------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
|                              | (292)   | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    |
| <b>Minimum Rough Opening</b> | 1'-0"   | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     |
|                              | (305)   | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    |
| Unobstructed Glass           | 5 1/4"  | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    | 59 1/4"   |
|                              | (133)   | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     | (1200)    | (1353)     | (1505)    |

| CUSTOM WIDTHS – 11 1/2" to 95 1/2"  |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| CUSTOM HEIGHTS – 11 1/2" to 95 1/2" |      |      |      |      |      |      |      |      |      |      |
|                                     | 1010 | 1610 | 2010 | 2610 | 3010 | 3610 | 4010 | 4610 | 5010 | 5610 |
| 11 1/2"                             |      |      |      |      |      |      |      |      |      |      |
| 1'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |
| 1'-11 1/2"                          |      |      |      |      |      |      |      |      |      |      |
| 2'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |
| 2'-11 1/2"                          |      |      |      |      |      |      |      |      |      |      |
| 3'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |
| 3'-11 1/2"                          |      |      |      |      |      |      |      |      |      |      |
| 4'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |
| 4'-11 1/2"                          |      |      |      |      |      |      |      |      |      |      |
| 5'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |
| 5'-11 1/2"                          |      |      |      |      |      |      |      |      |      |      |
| 6'-5 1/2"                           |      |      |      |      |      |      |      |      |      |      |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

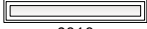
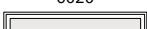
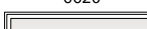
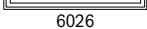
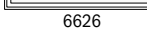
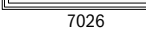
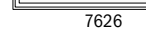
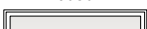
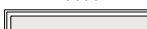
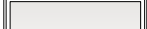
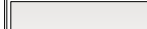
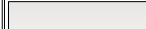
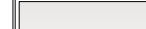
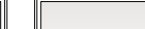
\* Dimensions in parentheses are in millimeters.

|                      |                     |                      |                     |                      |
|----------------------|---------------------|----------------------|---------------------|----------------------|
| 5'-11 1/2"<br>(1816) | 6'-5 1/2"<br>(1969) | 6'-11 1/2"<br>(2121) | 7'-5 1/2"<br>(2273) | 7'-11 1/2"<br>(2426) |
| 6'-0"<br>(1829)      | 6'-6"<br>(1981)     | 7'-0"<br>(2134)      | 7'-6"<br>(2286)     | 8'-0"<br>(2438)      |
| 65 1/4"<br>(1657)    | 71 1/4"<br>(1810)   | 77 1/4"<br>(1962)    | 83 1/4"<br>(2115)   | 89 1/4"<br>(2267)    |



Custom-size windows are available in 1/8" (3) increments. See page 98 for custom sizes and specifications.

Grille patterns shown on page 79.  
Details shown on pages 83-86.

|                                                                                             |                                                                                             |                                                                                             |                                                                                             |                                                                                             |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| <br>6010   | <br>6610   | <br>7010   | <br>7610   | <br>8010   |
| <br>6016   | <br>6616   | <br>7016   | <br>7616   | <br>8016   |
| <br>6020   | <br>6620   | <br>7020   | <br>7620   | <br>8020   |
| <br>6026   | <br>6626   | <br>7026   | <br>7626   | <br>8026   |
| <br>6030   | <br>6630   | <br>7030   | <br>7630   | <br>8030   |
| <br>6036   | <br>6636   | <br>7036   | <br>7636   | <br>8036   |
| <br>6040   | <br>6640   | <br>7040   | <br>7640   | <br>8040   |
| <br>6046   | <br>6646   | <br>7046   | <br>7646   | <br>8046   |
| <br>6050   | <br>6650   | <br>7050   | <br>7650   | <br>8050   |
| <br>6056 | <br>6656 | <br>7056 | <br>7656 | <br>8056 |
| <br>6060 | <br>6660 | <br>7060 | <br>7660 | <br>8060 |
| <br>6066 |                                                                                             |                                                                                             |                                                                                             |                                                                                             |

continued on next page

- Window Dimension always refers to outside frame-to-frame dimension.
- Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- Dimensions in parentheses are in millimeters.

# PICTURE, TRANSOM & SPECIALTY WINDOWS

**Table of Picture and Transom Window Sizes** *(continued)*

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

| Window Dimension             | 11 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" |
|------------------------------|---------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
|                              | (292)   | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    |
| <b>Minimum Rough Opening</b> | 1'-0"   | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     |
|                              | (305)   | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    |
| Unobstructed Glass           | 5 1/4"  | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    | 59 1/4"   |
|                              | (133)   | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     | (1200)    | (1353)     | (1505)    |

## CUSTOM WIDTHS – 11 1/2" to 95 1/2"

| Window Dimension             | 11 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" |
|------------------------------|---------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
|                              | (292)   | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    |
| <b>Minimum Rough Opening</b> | 1'-0"   | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     |
|                              | (305)   | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    |
| Unobstructed Glass           | 5 1/4"  | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    | 59 1/4"   |
|                              | (133)   | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     | (1200)    | (1353)     | (1505)    |

| Window Dimension             | 11 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" |
|------------------------------|---------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
|                              | (292)   | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    |
| <b>Minimum Rough Opening</b> | 1'-0"   | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     |
|                              | (305)   | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    |
| Unobstructed Glass           | 5 1/4"  | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    | 59 1/4"   |
|                              | (133)   | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     | (1200)    | (1353)     | (1505)    |

| Window Dimension             | 11 1/2" | 1'-5 1/2" | 1'-11 1/2" | 2'-5 1/2" | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" |
|------------------------------|---------|-----------|------------|-----------|------------|-----------|------------|-----------|------------|-----------|
|                              | (292)   | (445)     | (597)      | (749)     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    |
| <b>Minimum Rough Opening</b> | 1'-0"   | 1'-6"     | 2'-0"      | 2'-6"     | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     |
|                              | (305)   | (457)     | (610)      | (762)     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    |
| Unobstructed Glass           | 5 1/4"  | 11 1/4"   | 17 1/4"    | 23 1/4"   | 29 1/4"    | 35 1/4"   | 41 1/4"    | 47 1/4"   | 53 1/4"    | 59 1/4"   |
|                              | (133)   | (286)     | (438)      | (591)     | (743)      | (895)     | (1048)     | (1200)    | (1353)     | (1505)    |

• Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

## Picture and Transom Window Area Specifications

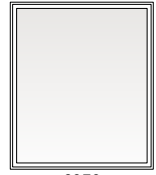
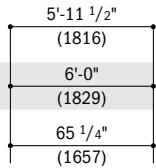
| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 1010          | 0.19 (0.02)                              | 0.92 (0.09)                                       |
| 1016          | 0.41 (0.04)                              | 1.40 (0.13)                                       |
| 1020          | 0.63 (0.06)                              | 1.88 (0.17)                                       |
| 1026          | 0.85 (0.08)                              | 2.36 (0.22)                                       |
| 1030          | 1.07 (0.10)                              | 2.84 (0.26)                                       |
| 1036          | 1.29 (0.12)                              | 3.31 (0.31)                                       |
| 1040          | 1.50 (0.14)                              | 3.79 (0.35)                                       |
| 1046          | 1.72 (0.16)                              | 4.27 (0.40)                                       |
| 1050          | 1.94 (0.18)                              | 4.75 (0.44)                                       |
| 1056          | 2.16 (0.20)                              | 5.23 (0.49)                                       |
| 1060          | 2.38 (0.22)                              | 5.71 (0.53)                                       |
| 1066          | 2.60 (0.24)                              | 6.19 (0.57)                                       |
| 1070          | 2.82 (0.26)                              | 6.67 (0.62)                                       |
| 1076          | 3.04 (0.28)                              | 7.15 (0.66)                                       |
| 1080          | 3.25 (0.30)                              | 7.63 (0.71)                                       |
| 1610          | 0.41 (0.04)                              | 1.40 (0.13)                                       |
| 1616          | 0.88 (0.08)                              | 2.13 (0.20)                                       |
| 1620          | 1.35 (0.13)                              | 2.86 (0.27)                                       |
| 1626          | 1.82 (0.17)                              | 3.59 (0.33)                                       |
| 1630          | 2.29 (0.21)                              | 4.31 (0.40)                                       |
| 1636          | 2.75 (0.26)                              | 5.04 (0.47)                                       |
| 1640          | 3.22 (0.30)                              | 5.77 (0.54)                                       |
| 1646          | 3.69 (0.34)                              | 6.50 (0.60)                                       |

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 1650          | 4.16 (0.39)                              | 7.23 (0.67)                                       |
| 1656          | 4.63 (0.43)                              | 7.96 (0.74)                                       |
| 1660          | 5.10 (0.47)                              | 8.69 (0.81)                                       |
| 1666          | 5.57 (0.52)                              | 9.42 (0.87)                                       |
| 1670          | 6.04 (0.56)                              | 10.15 (0.94)                                      |
| 1676          | 6.50 (0.60)                              | 10.88 (1.01)                                      |
| 1680          | 6.97 (0.65)                              | 11.61 (1.08)                                      |
| 2010          | 0.63 (0.06)                              | 1.88 (0.17)                                       |
| 2016          | 1.35 (0.13)                              | 2.86 (0.27)                                       |
| 2020          | 2.07 (0.19)                              | 3.84 (0.36)                                       |
| 2026          | 2.79 (0.26)                              | 4.81 (0.45)                                       |
| 2030          | 3.50 (0.33)                              | 5.79 (0.54)                                       |
| 2036          | 4.22 (0.39)                              | 6.77 (0.63)                                       |
| 2040          | 4.94 (0.46)                              | 7.75 (0.72)                                       |
| 2046          | 5.66 (0.53)                              | 8.73 (0.81)                                       |
| 2050          | 6.38 (0.59)                              | 9.71 (0.90)                                       |
| 2056          | 7.10 (0.66)                              | 10.69 (0.99)                                      |
| 2060          | 7.82 (0.73)                              | 11.67 (1.08)                                      |
| 2066          | 8.54 (0.79)                              | 12.65 (1.17)                                      |
| 2070          | 9.25 (0.86)                              | 13.63 (1.27)                                      |
| 2076          | 9.97 (0.93)                              | 14.61 (1.36)                                      |
| 2080          | 10.69 (0.99)                             | 15.59 (1.45)                                      |
| 2610          | 0.85 (0.08)                              | 2.36 (0.22)                                       |

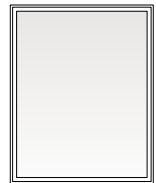
| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 2616          | 1.82 (0.17)                              | 3.59 (0.33)                                       |
| 2620          | 2.79 (0.26)                              | 4.81 (0.45)                                       |
| 2626          | 3.75 (0.35)                              | 6.04 (0.56)                                       |
| 2630          | 4.72 (0.44)                              | 7.27 (0.68)                                       |
| 2636          | 5.69 (0.53)                              | 8.50 (0.79)                                       |
| 2640          | 6.66 (0.62)                              | 9.73 (0.90)                                       |
| 2646          | 7.63 (0.71)                              | 10.96 (1.02)                                      |
| 2650          | 8.60 (0.80)                              | 12.19 (1.13)                                      |
| 2656          | 9.57 (0.89)                              | 13.42 (1.25)                                      |
| 2660          | 10.54 (0.98)                             | 14.65 (1.36)                                      |
| 2666          | 11.50 (1.07)                             | 15.88 (1.47)                                      |
| 2670          | 12.47 (1.16)                             | 17.11 (1.59)                                      |
| 2676          | 13.44 (1.25)                             | 18.34 (1.70)                                      |
| 2680          | 14.41 (1.34)                             | 19.56 (1.82)                                      |
| 3010          | 1.07 (0.10)                              | 2.84 (0.26)                                       |
| 3016          | 2.29 (0.21)                              | 4.31 (0.40)                                       |
| 3020          | 3.50 (0.33)                              | 5.79 (0.54)                                       |
| 3026          | 4.72 (0.44)                              | 7.27 (0.68)                                       |
| 3030          | 5.94 (0.55)                              | 8.75 (0.81)                                       |
| 3036          | 7.16 (0.67)                              | 10.23 (0.95)                                      |
| 3040          | 8.38 (0.78)                              | 11.71 (1.09)                                      |

• Dimensions in parentheses are in square meters.

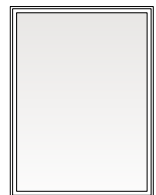
*continued on next page*



6070



6076



6080

Custom-size windows are available in 1/8" (3) increments. See page 98 for custom sizes and specifications.

Grille patterns shown on page 79. Details shown on pages 83-86.

• Window Dimension always refers to outside frame-to-frame dimension.  
• Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.  
• Dimensions in parentheses are in millimeters.

## Picture and Transom Window Area Specifications *(continued)*

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 3046          | 9.60 (0.89)                              | 13.19 (1.23)                                      |
| 3050          | 10.82 (1.00)                             | 14.67 (1.36)                                      |
| 3056          | 12.04 (1.12)                             | 16.15 (1.50)                                      |
| 3060          | 13.25 (1.23)                             | 17.63 (1.64)                                      |
| 3066          | 14.47 (1.34)                             | 19.11 (1.77)                                      |
| 3070          | 15.69 (1.46)                             | 20.59 (1.91)                                      |
| 3076          | 16.91 (1.57)                             | 22.06 (2.05)                                      |
| 3080          | 18.13 (1.68)                             | 23.54 (2.19)                                      |
| 3610          | 1.29 (0.12)                              | 3.31 (0.31)                                       |
| 3616          | 2.75 (0.26)                              | 5.04 (0.47)                                       |
| 3620          | 4.22 (0.39)                              | 6.77 (0.63)                                       |
| 3626          | 5.69 (0.53)                              | 8.50 (0.79)                                       |
| 3630          | 7.16 (0.67)                              | 10.23 (0.95)                                      |
| 3636          | 8.63 (0.80)                              | 11.96 (1.11)                                      |
| 3640          | 10.10 (0.94)                             | 13.69 (1.27)                                      |
| 3646          | 11.57 (1.07)                             | 15.42 (1.43)                                      |
| 3650          | 13.04 (1.21)                             | 17.15 (1.59)                                      |
| 3656          | 14.50 (1.35)                             | 18.88 (1.75)                                      |
| 3660          | 15.97 (1.48)                             | 20.61 (1.91)                                      |
| 3666          | 17.44 (1.62)                             | 22.34 (2.07)                                      |
| 3670          | 18.91 (1.76)                             | 24.06 (2.24)                                      |
| 3676          | 20.38 (1.89)                             | 25.79 (2.40)                                      |
| 3680          | 21.85 (2.03)                             | 27.52 (2.56)                                      |

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 4010          | 1.50 (0.14)                              | 3.79 (0.35)                                       |
| 4016          | 3.22 (0.30)                              | 5.77 (0.54)                                       |
| 4020          | 4.94 (0.46)                              | 7.75 (0.72)                                       |
| 4026          | 6.66 (0.62)                              | 9.73 (0.90)                                       |
| 4030          | 8.38 (0.78)                              | 11.71 (1.09)                                      |
| 4036          | 10.10 (0.94)                             | 13.69 (1.27)                                      |
| 4040          | 11.82 (1.10)                             | 15.67 (1.46)                                      |
| 4046          | 13.54 (1.26)                             | 17.65 (1.64)                                      |
| 4050          | 15.25 (1.42)                             | 19.63 (1.82)                                      |
| 4056          | 16.97 (1.58)                             | 21.61 (2.01)                                      |
| 4060          | 18.69 (1.74)                             | 23.59 (2.19)                                      |
| 4066          | 20.41 (1.90)                             | 25.56 (2.37)                                      |
| 4070          | 22.13 (2.06)                             | 27.54 (2.56)                                      |
| 4076          | 23.85 (2.22)                             | 29.52 (2.74)                                      |
| 4080          | 25.57 (2.38)                             | 31.50 (2.93)                                      |
| 4610          | 1.72 (0.16)                              | 4.27 (0.40)                                       |
| 4616          | 3.69 (0.34)                              | 6.50 (0.60)                                       |
| 4620          | 5.66 (0.53)                              | 8.73 (0.81)                                       |
| 4626          | 7.63 (0.71)                              | 10.96 (1.02)                                      |
| 4630          | 9.60 (0.89)                              | 13.19 (1.23)                                      |
| 4636          | 11.57 (1.07)                             | 15.42 (1.43)                                      |
| 4640          | 13.54 (1.26)                             | 17.65 (1.64)                                      |
| 4646          | 15.50 (1.44)                             | 19.88 (1.85)                                      |
| 4650          | 17.47 (1.62)                             | 22.11 (2.05)                                      |
| 4656          | 19.44 (1.81)                             | 24.34 (2.26)                                      |
| 4660          | 21.41 (1.99)                             | 26.56 (2.47)                                      |
| 4666          | 23.38 (2.17)                             | 28.79 (2.67)                                      |
| 4670          | 25.35 (2.35)                             | 31.02 (2.88)                                      |
| 4676          | 27.32 (2.54)                             | 33.25 (3.09)                                      |
| 4680          | 29.29 (2.72)                             | 35.48 (3.30)                                      |
| 5010          | 1.94 (0.18)                              | 4.75 (0.44)                                       |
| 5016          | 4.16 (0.39)                              | 7.23 (0.67)                                       |
| 5020          | 6.38 (0.59)                              | 9.71 (0.90)                                       |
| 5026          | 8.60 (0.80)                              | 12.19 (1.13)                                      |
| 5030          | 10.82 (1.00)                             | 14.67 (1.36)                                      |
| 5036          | 13.04 (1.21)                             | 17.15 (1.59)                                      |
| 5040          | 15.25 (1.42)                             | 19.63 (1.82)                                      |
| 5046          | 17.47 (1.62)                             | 22.11 (2.05)                                      |
| 5050          | 19.69 (1.83)                             | 24.59 (2.28)                                      |
| 5056          | 21.91 (2.04)                             | 27.06 (2.51)                                      |
| 5060          | 24.13 (2.24)                             | 29.54 (2.74)                                      |
| 5066          | 26.35 (2.45)                             | 32.02 (2.97)                                      |
| 5070          | 28.57 (2.65)                             | 34.50 (3.21)                                      |
| 5076          | 30.79 (2.86)                             | 36.98 (3.44)                                      |
| 5080          | 33.00 (3.07)                             | 39.46 (3.67)                                      |
| 5610          | 2.16 (0.20)                              | 5.23 (0.49)                                       |
| 5616          | 4.63 (0.43)                              | 7.96 (0.74)                                       |
| 5620          | 7.10 (0.66)                              | 10.69 (0.99)                                      |
| 5626          | 9.57 (0.89)                              | 13.42 (1.25)                                      |
| 5630          | 12.04 (1.12)                             | 16.15 (1.50)                                      |
| 5636          | 14.50 (1.35)                             | 18.88 (1.75)                                      |
| 5640          | 16.97 (1.58)                             | 21.61 (2.01)                                      |
| 5646          | 19.44 (1.81)                             | 24.34 (2.26)                                      |
| 5650          | 21.91 (2.04)                             | 27.06 (2.51)                                      |
| 5656          | 24.38 (2.26)                             | 29.79 (2.77)                                      |
| 5660          | 26.85 (2.49)                             | 32.52 (3.02)                                      |
| 5666          | 29.32 (2.72)                             | 35.25 (3.27)                                      |
| 5670          | 31.79 (2.95)                             | 37.98 (3.53)                                      |
| 5676          | 34.25 (3.18)                             | 40.71 (3.78)                                      |
| 5680          | 36.72 (3.41)                             | 43.44 (4.04)                                      |

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 6010          | 2.38 (0.22)                              | 5.71 (0.53)                                       |
| 6016          | 5.10 (0.47)                              | 8.69 (0.81)                                       |
| 6020          | 7.82 (0.73)                              | 11.67 (1.08)                                      |
| 6026          | 10.54 (0.98)                             | 14.65 (1.36)                                      |
| 6030          | 13.25 (1.23)                             | 17.63 (1.64)                                      |
| 6036          | 15.97 (1.48)                             | 20.61 (1.91)                                      |
| 6040          | 18.69 (1.74)                             | 23.59 (2.19)                                      |
| 6046          | 21.41 (1.99)                             | 26.56 (2.47)                                      |
| 6050          | 24.13 (2.24)                             | 29.54 (2.74)                                      |
| 6056          | 26.85 (2.49)                             | 32.52 (3.02)                                      |
| 6060          | 29.57 (2.75)                             | 35.50 (3.30)                                      |
| 6066          | 32.29 (3.00)                             | 38.48 (3.57)                                      |
| 6070          | 35.00 (3.25)                             | 41.46 (3.85)                                      |
| 6076          | 37.72 (3.50)                             | 44.44 (4.13)                                      |
| 6080          | 40.44 (3.76)                             | 47.42 (4.41)                                      |
| 6610          | 2.60 (0.24)                              | 6.19 (0.57)                                       |
| 6616          | 5.57 (0.52)                              | 9.42 (0.87)                                       |
| 6620          | 8.54 (0.79)                              | 12.65 (1.17)                                      |
| 6626          | 11.50 (1.07)                             | 15.88 (1.47)                                      |
| 6630          | 14.47 (1.34)                             | 19.11 (1.77)                                      |
| 6636          | 17.44 (1.62)                             | 22.34 (2.07)                                      |
| 6640          | 20.41 (1.90)                             | 25.56 (2.37)                                      |
| 6646          | 23.38 (2.17)                             | 28.79 (2.67)                                      |
| 6650          | 26.35 (2.45)                             | 32.02 (2.97)                                      |
| 6656          | 29.32 (2.72)                             | 35.25 (3.27)                                      |
| 6660          | 32.29 (3.00)                             | 38.48 (3.57)                                      |
| 7010          | 2.82 (0.26)                              | 6.67 (0.62)                                       |
| 7016          | 6.04 (0.56)                              | 10.15 (0.94)                                      |
| 7020          | 9.25 (0.86)                              | 13.63 (1.27)                                      |
| 7026          | 12.47 (1.16)                             | 17.11 (1.59)                                      |
| 7030          | 15.69 (1.46)                             | 20.59 (1.91)                                      |
| 7036          | 18.91 (1.76)                             | 24.06 (2.24)                                      |
| 7040          | 22.13 (2.06)                             | 27.54 (2.56)                                      |
| 7046          | 25.35 (2.35)                             | 31.02 (2.88)                                      |
| 7050          | 28.57 (2.65)                             | 34.50 (3.21)                                      |
| 7056          | 31.79 (2.95)                             | 37.98 (3.53)                                      |
| 7060          | 35.00 (3.25)                             | 41.46 (3.85)                                      |
| 7610          | 3.04 (0.28)                              | 7.15 (0.66)                                       |
| 7616          | 6.50 (0.60)                              | 10.88 (1.01)                                      |
| 7620          | 9.97 (0.93)                              | 14.61 (1.36)                                      |
| 7626          | 13.44 (1.25)                             | 18.34 (1.70)                                      |
| 7630          | 16.91 (1.57)                             | 22.06 (2.05)                                      |
| 7636          | 20.38 (1.89)                             | 25.79 (2.40)                                      |
| 7640          | 23.85 (2.22)                             | 29.52 (2.74)                                      |
| 7646          | 27.32 (2.54)                             | 33.25 (3.09)                                      |
| 7650          | 30.79 (2.86)                             | 36.98 (3.44)                                      |
| 7656          | 34.25 (3.18)                             | 40.71 (3.78)                                      |
| 7660          | 37.72 (3.50)                             | 44.44 (4.13)                                      |
| 8010          | 3.25 (0.30)                              | 7.63 (0.71)                                       |
| 8016          | 6.97 (0.65)                              | 11.61 (1.08)                                      |
| 8020          | 10.69 (0.99)                             | 15.59 (1.45)                                      |
| 8026          | 14.41 (1.34)                             | 19.56 (1.82)                                      |
| 8030          | 18.13 (1.68)                             | 23.54 (2.19)                                      |
| 8036          | 21.85 (2.03)                             | 27.52 (2.56)                                      |
| 8040          | 25.57 (2.38)                             | 31.50 (2.93)                                      |
| 8046          | 29.29 (2.72)                             | 35.48 (3.30)                                      |
| 8050          | 33.00 (3.07)                             | 39.46 (3.67)                                      |
| 8056          | 36.72 (3.41)                             | 43.44 (4.04)                                      |
| 8060          | 40.44 (3.76)                             | 47.42 (4.41)                                      |

• Dimensions in parentheses are in square meters.

# PICTURE, TRANSOM & SPECIALTY WINDOWS

## Table of Twin and Triple Transom Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

| Window Dimension                                    | 2'-11 1/2" | 3'-5 1/2" | 3'-11 1/2" | 4'-5 1/2" | 4'-11 1/2" | 5'-5 1/2" | 5'-11 1/2" | 6'-11 1/2" |
|-----------------------------------------------------|------------|-----------|------------|-----------|------------|-----------|------------|------------|
|                                                     | (902)      | (1054)    | (1207)     | (1359)    | (1511)     | (1664)    | (1816)     | (2121)     |
| <b>Minimum Rough Opening</b>                        | 3'-0"      | 3'-6"     | 4'-0"      | 4'-6"     | 5'-0"      | 5'-6"     | 6'-0"      | 7'-0"      |
|                                                     | (914)      | (1067)    | (1219)     | (1372)    | (1524)     | (1676)    | (1829)     | (2134)     |
| Unobstructed Glass<br>(width of twin single sash)   | 11 1/4"    | 14 1/4"   | 17 1/4"    | 20 1/4"   | 23 1/4"    | 26 1/4"   | 29 1/4"    | 35 1/4"    |
|                                                     | (286)      | (362)     | (438)      | (514)     | (591)      | (667)     | (743)      | (895)      |
| Unobstructed Glass<br>(width of triple single sash) |            |           |            | 11 1/4"   |            |           | 17 1/4"    |            |
|                                                     |            |           |            | (286)     |            |           | (438)      |            |

| CUSTOM WIDTHS TWIN – 35 1/2" to 95 1/2" TRIPLE – 53 1/2" to 143 1/2"                                                       |        |        |        |        |        |        |        |        |
|----------------------------------------------------------------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| <div> <div>11'-1 1/2"</div> <div>(292)</div> <div>1'-0"</div> <div>(305)</div> <div>5'-1/4"</div> <div>(133)</div> </div>  |        |        |        |        |        |        |        |        |
|                                                                                                                            | 1610-2 | 1910-2 | 2010-2 | 2310-2 | 2610-2 | 2910-2 | 3010-2 | 3610-2 |
|                                                                                                                            |        |        |        |        |        |        |        |        |
| <div> <div>1'-5 1/2"</div> <div>(445)</div> <div>1'-6"</div> <div>(457)</div> <div>11'-1/4"</div> <div>(286)</div> </div>  |        |        |        |        |        |        |        |        |
|                                                                                                                            | 1616-2 | 1916-2 | 2016-2 | 2316-2 | 2616-2 | 2916-2 | 3016-2 | 3616-2 |
|                                                                                                                            |        |        |        |        |        |        |        |        |
| <div> <div>1'-11 1/2"</div> <div>(597)</div> <div>2'-0"</div> <div>(610)</div> <div>17'-1/4"</div> <div>(438)</div> </div> |        |        |        |        |        |        |        |        |
|                                                                                                                            | 1620-2 | 1920-2 | 2020-2 | 2320-2 | 2620-2 | 2920-2 | 3020-2 | 3620-2 |
|                                                                                                                            |        |        |        |        |        |        |        |        |

• Window Dimension always refers to outside frame-to-frame dimension.

• **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.**

• Dimensions in parentheses are in millimeters.

## Twin Transom Window Area Specifications

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 1610-2        | 0.82 (0.08)                              | 2.84 (0.26)                                       |
| 1910-2        | 1.04 (0.10)                              | 3.31 (0.31)                                       |
| 2010-2        | 1.26 (0.12)                              | 3.79 (0.35)                                       |
| 2310-2        | 1.48 (0.14)                              | 4.27 (0.40)                                       |
| 2610-2        | 1.70 (0.16)                              | 4.75 (0.44)                                       |
| 2910-2        | 1.91 (0.18)                              | 5.23 (0.49)                                       |
| 3010-2        | 2.13 (0.20)                              | 5.71 (0.53)                                       |
| 3610-2        | 2.57 (0.24)                              | 6.67 (0.62)                                       |
| 4010-2        | 3.01 (0.28)                              | 7.63 (0.71)                                       |
| 1616-2        | 1.76 (0.16)                              | 4.31 (0.40)                                       |
| 1916-2        | 2.23 (0.21)                              | 5.04 (0.47)                                       |
| 2016-2        | 2.70 (0.25)                              | 5.77 (0.54)                                       |
| 2316-2        | 3.16 (0.29)                              | 6.50 (0.60)                                       |
| 2616-2        | 3.63 (0.34)                              | 7.23 (0.67)                                       |
| 2916-2        | 4.10 (0.38)                              | 7.96 (0.74)                                       |
| 3016-2        | 4.57 (0.42)                              | 8.69 (0.81)                                       |
| 3616-2        | 5.51 (0.51)                              | 10.15 (0.94)                                      |
| 4016-2        | 6.45 (0.60)                              | 11.61 (1.08)                                      |
| 1620-2        | 2.70 (0.25)                              | 5.79 (0.54)                                       |
| 1920-2        | 3.41 (0.32)                              | 6.77 (0.63)                                       |
| 2020-2        | 4.13 (0.38)                              | 7.75 (0.72)                                       |
| 2320-2        | 4.85 (0.45)                              | 8.73 (0.81)                                       |
| 2620-2        | 5.57 (0.52)                              | 9.71 (0.90)                                       |
| 2920-2        | 6.29 (0.58)                              | 10.69 (0.99)                                      |
| 3020-2        | 7.01 (0.65)                              | 11.67 (1.08)                                      |
| 3620-2        | 8.45 (0.78)                              | 13.63 (1.27)                                      |
| 4020-2        | 9.88 (0.92)                              | 15.59 (1.45)                                      |

• Dimensions in parentheses are in square meters.

## Triple Transom Window Area Specifications

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 1610-3        | 1.23 (0.11)                              | 4.27 (0.40)                                       |
| 2010-3        | 1.89 (0.18)                              | 5.71 (0.53)                                       |
| 2610-3        | 2.54 (0.24)                              | 7.15 (0.66)                                       |
| 3010-3        | 3.20 (0.30)                              | 8.59 (0.80)                                       |
| 3610-3        | 3.86 (0.36)                              | 10.02 (0.93)                                      |
| 4010-3        | 4.51 (0.42)                              | 11.46 (1.06)                                      |
| 1616-3        | 2.64 (0.24)                              | 6.50 (0.60)                                       |
| 2016-3        | 4.04 (0.38)                              | 8.69 (0.81)                                       |
| 2616-3        | 5.45 (0.51)                              | 10.88 (1.01)                                      |
| 3016-3        | 6.86 (0.64)                              | 13.06 (1.21)                                      |
| 3616-3        | 8.26 (0.77)                              | 15.25 (1.42)                                      |
| 4016-3        | 9.67 (0.90)                              | 17.44 (1.62)                                      |
| 1620-3        | 4.04 (0.38)                              | 8.73 (0.81)                                       |
| 2020-3        | 6.20 (0.58)                              | 11.67 (1.08)                                      |
| 2620-3        | 8.36 (0.78)                              | 14.61 (1.36)                                      |
| 3020-3        | 10.51 (0.98)                             | 17.54 (1.63)                                      |
| 3620-3        | 12.67 (1.18)                             | 20.48 (1.90)                                      |
| 4020-3        | 14.82 (1.38)                             | 23.42 (2.18)                                      |

• Dimensions in parentheses are in square meters.

## Half Circle Window Area Specifications

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 26            | 1.46 (0.14)                              | 3.01 (0.28)                                       |
| 30            | 2.32 (0.22)                              | 4.21 (0.39)                                       |
| 36            | 3.37 (0.31)                              | 5.60 (0.52)                                       |
| 40            | 4.62 (0.43)                              | 7.18 (0.67)                                       |
| 46            | 6.06 (0.56)                              | 8.97 (0.83)                                       |
| 50            | 7.70 (0.72)                              | 10.95 (1.02)                                      |
| 56            | 9.54 (0.89)                              | 13.12 (1.22)                                      |
| 60            | 11.58 (1.08)                             | 15.49 (1.44)                                      |
| 66            | 13.81 (1.28)                             | 18.06 (1.68)                                      |
| 70            | 16.23 (1.51)                             | 20.83 (1.93)                                      |
| 76            | 18.85 (1.75)                             | 23.79 (2.21)                                      |
| 80            | 21.67 (2.01)                             | 26.94 (2.50)                                      |

• Dimensions in parentheses are in square meters.

## Circle Window Area Specifications

| Window Number | Glass Area<br>Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area<br>Sq. Ft./ (m <sup>2</sup> ) |
|---------------|------------------------------------------|---------------------------------------------------|
| 2020          | 1.61 (0.15)                              | 3.01 (0.28)                                       |
| 2626          | 2.93 (0.27)                              | 4.75 (0.44)                                       |
| 3030          | 4.65 (0.43)                              | 6.87 (0.64)                                       |
| 3636          | 6.75 (0.63)                              | 9.39 (0.87)                                       |
| 4040          | 9.25 (0.86)                              | 12.31 (1.14)                                      |

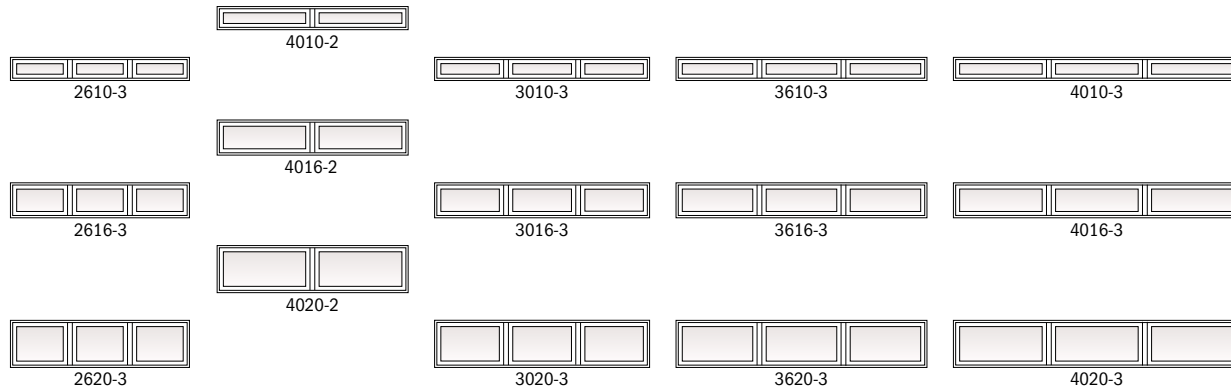
• Dimensions in parentheses are in square meters.

|                     |                      |                      |                      |                       |
|---------------------|----------------------|----------------------|----------------------|-----------------------|
| 7'-5 1/2"<br>(2273) | 7'-11 1/2"<br>(2426) | 8'-11 1/2"<br>(2731) | 10'-5 1/2"<br>(3188) | 11'-11 1/2"<br>(3645) |
| 7'-6"<br>(2286)     | 8'-0"<br>(2438)      | 9'-0"<br>(2743)      | 10'-6"<br>(3200)     | 12'-0"<br>(3658)      |
|                     | 41 1/4"<br>(1048)    |                      |                      |                       |
| 23 1/4"<br>(591)    |                      | 29 1/4"<br>(743)     | 35 1/4"<br>(895)     | 41 1/4"<br>(1048)     |



Custom-size windows are available in 1/8" (3) increments. See page 98 for custom sizes and specifications.

Windows have one continuous outer frame. Details shown on pages 83-86.



- Window Dimension always refers to outside frame-to-frame dimension.
- Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- Dimensions in parentheses are in millimeters.

### Quarter Circle Window Area Specifications

| Window Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|---------------|---------------------------------------|------------------------------------------------|
| 2620          | 1.62 (0.15)                           | 3.22 (0.30)                                    |
| 2626          | 2.95 (0.27)                           | 5.01 (0.47)                                    |
| 3030          | 4.67 (0.43)                           | 7.19 (0.67)                                    |
| 3636          | 6.78 (0.63)                           | 9.77 (0.91)                                    |
| 4040          | 9.28 (0.86)                           | 12.73 (1.18)                                   |
| 4646          | 12.18 (1.13)                          | 16.09 (1.50)                                   |
| 5050          | 15.47 (1.44)                          | 19.85 (1.84)                                   |

• Dimensions in parentheses are in square meters.

### Springline™ Window Area Specifications

| Window Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|---------------|---------------------------------------|------------------------------------------------|
| 2020          | 3.23 (0.30)                           | 5.34 (0.50)                                    |
| 2026          | 3.95 (0.37)                           | 6.32 (0.59)                                    |
| 2030          | 4.67 (0.43)                           | 7.30 (0.68)                                    |
| 2036          | 5.38 (0.50)                           | 8.28 (0.77)                                    |
| 2040          | 6.10 (0.57)                           | 9.26 (0.86)                                    |
| 2046          | 6.81 (0.63)                           | 10.24 (0.95)                                   |
| 2050          | 7.53 (0.70)                           | 11.22 (1.04)                                   |
| 2620          | 4.74 (0.44)                           | 7.19 (0.67)                                    |
| 2626          | 5.71 (0.53)                           | 8.42 (0.78)                                    |
| 2630          | 6.67 (0.62)                           | 9.65 (0.90)                                    |
| 2636          | 7.64 (0.71)                           | 10.87 (1.01)                                   |
| 2640          | 8.61 (0.80)                           | 12.10 (1.12)                                   |
| 2646          | 9.57 (0.89)                           | 13.33 (1.24)                                   |

| Window Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|---------------|---------------------------------------|------------------------------------------------|
| 2650          | 10.54 (0.98)                          | 14.56 (1.35)                                   |
| 3020          | 6.45 (0.60)                           | 9.23 (0.86)                                    |
| 3026          | 7.66 (0.71)                           | 10.71 (0.99)                                   |
| 3030          | 8.88 (0.82)                           | 12.19 (1.13)                                   |
| 3036          | 10.10 (0.94)                          | 13.67 (1.27)                                   |
| 3040          | 11.31 (1.05)                          | 15.15 (1.41)                                   |
| 3046          | 12.53 (1.16)                          | 16.63 (1.54)                                   |
| 3050          | 13.74 (1.28)                          | 18.11 (1.68)                                   |
| 3620          | 8.35 (0.78)                           | 11.47 (1.07)                                   |
| 3626          | 9.81 (0.91)                           | 13.20 (1.23)                                   |
| 3630          | 11.28 (1.05)                          | 14.93 (1.39)                                   |
| 3636          | 12.75 (1.18)                          | 16.66 (1.55)                                   |
| 3640          | 14.21 (1.32)                          | 18.39 (1.71)                                   |
| 3646          | 15.68 (1.46)                          | 20.12 (1.87)                                   |
| 3650          | 17.14 (1.59)                          | 21.84 (2.03)                                   |
| 4020          | 10.45 (0.97)                          | 13.90 (1.29)                                   |
| 4026          | 12.16 (1.13)                          | 15.88 (1.48)                                   |
| 4030          | 13.88 (1.29)                          | 17.86 (1.66)                                   |
| 4036          | 15.59 (1.45)                          | 19.84 (1.84)                                   |
| 4040          | 17.31 (1.61)                          | 21.82 (2.03)                                   |
| 4046          | 19.03 (1.77)                          | 23.80 (2.21)                                   |
| 4050          | 20.74 (1.93)                          | 25.78 (2.40)                                   |
| 4620          | 12.74 (1.18)                          | 16.54 (1.54)                                   |
| 4626          | 14.71 (1.37)                          | 18.77 (1.74)                                   |
| 4630          | 16.67 (1.55)                          | 20.99 (1.95)                                   |
| 4636          | 18.64 (1.73)                          | 23.22 (2.16)                                   |
| 4640          | 20.60 (1.91)                          | 25.45 (2.36)                                   |
| 4646          | 22.57 (2.10)                          | 27.68 (2.57)                                   |

| Window Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|---------------|---------------------------------------|------------------------------------------------|
| 4650          | 24.54 (2.28)                          | 29.91 (2.78)                                   |
| 5020          | 15.23 (1.41)                          | 19.36 (1.80)                                   |
| 5026          | 17.45 (1.62)                          | 21.84 (2.03)                                   |
| 5030          | 19.66 (1.83)                          | 24.32 (2.26)                                   |
| 5036          | 21.88 (2.03)                          | 26.80 (2.49)                                   |
| 5040          | 24.09 (2.24)                          | 29.28 (2.72)                                   |
| 5046          | 26.31 (2.44)                          | 31.76 (2.95)                                   |
| 5050          | 28.53 (2.65)                          | 34.24 (3.18)                                   |
| 5620          | 17.92 (1.66)                          | 22.39 (2.08)                                   |
| 5626          | 20.38 (1.89)                          | 25.12 (2.33)                                   |
| 5630          | 22.85 (2.12)                          | 27.85 (2.59)                                   |
| 5636          | 25.31 (2.35)                          | 30.58 (2.84)                                   |
| 5640          | 27.78 (2.58)                          | 33.31 (3.09)                                   |
| 5646          | 30.25 (2.81)                          | 36.03 (3.35)                                   |
| 5650          | 32.71 (3.04)                          | 38.76 (3.60)                                   |
| 6020          | 20.80 (1.93)                          | 25.61 (2.38)                                   |
| 6026          | 23.51 (2.18)                          | 28.59 (2.66)                                   |
| 6030          | 26.23 (2.44)                          | 31.57 (2.93)                                   |
| 6036          | 28.95 (2.69)                          | 34.55 (3.21)                                   |
| 6040          | 31.66 (2.94)                          | 37.53 (3.49)                                   |
| 6046          | 34.38 (3.19)                          | 40.51 (3.76)                                   |
| 6050          | 37.10 (3.45)                          | 43.48 (4.04)                                   |

• Dimensions in parentheses are in square meters.



# PICTURE, TRANSOM & SPECIALTY WINDOWS

**Table of Half Circle Window Sizes**

Scale  $\frac{1}{8}"$  (3) = 1'-0" (305) – 1:96

|                       |                               |                              |                               |
|-----------------------|-------------------------------|------------------------------|-------------------------------|
| Window Dimension      | 1'-11 $\frac{1}{2}"$<br>(597) | 2'-5 $\frac{1}{2}"$<br>(749) | 2'-11 $\frac{1}{2}"$<br>(902) |
| Minimum Rough Opening | 2'-0"<br>(610)                | 2'-6"<br>(762)               | 3'-0"<br>(914)                |
| Unobstructed Glass    | 17 $\frac{1}{4}"$<br>(438)    | (591)                        | (743)                         |

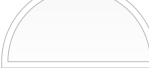
[Click for revised "Table of Half Circle Window Sizes"](#)



|                              |                              |                              |                              |
|------------------------------|------------------------------|------------------------------|------------------------------|
| Radius                       | 11 $\frac{3}{4}"$ (298)      | 14 $\frac{3}{4}"$ (375)      | 17 $\frac{3}{4}"$ (451)      |
| 1'-2 $\frac{7}{8}"$<br>(378) | 1'-5 $\frac{7}{8}"$<br>(454) | 1'-8 $\frac{7}{8}"$<br>(530) | 2'-2 $\frac{7}{8}"$<br>(606) |
| 1'-3 $\frac{3}{8}"$<br>(391) | 1'-6 $\frac{3}{8}"$<br>(467) | 1'-9 $\frac{3}{8}"$<br>(543) | 2'-5 $\frac{3}{8}"$<br>(619) |
| 8 $\frac{5}{8}"$<br>(219)    | 11 $\frac{5}{8}"$<br>(295)   | 14 $\frac{5}{8}"$<br>(371)   | 17 $\frac{5}{8}"$<br>(447)   |
| 20                           | 26                           | 30                           | 36                           |

Custom-size half circle windows are available in  $\frac{1}{8}"$  (3) increments. Contact your Andersen supplier for more information.

Grille patterns shown on page 79.  
Details shown on pages 83-86.

|                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                               |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <div><div>3'-5 1/2"</div><div>(1054)</div><div>3'-6"</div><div>(1067)</div><div>35 1/4"</div><div>(895)</div></div> <div>20 3/4" (527)</div> <div><div><div>1'-11 7/8"</div><div>(606)</div><div>2'-0 3/8"</div><div>(619)</div><div>17 5/8"</div><div>(448)</div></div><div></div><div>36</div></div>       | <div><div>3'-11 1/2"</div><div>(1207)</div><div>4'-0"</div><div>(1219)</div><div>41 1/4"</div><div>(1048)</div></div> <div>23 3/4" (603)</div> <div><div><div>2'-2 7/8"</div><div>(683)</div><div>2'-3 3/8"</div><div>(695)</div><div>20 5/8"</div><div>(524)</div></div><div></div><div>40</div></div>       | <div><div>4'-5 1/2"</div><div>(1359)</div><div>4'-6"</div><div>(1372)</div><div>47 1/4"</div><div>(1200)</div></div> <div>26 3/4" (679)</div> <div><div><div>2'-5 7/8"</div><div>(759)</div><div>2'-6 3/8"</div><div>(772)</div><div>23 5/8"</div><div>(600)</div></div><div></div><div>46</div></div>         | <div>Grille patterns shown on page 79.</div> <div>Details shown on pages 83-86.</div>                                                                                                                                                                                                                                                                                                         |  |
| <div><div>4'-11 1/2"</div><div>(1511)</div><div>5'-0"</div><div>(1524)</div><div>53 1/4"</div><div>(1353)</div></div> <div>29 3/4" (756)</div> <div><div><div>2'-8 7/8"</div><div>(835)</div><div>2'-9 3/8"</div><div>(848)</div><div>26 5/8"</div><div>(676)</div></div><div></div><div>50</div></div>    | <div><div>5'-5 1/2"</div><div>(1664)</div><div>5'-6"</div><div>(1676)</div><div>59 1/4"</div><div>(1505)</div></div> <div>32 3/4" (832)</div> <div><div><div>2'-11 7/8"</div><div>(911)</div><div>3'-0 3/8"</div><div>(924)</div><div>29 5/8"</div><div>(752)</div></div><div></div><div>56</div></div>     | <div><div>5'-11 1/2"</div><div>(1816)</div><div>6'-0"</div><div>(1829)</div><div>65 1/4"</div><div>(1657)</div></div> <div>35 3/4" (908)</div> <div><div><div>3'-2 7/8"</div><div>(987)</div><div>3'-3 3/8"</div><div>(1000)</div><div>32 5/8"</div><div>(829)</div></div><div></div><div>60</div></div>     | <div><div>6'-5 1/2"</div><div>(1969)</div><div>6'-6"</div><div>(1981)</div><div>71 1/4"</div><div>(1810)</div></div> <div>38 3/4" (984)</div> <div><div><div>3'-5 7/8"</div><div>(1064)</div><div>3'-6 3/8"</div><div>(1076)</div><div>35 5/8"</div><div>(905)</div></div><div></div><div>66</div></div> |  |
| <div><div>6'-11 1/2"</div><div>(2121)</div><div>7'-0"</div><div>(2134)</div><div>77 1/4"</div><div>(1962)</div></div> <div>41 3/4" (1060)</div> <div><div><div>3'-8 7/8"</div><div>(1140)</div><div>3'-9 3/8"</div><div>(1153)</div><div>38 5/8"</div><div>(981)</div></div><div></div><div>70</div></div> | <div><div>7'-5 1/2"</div><div>(2273)</div><div>7'-6"</div><div>(2286)</div><div>83 1/4"</div><div>(2115)</div></div> <div>44 3/4" (1137)</div> <div><div><div>3'-11 7/8"</div><div>(1216)</div><div>4'-0 3/8"</div><div>(1229)</div><div>41 5/8"</div><div>(1057)</div></div><div></div><div>76</div></div> | <div><div>7'-11 1/2"</div><div>(2426)</div><div>8'-0"</div><div>(2438)</div><div>89 1/4"</div><div>(2267)</div></div> <div>47 3/4" (1213)</div> <div><div><div>4'-2 7/8"</div><div>(1292)</div><div>4'-3 3/8"</div><div>(1305)</div><div>44 5/8"</div><div>(1133)</div></div><div></div><div>80</div></div> |                                                                                                                                                                                                                                                                                                                                                                                               |  |

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

## Table of Quarter Circle Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension      | 1'-5 1/2"<br>(445)                                                                        | 1'-11 1/2"<br>(597)                                                                       | 2'-5 1/2"<br>(749)                                                                        | 2'-11 1/2"<br>(902)                                                                         |
|-----------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Minimum Rough Opening | 1'-6"<br>(457)                                                                            | 2'-0"<br>(610)                                                                            | 2'-6"<br>(762)                                                                            | 3'-0"<br>(914)                                                                              |
| Unobstructed Glass    | 5 1/4"<br>(133)                                                                           | 17 1/2"<br>(438)                                                                          | 23 1/4"<br>(591)                                                                          | 29 1/4"<br>(743)                                                                            |
| Radius                | 14 3/8" (365)                                                                             | 20 3/8" (518)                                                                             | 26 3/8" (670)                                                                             | 32 3/8" (822)                                                                               |
|                       | <br>1616 | <br>2020 | <br>2626 | <br>3030 |
|                       | <br>3636 | <br>4040 | <br>4646 | <br>5050 |



Custom-size quarter circle windows are available in 1/8" (3) increments.

Contact your Andersen supplier for more information. Grille patterns shown on page 79. Details shown on pages 83-86.

## Table of Circle Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Window Dimension      | 1'-11 1/2"<br>(597)                                                                         | 2'-5 1/2"<br>(749)                                                                          | 2'-11 1/2"<br>(902)                                                                         | 3'-5 1/2"<br>(1054)                                                                         | 3'-11 1/2"<br>(1207)                                                                        |
|-----------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Minimum Rough Opening | 2'-0"<br>(610)                                                                              | 2'-6"<br>(762)                                                                              | 3'-0"<br>(914)                                                                              | 3'-6"<br>(1067)                                                                             | 4'-0"<br>(1219)                                                                             |
| Unobstructed Glass    | 17 1/4"<br>(438)                                                                            | 23 1/4"<br>(591)                                                                            | 29 1/4"<br>(743)                                                                            | 35 1/4"<br>(895)                                                                            | 41 1/4"<br>(1048)                                                                           |
|                       | <br>2020 | <br>2626 | <br>3030 | <br>3636 | <br>4040 |



Custom-size circle windows are available in 1/8" (3) increments. Contact your Andersen supplier for more information. Grille patterns shown on page 79. Details shown on pages 83-86.

- Window Dimension always refers to outside frame-to-frame dimension.
- Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- Dimensions in parentheses are in millimeters.

# PICTURE, TRANSOM & SPECIALTY WINDOWS



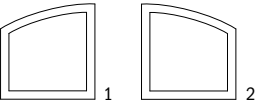
These custom shapes are available in 1/8" (3) increments.

### Design Criteria

Listed for each custom shape are factors that must be considered when deciding on a custom-shaped specialty window.

Grilles are available for most shapes and sizes in colonial and specified equal divided light patterns. For more grille options, see page 14 or contact your Andersen supplier. Details shown on pages 83-86.

### Custom Unequal Leg Arch



Choose left facing (1) or right facing (2) as viewed from the exterior. Contains unequal legs, two right angles at the sill and an arch at the top.

Custom-size design limitations:

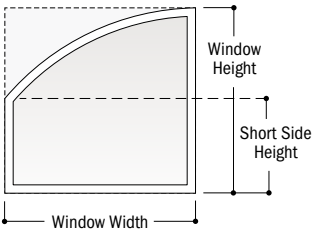
**Min./Max. Window Width**  
17 1/2" (445) to 95 1/2" (2426)

**Min./Max. Window Height**  
11 3/8" (289) to 95 1/2" (2426)

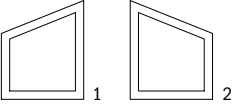
**Min./Max. Short Side Height**  
9 3/4" (248) to 93 7/8" (2384)

**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



### Custom Trapezoid



Choose left facing (1) or right facing (2) as viewed from the exterior. Contains a slope to the left or right. Slope is often designed to match a roof's pitch.

Custom-size design limitations:

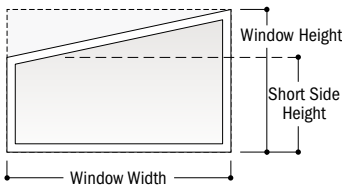
**Min./Max. Window Width**  
17 1/2" (445) to 107 1/2" (2731)

**Min./Max. Window Height**  
9 7/8" (251) to 95 1/2" (2426)

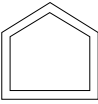
**Min./Max. Short Side Height**  
9 3/4" (248) to 95 3/8" (2423)

**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



### Custom Peak Pentagon



Contains sides of equal length, extending at right angles from the sill and two angled sides of equal length that peak above the center of the sill.

Custom-size design limitations:

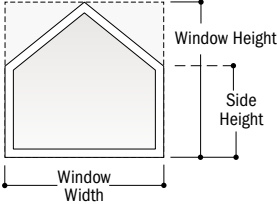
**Min./Max. Window Width**  
17 1/2" (445) to 107 1/2" (2731)

**Min./Max. Window Height**  
14 1/8" (359) to 107 1/2" (2731)

**Min./Max. Side Height**  
9 3/4" (248) to 94 1/8" (2391)

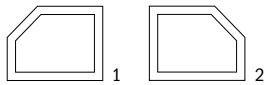
**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



\*Dimensions in parentheses are in millimeters.

### Custom Angled Pentagon



Choose left facing (1) or right facing (2) as viewed from the exterior. Contains an angle cut, or a "clipped corner," sloping to the left or right.

Custom-size design limitations:

**Min./Max. Window Width**  
17 1/2" (445) to 107 1/2" (2731)

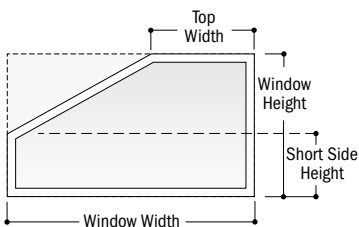
**Min./Max. Top Width**  
9 3/4" (248) to 107 3/8" (2727)

**Min./Max. Window Height**  
14 3/8" (365) to 107 1/2" (2731)

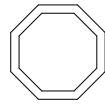
**Min./Max. Short Side Height**  
9 3/4" (248) to 94 1/8" (226)

**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



### Custom Octagon



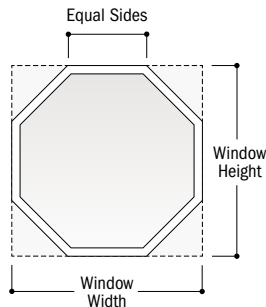
Contains eight equal angles and sides.

Custom-size design limitations:

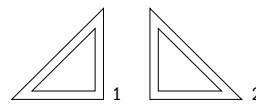
**Min./Max. Window Width**  
23 1/2" (597) to 71 1/2" (1816)

**Min./Max. Window Height**  
23 1/2" (597) to 71 1/2" (1816)

Additional limitations may apply. Contact your Andersen supplier for more information.



### Custom Right Triangle



Choose left facing (1) or right facing (2) as viewed from the exterior. Contains one 90-degree angle.

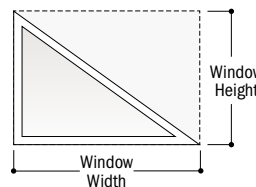
Custom-size design limitations:

**Min./Max. Window Width**  
17 1/2" (445) to 95 1/2" (2426)

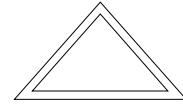
**Min./Max. Window Height**  
17 1/2" (445) to 95 1/2" (2426)

**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



### Custom Isosceles Triangle



Contains two sides of equal length and two equal angles.

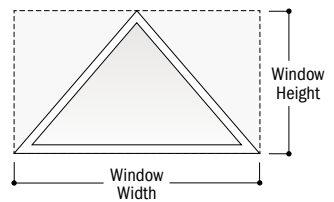
Custom-size design limitations:

**Min./Max. Window Width**  
17 1/2" (445) to 107 1/2" (2731)

**Min./Max. Window Height**  
17 1/2" (445) to 75 7/8" (1927)

**Max. Frame Area: 40 sq. ft. or 3.7 m<sup>2</sup>**  
Based on the smallest square or rectangular shape that covers the entire window.

Additional limitations may apply. Contact your Andersen supplier for more information.



# PICTURE, TRANSOM & SPECIALTY WINDOWS

## Table of Springline™ Window Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on next page also apply to this page.

|                        |                                                  |                                                 |                                                  |                                                  |                                                   |                                                  |                                                   |
|------------------------|--------------------------------------------------|-------------------------------------------------|--------------------------------------------------|--------------------------------------------------|---------------------------------------------------|--------------------------------------------------|---------------------------------------------------|
| Window Width Dimension | <div><div>1'-11 1/2"</div><div>(597)</div></div> | <div><div>2'-5 1/2"</div><div>(749)</div></div> | <div><div>2'-11 1/2"</div><div>(902)</div></div> | <div><div>3'-5 1/2"</div><div>(1054)</div></div> | <div><div>3'-11 1/2"</div><div>(1207)</div></div> | <div><div>4'-5 1/2"</div><div>(1359)</div></div> | <div><div>4'-11 1/2"</div><div>(1511)</div></div> |
| Minimum Rough Opening  | <div><div>2'-0"</div><div>(610)</div></div>      | <div><div>2'-6"</div><div>(762)</div></div>     | <div><div>3'-0"</div><div>(914)</div></div>      | <div><div>3'-6"</div><div>(1067)</div></div>     | <div><div>4'-0"</div><div>(1219)</div></div>      | <div><div>4'-6"</div><div>(1372)</div></div>     | <div><div>5'-0"</div><div>(1524)</div></div>      |
| Unobstructed Glass     | <div><div>17 1/4"</div><div>(438)</div></div>    | <div><div>23 1/4"</div><div>(591)</div></div>   | <div><div>29 1/4"</div><div>(743)</div></div>    | <div><div>35 1/4"</div><div>(895)</div></div>    | <div><div>41 1/4"</div><div>(1048)</div></div>    | <div><div>47 1/4"</div><div>(1200)</div></div>   | <div><div>53 1/4"</div><div>(1353)</div></div>    |

|                              |                                                              |                                                              |                                                             |                                                             |                                                             |                                                              |                                                              |                                                             |  |
|------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------------------------------------------|--|
| Window Height Shown in Table | CUSTOM SIZES AVAILABLE                                       |                                                              |                                                             |                                                             |                                                             |                                                              |                                                              |                                                             |  |
| Radius                       | 11 3/4" (298)                                                | 14 3/4" (375)                                                | 17 3/4" (451)                                               | 20 3/4" (527)                                               | 23 3/4" (603)                                               | 26 3/4" (679)                                                | 29 3/4" (756)                                                |                                                             |  |
| Chord Height                 | <div><div>11 3/4"</div><div>(298)</div><div></div></div>     | <div><div>14 3/4"</div><div>(375)</div><div></div></div>     | <div><div>17 3/4"</div><div>(451)</div><div></div></div>    | <div><div>20 3/4"</div><div>(527)</div><div></div></div>    | <div><div>23 3/4"</div><div>(603)</div><div></div></div>    | <div><div>26 3/4"</div><div>(679)</div><div></div></div>     | <div><div>29 3/4"</div><div>(756)</div><div></div></div>     |                                                             |  |
| Side Height                  | <div><div>1'-11 1/2"</div><div>(597)</div><div></div></div>  | <div><div>2'-11 1/4"</div><div>(895)</div><div></div></div>  | <div><div>3'-2 1/4"</div><div>(972)</div><div></div></div>  | <div><div>3'-5 1/4"</div><div>(1048)</div><div></div></div> | <div><div>3'-8 1/4"</div><div>(1124)</div><div></div></div> | <div><div>3'-11 1/4"</div><div>(1200)</div><div></div></div> | <div><div>4'-2 1/4"</div><div>(1276)</div><div></div></div>  | <div><div>4'-5 1/4"</div><div>(1353)</div><div></div></div> |  |
|                              | <div><div>2'-5 1/2"</div><div>(749)</div><div></div></div>   | <div><div>3'-5 1/4"</div><div>(1048)</div><div></div></div>  | <div><div>3'-8 1/4"</div><div>(1124)</div><div></div></div> | <div><div>4'-2 1/4"</div><div>(1276)</div><div></div></div> | <div><div>4'-5 1/4"</div><div>(1353)</div><div></div></div> | <div><div>4'-8 1/4"</div><div>(1429)</div><div></div></div>  | <div><div>4'-11 1/4"</div><div>(1505)</div><div></div></div> |                                                             |  |
|                              | <div><div>2'-11 1/2"</div><div>(902)</div><div></div></div>  | <div><div>3'-11 1/4"</div><div>(1200)</div><div></div></div> | <div><div>4'-2 1/4"</div><div>(1276)</div><div></div></div> | <div><div>4'-5 1/4"</div><div>(1353)</div><div></div></div> | <div><div>4'-8 1/4"</div><div>(1429)</div><div></div></div> | <div><div>5'-2 1/4"</div><div>(1581)</div><div></div></div>  | <div><div>5'-5 1/4"</div><div>(1657)</div><div></div></div>  |                                                             |  |
|                              | <div><div>3'-5 1/2"</div><div>(1054)</div><div></div></div>  | <div><div>4'-5 1/4"</div><div>(1353)</div><div></div></div>  | <div><div>4'-8 1/4"</div><div>(1429)</div><div></div></div> | <div><div>5'-2 1/4"</div><div>(1581)</div><div></div></div> | <div><div>5'-5 1/4"</div><div>(1657)</div><div></div></div> | <div><div>5'-8 1/4"</div><div>(1734)</div><div></div></div>  | <div><div>5'-11 1/4"</div><div>(1810)</div><div></div></div> |                                                             |  |
|                              | <div><div>3'-11 1/2"</div><div>(1207)</div><div></div></div> | <div><div>4'-11 1/4"</div><div>(1505)</div><div></div></div> | <div><div>5'-2 1/4"</div><div>(1581)</div><div></div></div> | <div><div>5'-5 1/4"</div><div>(1657)</div><div></div></div> | <div><div>5'-8 1/4"</div><div>(1734)</div><div></div></div> | <div><div>6'-2 1/4"</div><div>(1886)</div><div></div></div>  | <div><div>6'-5 1/4"</div><div>(1962)</div><div></div></div>  |                                                             |  |
|                              | <div><div>4'-5 1/2"</div><div>(1359)</div><div></div></div>  | <div><div>5'-5 1/4"</div><div>(1657)</div><div></div></div>  | <div><div>5'-8 1/4"</div><div>(1734)</div><div></div></div> | <div><div>6'-2 1/4"</div><div>(1886)</div><div></div></div> | <div><div>6'-5 1/4"</div><div>(1962)</div><div></div></div> | <div><div>6'-8 1/4"</div><div>(2038)</div><div></div></div>  | <div><div>6'-11 1/4"</div><div>(2115)</div><div></div></div> |                                                             |  |
|                              | <div><div>4'-11 1/2"</div><div>(1511)</div><div></div></div> | <div><div>5'-11 1/4"</div><div>(1810)</div><div></div></div> | <div><div>6'-2 1/4"</div><div>(1886)</div><div></div></div> | <div><div>6'-5 1/4"</div><div>(1962)</div><div></div></div> | <div><div>6'-8 1/4"</div><div>(2038)</div><div></div></div> | <div><div>7'-2 1/4"</div><div>(2191)</div><div></div></div>  | <div><div>7'-5 1/4"</div><div>(2267)</div><div></div></div>  |                                                             |  |
|                              | 2020                                                         | 2620                                                         | 3020                                                        | 3620                                                        | 4020                                                        | 4620                                                         | 5020                                                         |                                                             |  |
|                              | 2026                                                         | 2626                                                         | 3026                                                        | 3626                                                        | 4026                                                        | 4626                                                         | 5026                                                         |                                                             |  |
|                              | 2030                                                         | 2630                                                         | 3030                                                        | 3630                                                        | 4030                                                        | 4630                                                         | 5030                                                         |                                                             |  |
|                              | 2036                                                         | 2636                                                         | 3036                                                        | 3636                                                        | 4036                                                        | 4636                                                         | 5036                                                         |                                                             |  |
|                              | 2040                                                         | 2640                                                         | 3040                                                        | 3640                                                        | 4040                                                        | 4640                                                         | 5040                                                         |                                                             |  |
|                              | 2046                                                         | 2646                                                         | 3046                                                        | 3646                                                        | 4046                                                        | 4646                                                         | 5046                                                         |                                                             |  |
|                              | 2050                                                         | 2650                                                         | 3050                                                        | 3650                                                        | 4050                                                        | 4650                                                         | 5050                                                         |                                                             |  |

Minimum Rough Opening = Window Height + 1/2" (13)

Unobstructed Glass = Window Height - 6.25" (159)

CUSTOM SIZES AVAILABLE

\* Window Dimension always refers to outside frame-to-frame dimension.

\* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.

\* Dimensions in parentheses are in millimeters.

|                     |                      |
|---------------------|----------------------|
| 5'-5 1/2"<br>(1664) | 5'-11 1/2"<br>(1816) |
| 5'-6"<br>(1676)     | 6'-0"<br>(1829)      |
| 59 1/4"<br>(1505)   | 65 1/4"<br>(1657)    |



Custom-size windows are available in 1/8" (3) increments.

Contact your Andersen supplier for more information.

**For Springline™ and arch windows, the size designation does not reflect**

**the overall window height** (e.g., a 2020 Springline window size has a side height of 1'-11 1/2" and an overall window height of 2'-11 1/4").

Grille patterns shown below. Details shown on pages 83-86.

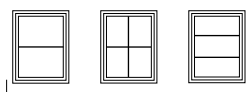
|                  |                   |
|------------------|-------------------|
| 32 3/4" (832)    | 34 3/4" (908)     |
| 4'-8 1/4" (1429) | 4'-11 1/4" (1505) |
| 5620             | 6020              |
| 5'-2 1/4" (1581) | 5'-5 1/4" (1657)  |
| 5626             | 6026              |
| 5'-8 1/4" (1734) | 5'-11 1/4" (1810) |
| 5630             | 6030              |
| 6'-2 1/4" (1886) | 6'-5 1/4" (1962)  |
| 5636             | 6036              |
| 6'-8 1/4" (2038) | 6'-11 1/4" (2115) |
| 5640             | 6040              |
| 7'-2 1/4" (2191) | 7'-5 1/4" (2267)  |
| 5646             | 6046              |
| 7'-8 1/4" (2343) | 7'-11 1/4" (2419) |
| 5650             | 6050              |

## Grille Patterns

|                       | Colonial | Renaissance | Sunburst |
|-----------------------|----------|-------------|----------|
| <b>Half Circle</b>    |          |             |          |
| <b>Quarter Circle</b> |          |             |          |
| <b>Circle</b>         |          |             |          |
| <b>Springline™</b>    |          |             |          |
| <b>Arch</b>           |          |             |          |

**Number of lights and overall pattern varies with window size. Patterns may not be available in all configurations or sizes.** Specialty window patterns may not align with picture window patterns when joined. Specified equal light pattern is available for all shapes except quarter circle. For specified equal light, specify number of same-size rectangles across or down. Custom grille patterns are available for picture and transom windows. For more grille options, see page 14 or visit [andersenwindows.com/grilles](http://andersenwindows.com/grilles).

|                | Prairie A | Colonial | Modified Colonial | Tall Fractional | Short Fractional |
|----------------|-----------|----------|-------------------|-----------------|------------------|
| <b>Transom</b> |           |          |                   |                 |                  |
| <b>Picture</b> |           |          |                   |                 |                  |



Specified Equal Light Examples

- \* Window Dimension always refers to outside frame-to-frame dimension.
- \* Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- \* Dimensions in parentheses are in millimeters.

# PICTURE, TRANSOM & SPECIALTY WINDOWS

**Table of Arch Window Sizes**

Scale 1/8" (3) = 1'-0" (305) – 1:96

Notes on page 79 also apply to this page.

|                        |            |  |           |  |            |  |           |  |            |  |           |  |            |  |
|------------------------|------------|--|-----------|--|------------|--|-----------|--|------------|--|-----------|--|------------|--|
| Window Width Dimension | 1'-11 1/2" |  | 2'-5 1/2" |  | 2'-11 1/2" |  | 3'-5 1/2" |  | 3'-11 1/2" |  | 4'-5 1/2" |  | 4'-11 1/2" |  |
| Minimum Rough Opening  | (597)      |  | (749)     |  | (902)      |  | (1054)    |  | (1207)     |  | (1359)    |  | (1511)     |  |
|                        | 2'-0"      |  | 2'-6"     |  | 3'-0"      |  | 3'-6"     |  | 4'-0"      |  | 4'-6"     |  | 5'-0"      |  |
|                        | (610)      |  | (762)     |  | (914)      |  | (1067)    |  | (1219)     |  | (1372)    |  | (1524)     |  |
| Unobstructed Glass     | 17 1/4"    |  | 23 1/4"   |  | 29 1/4"    |  | 35 1/4"   |  | 41 1/4"    |  | 47 1/4"   |  | 53 1/4"    |  |
|                        | (438)      |  | (591)     |  | (743)      |  | (895)     |  | (1048)     |  | (1200)    |  | (1353)     |  |

|                                                   |                        |                           |                            |                           |                            |                           |                            |                            |  |  |  |  |  |  |
|---------------------------------------------------|------------------------|---------------------------|----------------------------|---------------------------|----------------------------|---------------------------|----------------------------|----------------------------|--|--|--|--|--|--|
| Window Height Shown in Table                      | CUSTOM SIZES AVAILABLE |                           |                            |                           |                            |                           |                            |                            |  |  |  |  |  |  |
|                                                   | Radius                 | 23 1/2" (597)             | 29 1/2" (749)              | 35 1/2" (902)             | 41 1/2" (1054)             | 47 1/2" (1207)            | 53 1/2" (1359)             | 59 1/2" (1511)             |  |  |  |  |  |  |
| Chord Height                                      |                        | 1'-2 21/32" (352)<br>(80) | 1'-3 15/16" (392)<br>(100) | 1'-4 3/4" (413)<br>(121)  | 1'-5 1/16" (433)<br>(141)  | 1'-5 7/8" (454)<br>(162)  | 1'-6 21/32" (474)<br>(182) | 1'-7 15/32" (495)<br>(202) |  |  |  |  |  |  |
| Side Height                                       |                        | 1'-5 1/2" (445)<br>(292)  | 1'-9 7/16" (545)<br>(392)  | 1'-10 1/4" (565)<br>(413) | 1'-11 1/16" (586)<br>(433) | 1'-11 7/8" (606)<br>(454) | 2'-0 21/32" (627)<br>(474) | 2'-1 15/32" (647)<br>(495) |  |  |  |  |  |  |
| Unobstructed Glass = Window Height - 6.25" (159)  |                        | 2010                      | 2610                       | 3010                      | 3610                       | 4010                      | 4610                       | 5010                       |  |  |  |  |  |  |
| Minimum Rough Opening = Window Height + 1/2" (13) |                        | 2016                      | 2616                       | 3016                      | 3616                       | 4016                      | 4616                       | 5016                       |  |  |  |  |  |  |
| CUSTOM SIZES AVAILABLE                            |                        | 2020                      | 2620                       | 3020                      | 3620                       | 4020                      | 4620                       | 5020                       |  |  |  |  |  |  |
|                                                   |                        | 2026                      | 2626                       | 3026                      | 3626                       | 4026                      | 4626                       | 5026                       |  |  |  |  |  |  |
|                                                   |                        | 2030                      | 2630                       | 3030                      | 3630                       | 4030                      | 4630                       | 5030                       |  |  |  |  |  |  |
|                                                   |                        | 2036                      | 2636                       | 3036                      | 3636                       | 4036                      | 4636                       | 5036                       |  |  |  |  |  |  |
|                                                   |                        | 2040                      | 2640                       | 3040                      | 3640                       | 4040                      | 4640                       | 5040                       |  |  |  |  |  |  |
|                                                   |                        | 2046                      | 2646                       | 3046                      | 3646                       | 4046                      | 4646                       | 5046                       |  |  |  |  |  |  |
|                                                   |                        | 2050                      | 2650                       | 3050                      | 3650                       | 4050                      | 4650                       | 5050                       |  |  |  |  |  |  |
|                                                   |                        | 2056                      | 2656                       | 3056                      | 3656                       | 4056                      | 4656                       | 5056                       |  |  |  |  |  |  |
|                                                   |                        | 2060                      | 2660                       | 3060                      | 3660                       | 4060                      | 4660                       | 5060                       |  |  |  |  |  |  |



Notes on page 79 also apply to this page.

|                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>5'-5 1/2" (1664)</p> <p>5'-6" (1676)</p> <p>59 1/4" (1505)</p>                                                                                                                                                                                                                                                            | <p>5'-11 1/2" (1816)</p> <p>6'-0" (1829)</p> <p>65 1/4" (1657)</p>                                                                                                                                                                                                                                                         | <p>6'-5 1/2" (1969)</p> <p>6'-6" (1981)</p> <p>71 1/4" (1810)</p>                                                                                                                                                                                                                                               | <p>6'-11 1/2" (2121)</p> <p>7'-0" (2134)</p> <p>77 1/4" (1962)</p>                                                                                                                                                                                                                                                     | <p>7'-5 1/2" (2273)</p> <p>7'-6" (2286)</p> <p>83 1/4" (2115)</p>                                                                                                                                                                                                                                | <p>7'-11 1/2" (2426)</p> <p>8'-0" (2438)</p> <p>89 1/4" (2267)</p>                                                                                                                                                                                                                                                           |
| <p>65 1/2" (1664)</p> <p>1'-8 9/32" (223)</p> <p>1'-9 3/32" (515)</p> <p>2'-2 9/32" (667)</p> <p>2'-8 9/32" (820)</p> <p>3'-2 9/32" (972)</p> <p>3'-8 9/32" (1125)</p> <p>4'-2 9/32" (1277)</p> <p>4'-8 9/32" (1429)</p> <p>5'-2 9/32" (1582)</p> <p>5'-8 9/32" (1734)</p> <p>6'-2 9/32" (1887)</p> <p>6'-8 9/32" (2039)</p> | <p>71 1/2" (1816)</p> <p>9 19/32" (243)</p> <p>1'-9 3/32" (535)</p> <p>2'-3 3/32" (688)</p> <p>2'-9 3/32" (840)</p> <p>3'-3 3/32" (993)</p> <p>3'-9 3/32" (1145)</p> <p>4'-3 3/32" (1297)</p> <p>4'-9 3/32" (1450)</p> <p>5'-3 3/32" (1602)</p> <p>5'-9 3/32" (1755)</p> <p>6'-3 3/32" (1907)</p> <p>6'-9 3/32" (2059)</p> | <p>77 1/2" (1969)</p> <p>10 3/8" (264)</p> <p>1'-9 7/8" (556)</p> <p>2'-3 7/8" (708)</p> <p>2'-9 7/8" (861)</p> <p>3'-3 7/8" (1013)</p> <p>3'-9 7/8" (1165)</p> <p>4'-3 7/8" (1318)</p> <p>4'-9 7/8" (1470)</p> <p>5'-3 7/8" (1623)</p> <p>5'-9 7/8" (1775)</p> <p>6'-3 7/8" (1927)</p> <p>6'-9 7/8" (2080)</p> | <p>83 1/2" (2121)</p> <p>1'-10 11/16" (576)</p> <p>2'-4 11/16" (729)</p> <p>2'-10 11/16" (881)</p> <p>3'-4 11/16" (1033)</p> <p>3'-10 11/16" (1186)</p> <p>4'-4 11/16" (1338)</p> <p>4'-10 11/16" (1491)</p> <p>5'-4 11/16" (1643)</p> <p>5'-10 11/16" (1795)</p> <p>6'-4 11/16" (1948)</p> <p>6'-10 11/16" (2100)</p> | <p>89 1/2" (2273)</p> <p>1'-11 1/2" (305)</p> <p>2'-5 1/2" (749)</p> <p>2'-11 1/2" (901)</p> <p>3'-5 1/2" (1054)</p> <p>3'-11 1/2" (1206)</p> <p>4'-5 1/2" (1359)</p> <p>4'-11 1/2" (1511)</p> <p>5'-5 1/2" (1663)</p> <p>5'-11 1/2" (1816)</p> <p>6'-5 1/2" (1968)</p> <p>6'-11 1/2" (2121)</p> | <p>95 1/2" (2426)</p> <p>12 25/32" (325)</p> <p>2'-0 9/32" (617)</p> <p>2'-6 9/32" (769)</p> <p>3'-0 9/32" (922)</p> <p>3'-6 9/32" (1074)</p> <p>4'-0 9/32" (1227)</p> <p>4'-6 9/32" (1379)</p> <p>5'-0 9/32" (1531)</p> <p>5'-6 9/32" (1684)</p> <p>6'-0 9/32" (1836)</p> <p>6'-6 9/32" (1989)</p> <p>7'-0 9/32" (2141)</p> |
| <p>5610</p> <p>5616</p> <p>5620</p> <p>5626</p> <p>5630</p> <p>5636</p> <p>5640</p> <p>5646</p> <p>5650</p> <p>5656</p> <p>5660</p>                                                                                                                                                                                          | <p>6010</p> <p>6016</p> <p>6020</p> <p>6026</p> <p>6030</p> <p>6036</p> <p>6040</p> <p>6046</p> <p>6050</p> <p>6056</p> <p>6060</p>                                                                                                                                                                                        | <p>6610</p> <p>6616</p> <p>6620</p> <p>6626</p> <p>6630</p> <p>6636</p> <p>6640</p> <p>6646</p> <p>6650</p> <p>6656</p> <p>6660</p>                                                                                                                                                                             | <p>7010</p> <p>7016</p> <p>7020</p> <p>7026</p> <p>7030</p> <p>7036</p> <p>7040</p> <p>7046</p> <p>7050</p> <p>7056</p> <p>7060</p>                                                                                                                                                                                    | <p>7610</p> <p>7616</p> <p>7620</p> <p>7626</p> <p>7630</p> <p>7636</p> <p>7640</p> <p>7646</p> <p>7650</p> <p>7656</p> <p>7660</p>                                                                                                                                                              | <p>8010</p> <p>8016</p> <p>8020</p> <p>8026</p> <p>8030</p> <p>8036</p> <p>8040</p> <p>8046</p> <p>8050</p> <p>8056</p> <p>8060</p>                                                                                                                                                                                          |

PICTURE, TRANSOM & SPECIALTY WINDOWS

Arch Window Area Specifications

| Window Number | Glass Area<br>Sq. Ft./ (m²) |        | Overall Window Area<br>Sq. Ft./ (m²) |        |
|---------------|-----------------------------|--------|--------------------------------------|--------|
| 2010          | 0.93                        | (0.09) | 2.22                                 | (0.21) |
| 2016          | 1.65                        | (0.15) | 3.20                                 | (0.30) |
| 2020          | 2.37                        | (0.22) | 4.18                                 | (0.39) |
| 2026          | 3.09                        | (0.29) | 5.16                                 | (0.48) |
| 2030          | 3.81                        | (0.35) | 6.14                                 | (0.57) |
| 2036          | 4.52                        | (0.42) | 7.12                                 | (0.66) |
| 2040          | 5.24                        | (0.49) | 8.10                                 | (0.75) |
| 2046          | 5.96                        | (0.55) | 9.08                                 | (0.84) |
| 2050          | 6.68                        | (0.62) | 10.06                                | (0.93) |
| 2056          | 7.40                        | (0.69) | 11.04                                | (1.03) |
| 2060          | 8.12                        | (0.75) | 12.02                                | (1.12) |
| 2610          | 1.34                        | (0.12) | 2.90                                 | (0.27) |
| 2616          | 2.31                        | (0.21) | 4.13                                 | (0.38) |
| 2620          | 3.28                        | (0.30) | 5.36                                 | (0.50) |
| 2626          | 4.25                        | (0.39) | 6.59                                 | (0.61) |
| 2630          | 5.22                        | (0.48) | 7.82                                 | (0.73) |
| 2636          | 6.19                        | (0.57) | 9.05                                 | (0.84) |
| 2640          | 7.16                        | (0.66) | 10.28                                | (0.95) |
| 2646          | 8.12                        | (0.75) | 11.51                                | (1.07) |
| 2650          | 9.09                        | (0.84) | 12.74                                | (1.18) |
| 2656          | 10.06                       | (0.93) | 13.97                                | (1.30) |
| 2660          | 11.03                       | (1.02) | 15.20                                | (1.41) |
| 3010          | 1.80                        | (0.17) | 3.63                                 | (0.34) |
| 3016          | 3.02                        | (0.28) | 5.11                                 | (0.47) |
| 3020          | 4.24                        | (0.39) | 6.59                                 | (0.61) |
| 3026          | 5.46                        | (0.51) | 8.07                                 | (0.75) |
| 3030          | 6.68                        | (0.62) | 9.54                                 | (0.89) |
| 3036          | 7.90                        | (0.73) | 11.02                                | (1.02) |
| 3040          | 9.11                        | (0.85) | 12.50                                | (1.16) |
| 3046          | 10.33                       | (0.96) | 13.98                                | (1.30) |
| 3050          | 11.55                       | (1.07) | 15.46                                | (1.44) |
| 3056          | 12.77                       | (1.19) | 16.94                                | (1.57) |
| 3060          | 13.99                       | (1.30) | 18.42                                | (1.71) |
| 3610          | 2.30                        | (0.21) | 4.40                                 | (0.41) |
| 3616          | 3.77                        | (0.35) | 6.13                                 | (0.57) |
| 3620          | 5.24                        | (0.49) | 7.86                                 | (0.73) |
| 3626          | 6.71                        | (0.62) | 9.59                                 | (0.89) |
| 3630          | 8.18                        | (0.76) | 11.31                                | (1.05) |
| 3636          | 9.65                        | (0.90) | 13.04                                | (1.21) |
| 3640          | 11.12                       | (1.03) | 14.77                                | (1.37) |
| 3646          | 12.59                       | (1.17) | 16.50                                | (1.53) |
| 3650          | 14.05                       | (1.31) | 18.23                                | (1.69) |
| 3656          | 15.52                       | (1.44) | 19.96                                | (1.85) |
| 3660          | 16.99                       | (1.58) | 21.69                                | (2.02) |
| 4010          | 2.85                        | (0.27) | 5.21                                 | (0.48) |
| 4016          | 4.57                        | (0.42) | 7.19                                 | (0.67) |
| 4020          | 6.29                        | (0.58) | 9.17                                 | (0.85) |
| 4026          | 8.01                        | (0.74) | 11.15                                | (1.04) |
| 4030          | 9.73                        | (0.90) | 13.13                                | (1.22) |
| 4036          | 11.45                       | (1.06) | 15.11                                | (1.40) |
| 4040          | 13.17                       | (1.22) | 17.09                                | (1.59) |
| 4046          | 14.88                       | (1.38) | 19.07                                | (1.77) |
| 4050          | 16.60                       | (1.54) | 21.05                                | (1.96) |
| 4056          | 18.32                       | (1.70) | 23.03                                | (2.14) |
| 4060          | 20.04                       | (1.86) | 25.00                                | (2.32) |
| 4610          | 3.45                        | (0.32) | 6.07                                 | (0.56) |
| 4616          | 5.42                        | (0.50) | 8.30                                 | (0.77) |
| 4620          | 7.38                        | (0.69) | 10.53                                | (0.98) |
| 4626          | 9.35                        | (0.87) | 12.76                                | (1.19) |
| 4630          | 11.32                       | (1.05) | 14.99                                | (1.39) |
| 4636          | 13.29                       | (1.23) | 17.22                                | (1.60) |

| Window Number | Glass Area<br>Sq. Ft./ (m²) |        | Overall Window Area<br>Sq. Ft./ (m²) |        |
|---------------|-----------------------------|--------|--------------------------------------|--------|
| 4640          | 15.26                       | (1.42) | 19.45                                | (1.81) |
| 4646          | 17.23                       | (1.60) | 21.68                                | (2.01) |
| 4650          | 19.20                       | (1.78) | 23.91                                | (2.22) |
| 4656          | 21.17                       | (1.97) | 26.14                                | (2.43) |
| 4660          | 23.13                       | (2.15) | 28.36                                | (2.64) |
| 5010          | 4.09                        | (0.38) | 6.98                                 | (0.65) |
| 5016          | 6.30                        | (0.59) | 9.46                                 | (0.88) |
| 5020          | 8.52                        | (0.79) | 11.94                                | (1.11) |
| 5026          | 10.74                       | (1.00) | 14.42                                | (1.34) |
| 5030          | 12.96                       | (1.20) | 16.90                                | (1.57) |
| 5036          | 15.18                       | (1.41) | 19.37                                | (1.80) |
| 5040          | 17.40                       | (1.62) | 21.85                                | (2.03) |
| 5046          | 19.62                       | (1.82) | 24.33                                | (2.26) |
| 5050          | 21.84                       | (2.03) | 26.81                                | (2.49) |
| 5056          | 24.05                       | (2.23) | 29.29                                | (2.72) |
| 5060          | 26.27                       | (2.44) | 31.77                                | (2.95) |
| 5610          | 4.77                        | (0.44) | 7.93                                 | (0.74) |
| 5616          | 7.24                        | (0.67) | 10.66                                | (0.99) |
| 5620          | 9.71                        | (0.90) | 13.39                                | (1.24) |
| 5626          | 12.18                       | (1.13) | 16.12                                | (1.50) |
| 5630          | 14.65                       | (1.36) | 18.85                                | (1.75) |
| 5636          | 17.11                       | (1.59) | 21.58                                | (2.00) |
| 5640          | 19.58                       | (1.82) | 24.30                                | (2.26) |
| 5646          | 22.05                       | (2.05) | 27.03                                | (2.51) |
| 5650          | 24.52                       | (2.28) | 29.76                                | (2.77) |
| 5656          | 26.99                       | (2.51) | 32.49                                | (3.02) |
| 5660          | 29.46                       | (2.74) | 35.22                                | (3.27) |
| 6010          | 5.50                        | (0.51) | 8.93                                 | (0.83) |
| 6016          | 8.22                        | (0.76) | 11.91                                | (1.11) |
| 6020          | 10.94                       | (1.02) | 14.88                                | (1.38) |
| 6026          | 13.66                       | (1.27) | 17.86                                | (1.66) |
| 6030          | 16.38                       | (1.52) | 20.84                                | (1.94) |
| 6036          | 19.09                       | (1.77) | 23.82                                | (2.21) |
| 6040          | 21.81                       | (2.03) | 26.80                                | (2.49) |
| 6046          | 24.53                       | (2.28) | 29.78                                | (2.77) |
| 6050          | 27.25                       | (2.53) | 32.76                                | (3.04) |
| 6056          | 29.97                       | (2.78) | 35.74                                | (3.32) |
| 6060          | 32.69                       | (3.04) | 38.72                                | (3.60) |
| 6610          | 6.27                        | (0.58) | 9.97                                 | (0.93) |
| 6616          | 9.24                        | (0.86) | 13.20                                | (1.23) |
| 6620          | 12.21                       | (1.13) | 16.43                                | (1.53) |
| 6626          | 15.18                       | (1.41) | 19.66                                | (1.83) |
| 6630          | 18.15                       | (1.69) | 22.88                                | (2.13) |
| 6636          | 21.12                       | (1.96) | 26.11                                | (2.43) |
| 6640          | 24.09                       | (2.24) | 29.34                                | (2.73) |
| 6646          | 27.06                       | (2.51) | 32.57                                | (3.03) |
| 6650          | 30.02                       | (2.79) | 35.80                                | (3.33) |
| 6656          | 32.99                       | (3.07) | 39.03                                | (3.63) |
| 6660          | 35.96                       | (3.34) | 42.26                                | (3.93) |
| 7010          | 7.10                        | (0.66) | 11.05                                | (1.03) |
| 7016          | 10.31                       | (0.96) | 14.53                                | (1.35) |
| 7020          | 13.53                       | (1.26) | 18.01                                | (1.67) |
| 7026          | 16.75                       | (1.56) | 21.49                                | (2.00) |
| 7030          | 19.97                       | (1.86) | 24.97                                | (2.32) |
| 7036          | 23.19                       | (2.15) | 28.45                                | (2.64) |
| 7040          | 26.41                       | (2.45) | 31.93                                | (2.97) |
| 7046          | 29.63                       | (2.75) | 35.41                                | (3.29) |
| 7050          | 32.85                       | (3.05) | 38.89                                | (3.61) |
| 7056          | 36.06                       | (3.35) | 42.37                                | (3.94) |
| 7060          | 39.28                       | (3.65) | 45.85                                | (4.26) |
| 7610          | 7.96                        | (0.74) | 12.19                                | (1.13) |

| Window Number | Glass Area<br>Sq. Ft./ (m²) |        | Overall Window Area<br>Sq. Ft./ (m²) |        |
|---------------|-----------------------------|--------|--------------------------------------|--------|
| 7616          | 11.43                       | (1.06) | 15.92                                | (1.48) |
| 7620          | 14.90                       | (1.38) | 19.64                                | (1.83) |
| 7626          | 18.37                       | (1.71) | 23.37                                | (2.17) |
| 7630          | 21.84                       | (2.03) | 27.10                                | (2.52) |
| 7636          | 25.30                       | (2.35) | 30.83                                | (2.86) |
| 7640          | 28.77                       | (2.67) | 34.56                                | (3.21) |
| 7646          | 32.24                       | (3.00) | 38.29                                | (3.56) |
| 7650          | 35.71                       | (3.32) | 42.02                                | (3.90) |
| 7656          | 39.18                       | (3.64) | 45.75                                | (4.25) |
| 7660          | 42.65                       | (3.96) | 49.48                                | (4.60) |
| 8010          | 8.87                        | (0.82) | 13.36                                | (1.24) |
| 8016          | 12.59                       | (1.17) | 17.34                                | (1.61) |
| 8020          | 16.31                       | (1.52) | 21.32                                | (1.98) |
| 8026          | 20.03                       | (1.86) | 25.30                                | (2.35) |
| 8030          | 23.75                       | (2.21) | 29.28                                | (2.72) |
| 8036          | 27.47                       | (2.55) | 33.26                                | (3.09) |
| 8040          | 31.18                       | (2.90) | 37.24                                | (3.46) |
| 8046          | 34.90                       | (3.24) | 41.22                                | (3.83) |
| 8050          | 38.62                       | (3.59) | 45.20                                | (4.20) |
| 8056          | 42.34                       | (3.93) | 49.18                                | (4.57) |
| 8060          | 46.06                       | (4.28) | 53.16                                | (4.94) |

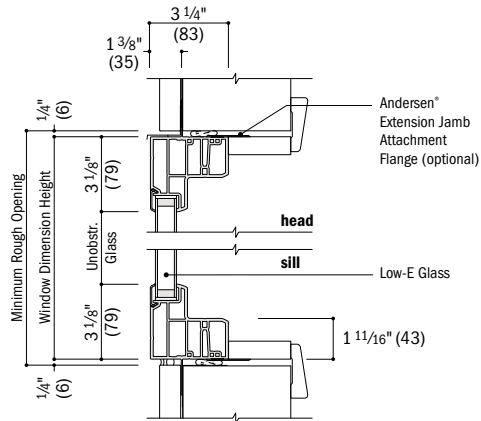
• Dimensions in parentheses are in square meters.

For picture, transom, half circle, quarter circle, circle and Springline™ window specifications, see pages 70-73.

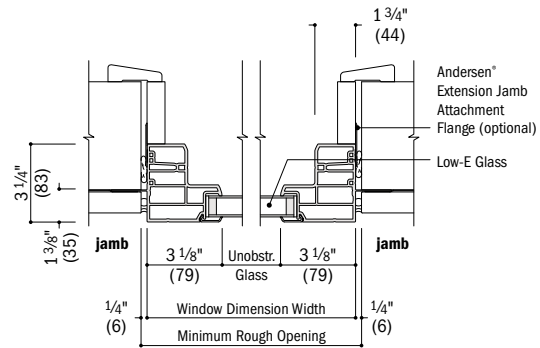
## Picture, Transom and Specialty Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

### 1 3/8" Flange Setback

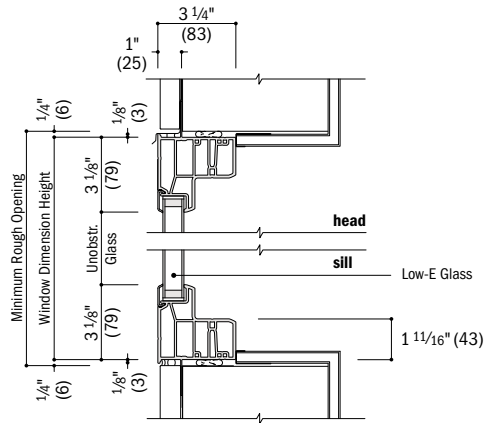


Vertical Section

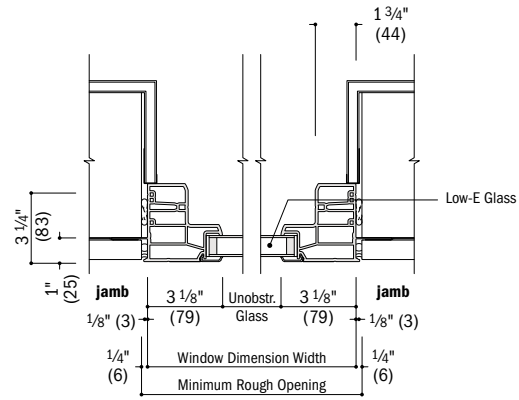


Horizontal Section

### 1" Flange Setback With Stucco Key



Vertical Section  
Stucco Exterior



Horizontal Section  
Stucco Exterior

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

Scale 1 1/2" (38) = 1'-0" (305) - 1:8

### Vertical Section

**Horizontal Section**  
Existing Framed Opening

### Vertical Section

Existing Window Opening

**Horizontal Section**  
Existing Window Opening

Installation accessories are available for windows with insert and flush fin frames; see page 120.

**See pages 88-93 for joining details.**

### Vertical Section

Existing Aluminum Frame Window Opening

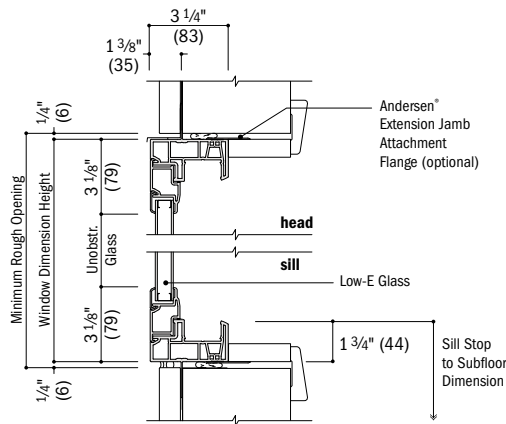
**Horizontal Section**  
Existing Aluminum Frame Window Opening

- \* Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- \* **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- \* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- \* Dimensions in parentheses are in millimeters.
- \* Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

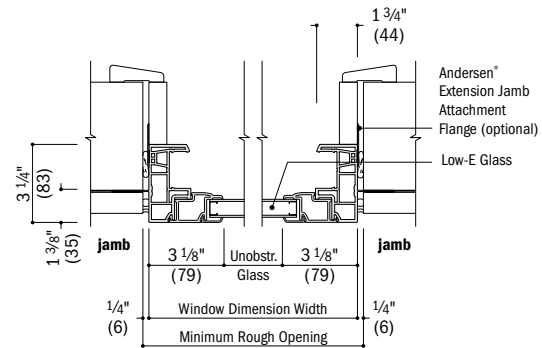
## Twin and Triple Transom Window Details – New Construction

Scale 1 1/2" (38) = 1'-0" (305) – 1:8

### 1 3/8" Flange Setback

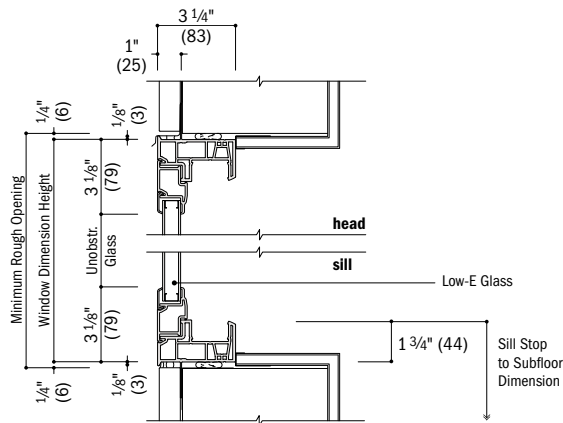


Vertical Section

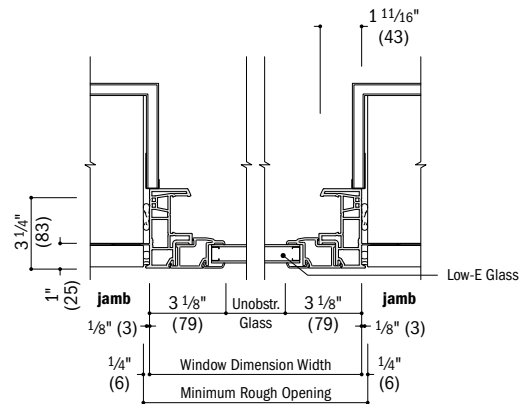


Horizontal Section

### 1" Flange Setback With Stucco Key

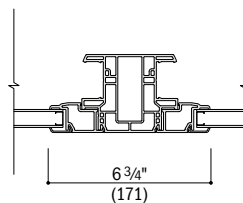


Vertical Section  
Stucco Exterior



Horizontal Section  
Stucco Exterior

### Integral



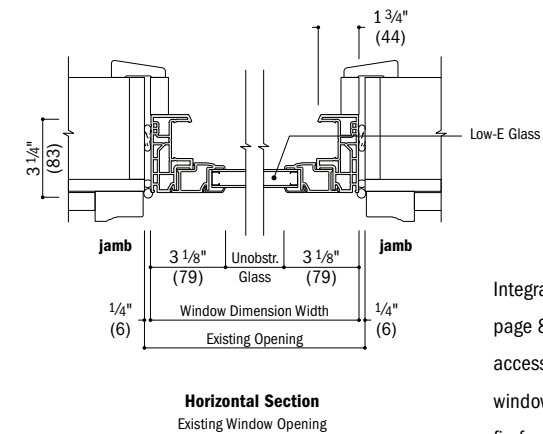
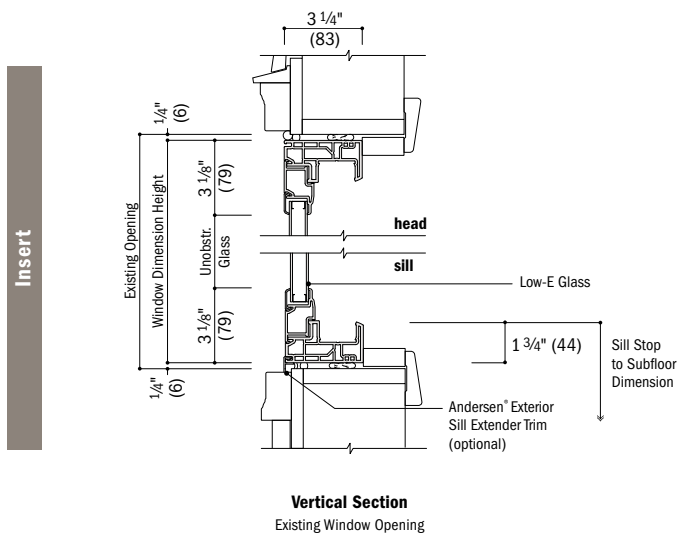
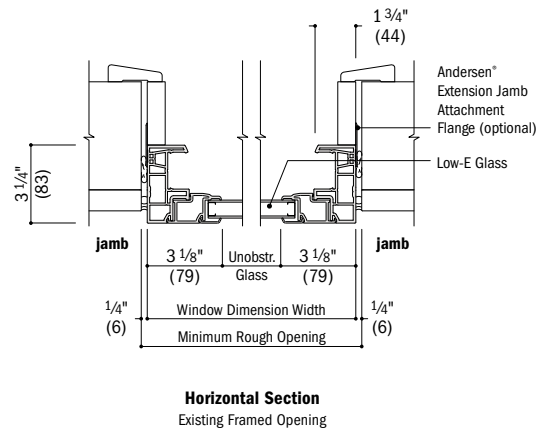
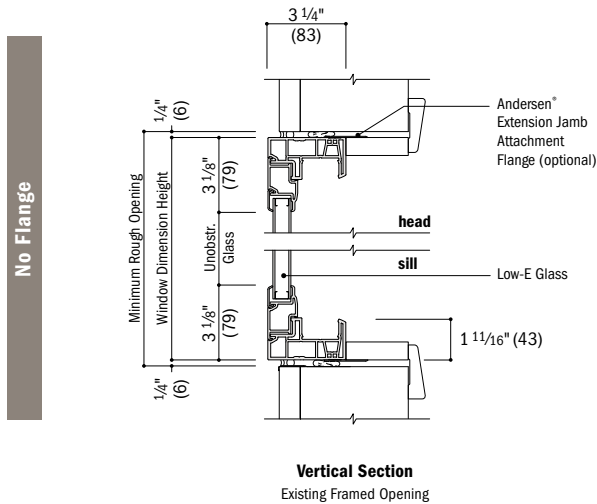
Horizontal Section  
Twin/Triple Transom

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete window installation as shown but may not be included with window. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Dimensions in parentheses are in millimeters.

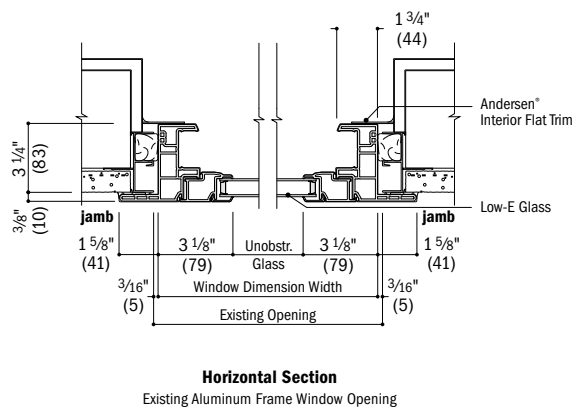
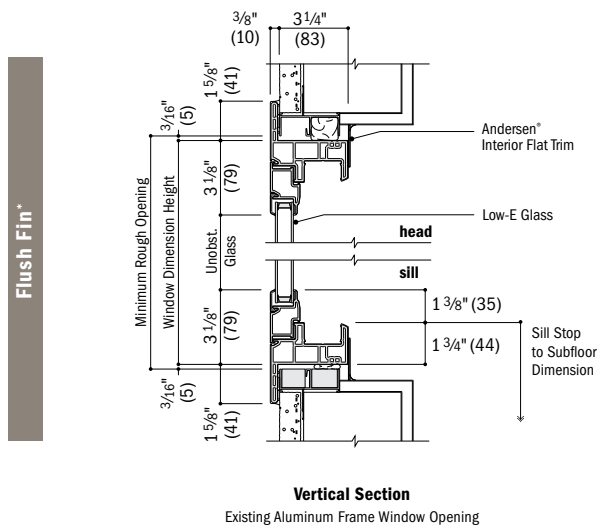
# PICTURE, TRANSOM & SPECIALTY WINDOWS

## Twin and Triple Transom Window Details - Replacement

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



Integral detail shown on page 85. Installation accessories are available for windows with insert and flush fin windows with insert and flush fin frames; see page 120.



See pages 88-93 for joining details.

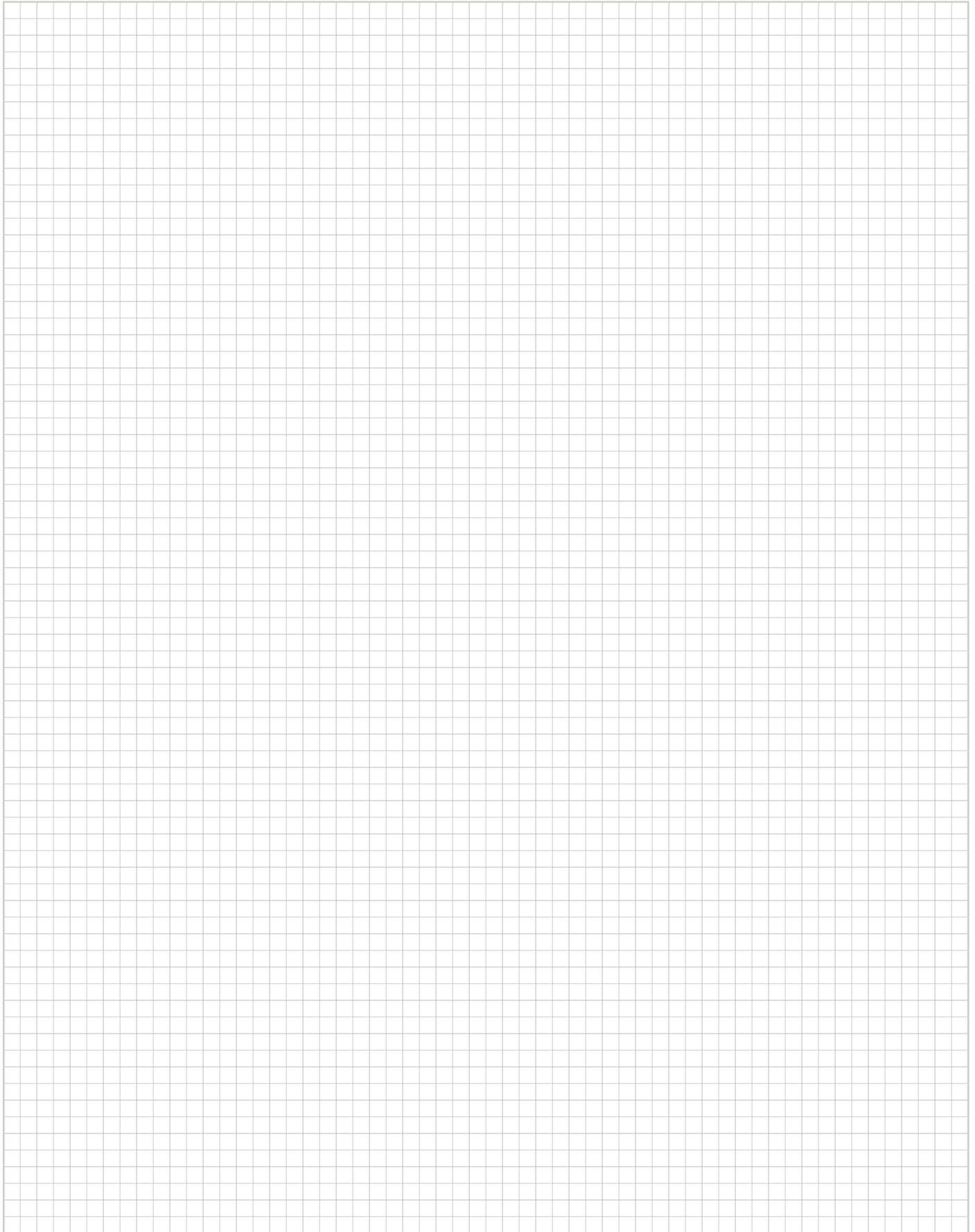
\*Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

\*Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.

\*Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

\*Dimensions in parentheses are in millimeters.

\*Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.





# WINDOW JOINING DETAILS

## Vertical (ribbon) Fiberglass Joining Details – Non-Reinforced

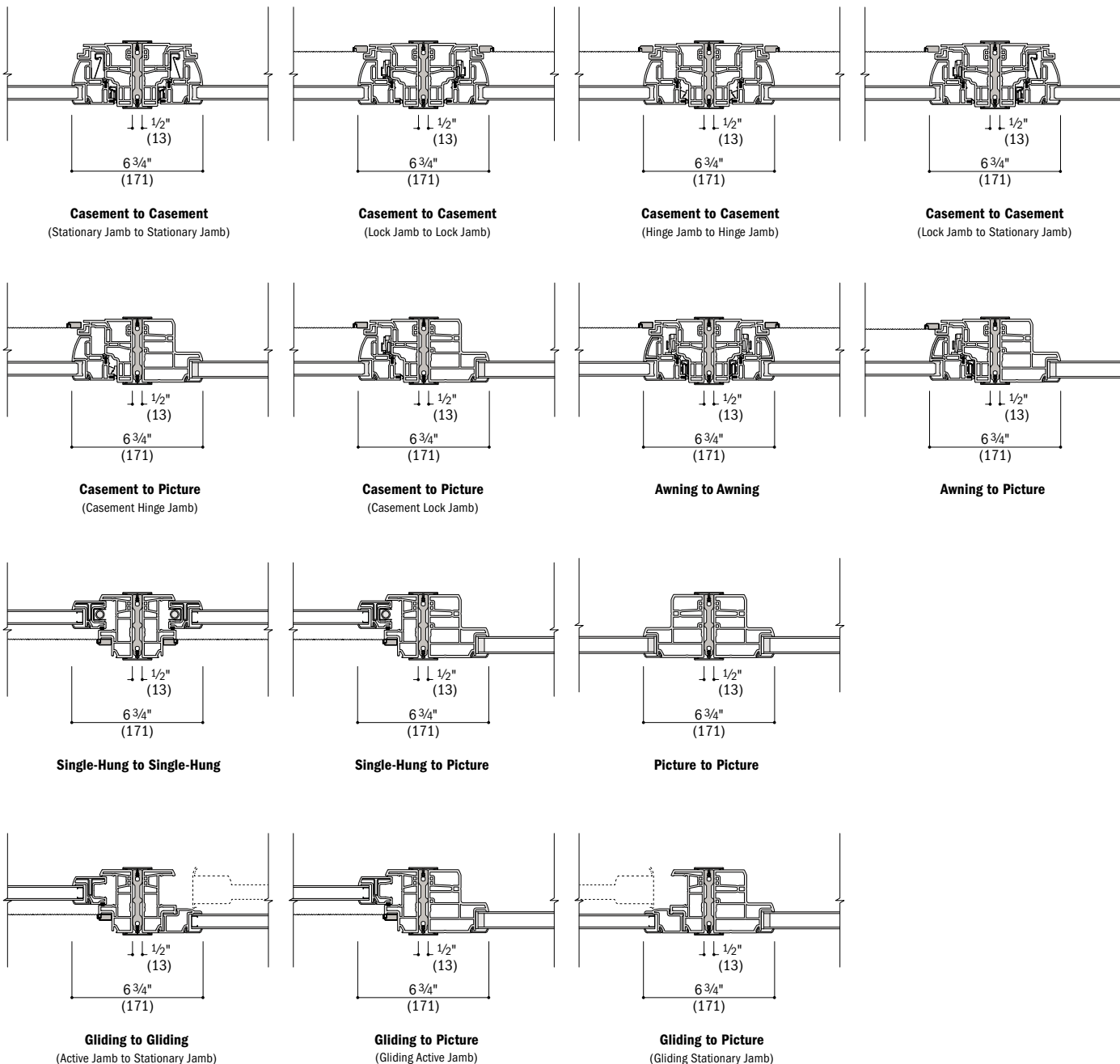
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 1/2" (13) per join.

**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

### FRAME TYPES: 1 3/8" Flange Setback, 1" Flange Setback With Stucco Key, No Flange and Insert



\* Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

\* **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).

\* Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

\* Dimensions in parentheses are in millimeters.

## Horizontal (stack) Fiberglass Joining Details – Non-Reinforced

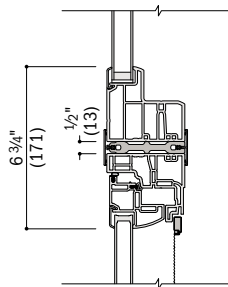
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 1/2" (13) per join.

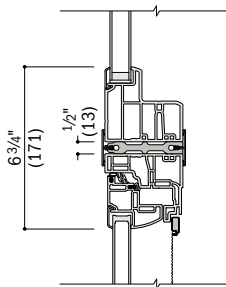
**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

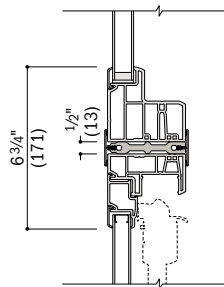
### FRAME TYPES: 1 3/8" Flange Setback, 1" Flange Setback With Stucco Key, No Flange and Insert



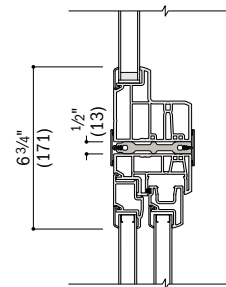
**Picture/Specialty Over Casement**



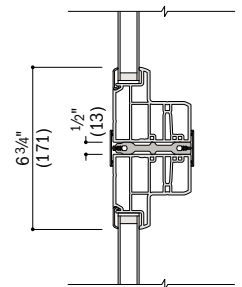
**Picture/Specialty Over Awning**



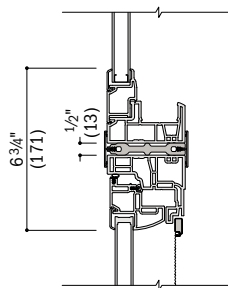
**Picture/Specialty Over Single-Hung**



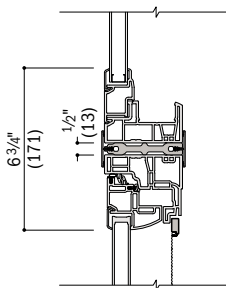
**Picture/Specialty Over Gliding**



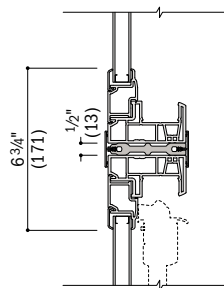
**Picture/Specialty Over Picture**



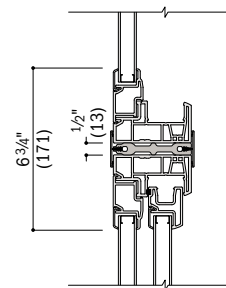
**Transom Over Casement**



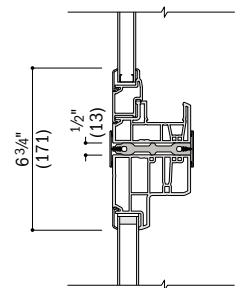
**Transom Over Awning**



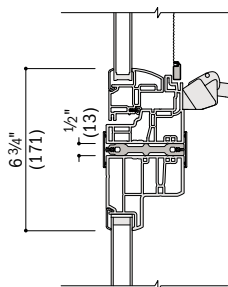
**Transom Over Single-Hung**



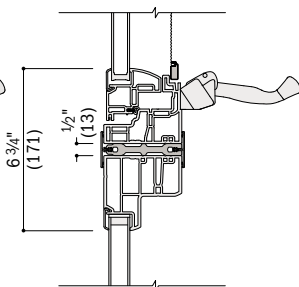
**Transom Over Gliding**



**Transom Over Picture**



**Casement Over Picture**



**Awning Over Picture**

For more information on joining, refer to the Combination Designs section starting on page 107.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- Dimensions in parentheses are in millimeters.

# WINDOW JOINING DETAILS

## Vertical (ribbon) Fiberglass Joining Details – Non-Reinforced

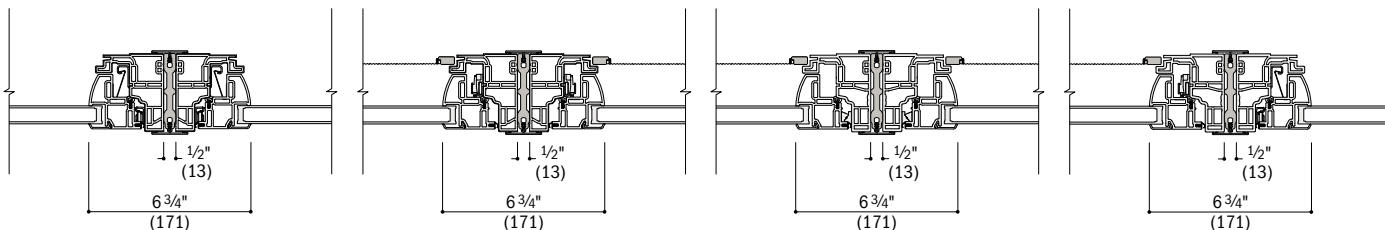
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 1/2" (13) per join.

**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

### FRAME TYPE: Flush Fin\*

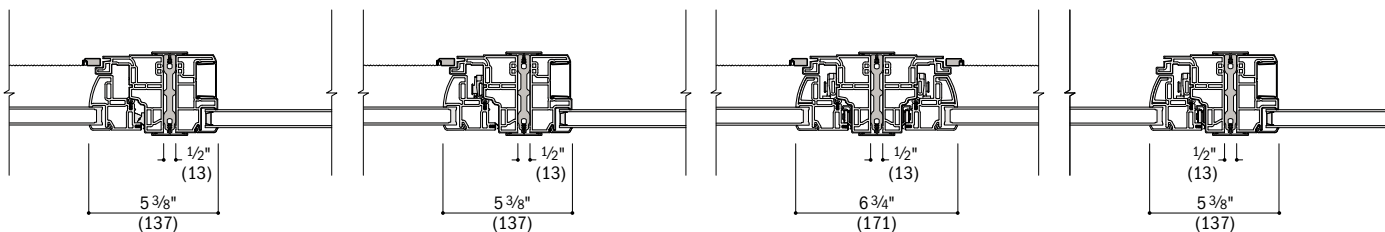


**Casement to Casement**  
(Stationary Jamb to Stationary Jamb)

**Casement to Casement**  
(Lock Jamb to Lock Jamb)

**Casement to Casement**  
(Hinge Jamb to Hinge Jamb)

**Casement to Casement**  
(Lock Jamb to Stationary Jamb)

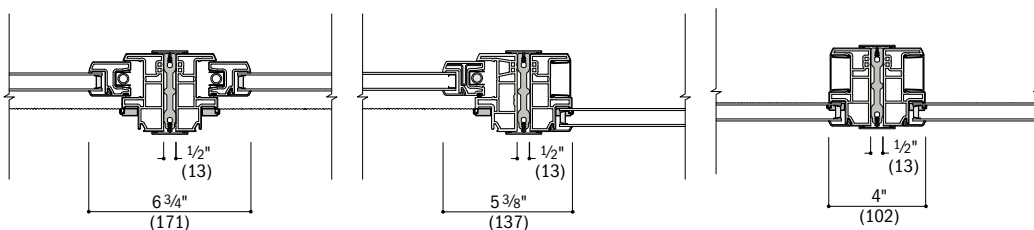


**Casement to Picture**  
(Casement Hinge Jamb)

**Casement to Picture**  
(Casement Lock Jamb)

**Awning to Awning**

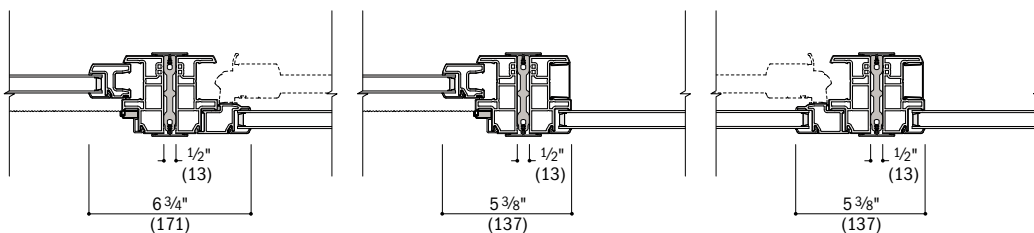
**Awning to Picture**



**Single-Hung to Single-Hung**

**Single-Hung to Picture**

**Picture to Picture**



**Gliding to Gliding**  
(Active Jamb to Stationary Jamb)

**Gliding to Picture**  
(Gliding Active Jamb)

**Gliding to Picture**  
(Gliding Stationary Jamb)

\*Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

• **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on pages 121.**

• Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

• Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

• Dimensions in parentheses are in millimeters.

\*Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

## Horizontal (stack) Fiberglass Joining Details – Non-Reinforced

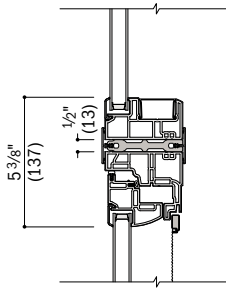
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 1/2" (13) per join.

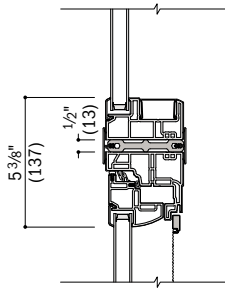
**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

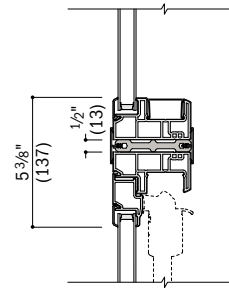
### FRAME TYPE: Flush Fin\*



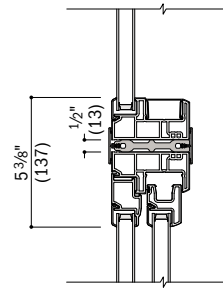
**Picture/Specialty Over Casement**



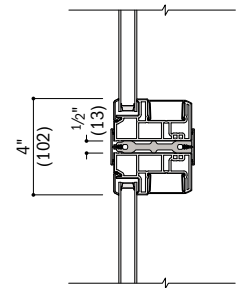
**Picture/Specialty Over Awning**



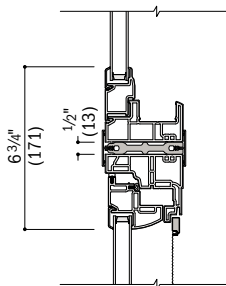
**Picture/Specialty Over Single-Hung**



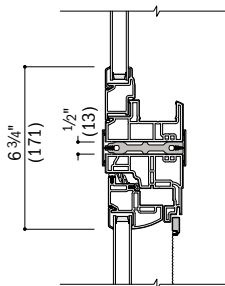
**Picture/Specialty Over Gliding**



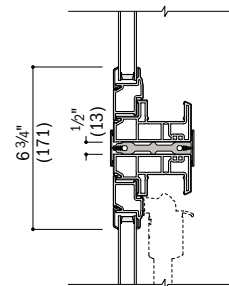
**Picture/Specialty Over Picture**



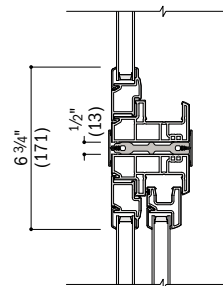
**Transom Over Casement**



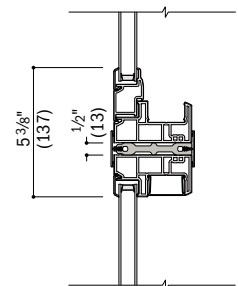
**Transom Over Awning**



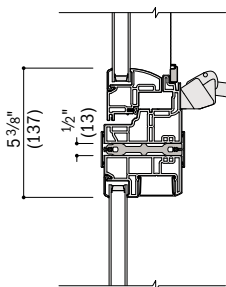
**Transom Over Single-Hung**



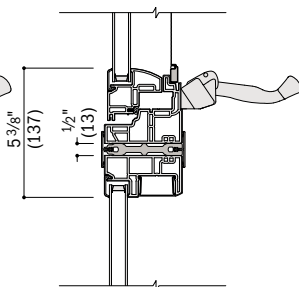
**Transom Over Gliding**



**Transom Over Picture**



**Casement Over Picture**



**Awning Over Picture**

For more information on joining, refer to the Combination Designs section starting on page 107.

\* Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.

\* Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

\* Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

\* Dimensions in parentheses are in millimeters.

\* Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# WINDOW JOINING DETAILS

## Vertical (ribbon) Easy Connect Fiberglass Joining Details – Reinforced

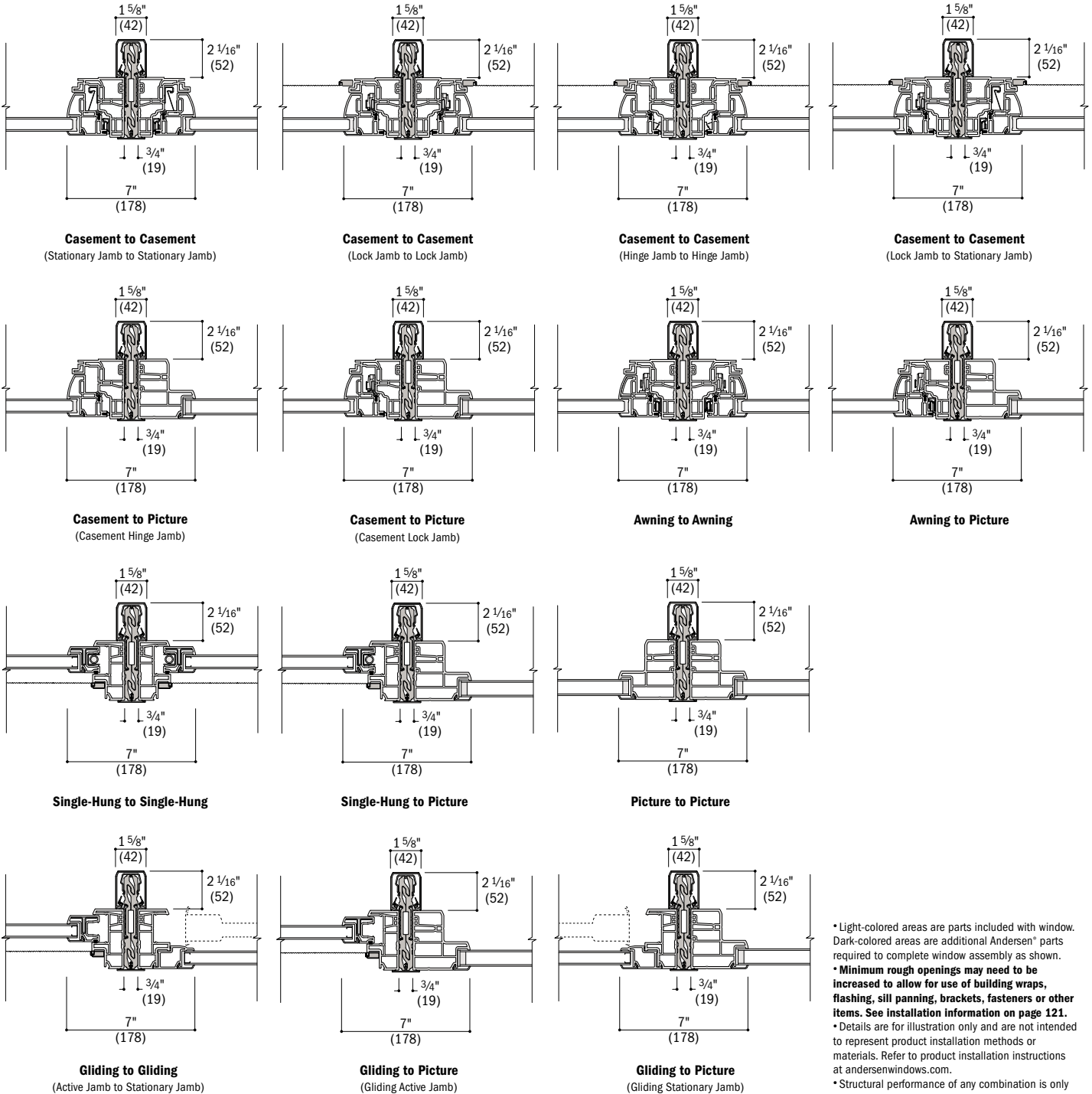
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 3/4" (19) per join.

**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

### FRAME TYPES: 1 3/8" Flange Setback, 1" Flange Setback With Stucco Key and No Flange



- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.
- Dimensions in parentheses are in millimeters.

## Horizontal (stack) Easy Connect Fiberglass Joining Details – Reinforced

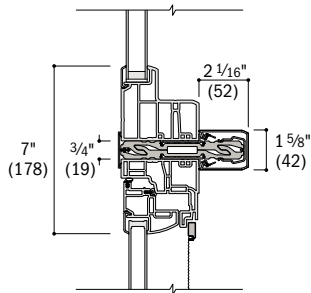
Scale 1 1/2" (38) = 1'-0" (305) – 1:8

**Overall Window Dimension Width** – Sum of individual window widths plus 3/4" (19) per join.

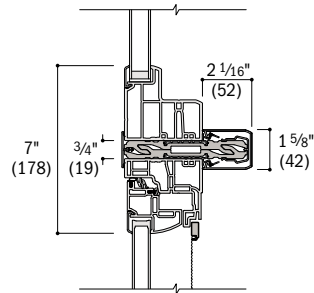
**Overall Minimum Rough Opening Width** – Overall window dimension width plus 3/4" (19).

The addition of joining materials will affect the overall rough opening dimension. See page 121.

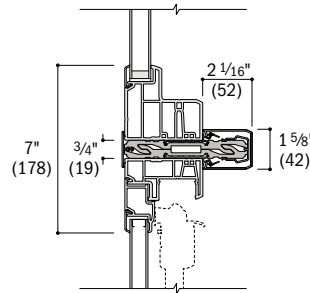
### FRAME TYPES: 1 3/8" Flange Setback, 1" Flange Setback With Stucco Key and No Flange



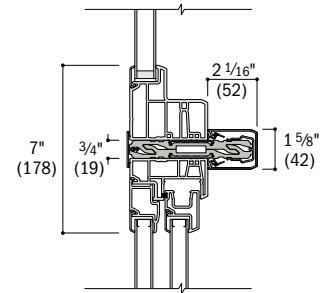
Picture/Specialty Over Casement



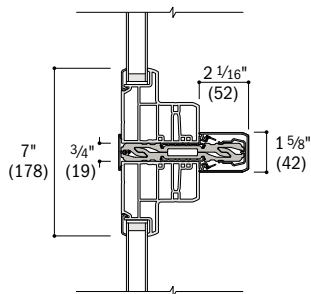
Picture/Specialty Over Awning



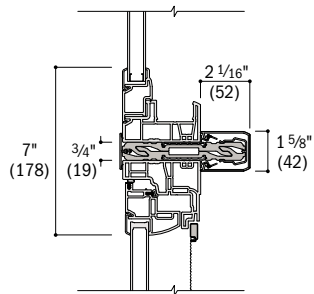
Picture/Specialty Over Single-Hung



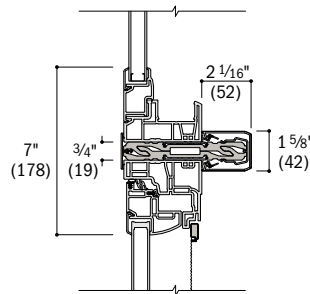
Picture/Specialty Over Gliding



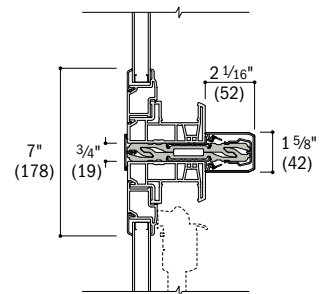
Picture/Specialty Over Picture



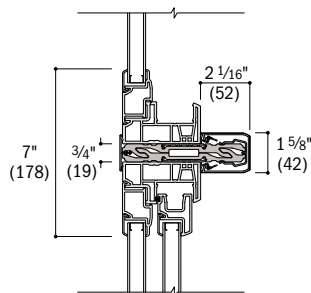
Transom Over Casement



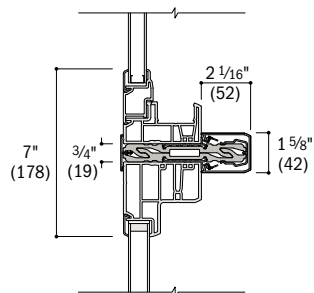
Transom Over Awning



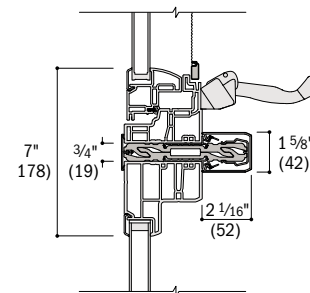
Transom Over Single-Hung



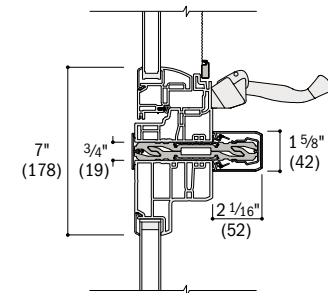
Transom Over Gliding



Transom Over Picture



Casement Over Picture



Awning Over Picture

For more information on joining, refer to the Combination Designs section starting on page 107.

- Light-colored areas are parts included with window. Dark-colored areas are additional Andersen® parts required to complete window assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.**
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).
- Structural performance of any combination is only as high as the lowest structural performance of any individual unit or join in the combination.
- Dimensions in parentheses are in millimeters.

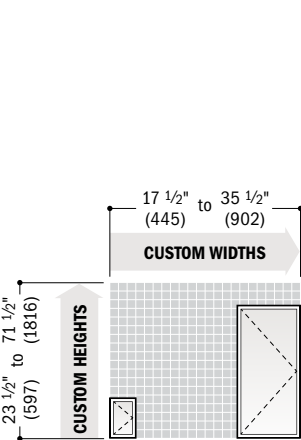
# WINDOW CUSTOM SIZES

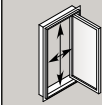
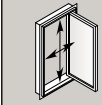
## Custom Sizes and Specification Formulas



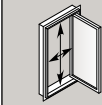
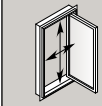
100 Series custom-size windows are available in 1/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply.

### Casement Windows



| Single                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br>                                                                                                                                              | <b>Minimum R.O.</b><br>                                                                                                                                                                                                                                    |
| $\text{Width} = \text{window width} - 12.103'' \text{ (307) } \textit{wash mode}^*$<br>$\text{Width} = \text{window width} - 7.790'' \text{ (198) } \textit{widest clear opening}^*$<br>$\text{Height} = \text{window height} - 5.694'' \text{ (145)}$ | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br>$\text{Width} = \text{window width} + 1/2'' \text{ (13)}$<br>$\text{Height} = \text{window height} + 1/2'' \text{ (13)}$<br><b>Insert &amp; Flush Fin Frames</b><br>$\text{Width} = \text{window width} + 3/8'' \text{ (10)}$<br>$\text{Height} = \text{window height} + 3/8'' \text{ (10)}$ |
| <b>Vent Opening</b><br>                                                                                                                                               | <b>Unobst. Glass</b><br>                                                                                                                                                                                                                                   |
| $\text{Width} = \text{window width} - 7.964'' \text{ (202)}$<br>$\text{Height} = \text{window height} - 5.694'' \text{ (145)}$                                                                                                                         | $\text{Width} = \text{window width} - 6.250'' \text{ (159)}$<br>$\text{Height} = \text{window height} - 6.250'' \text{ (159)}$                                                                                                                                                                                                               |

\*Widest clear opening hinge will be applied, based on window size, if it allows the window to meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). Hinge type cannot be specified.

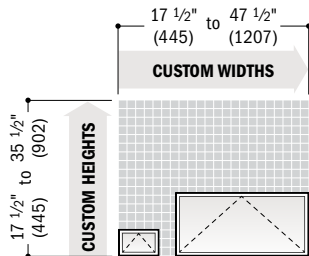
| Twin                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br>                                                                                                                                                        | <b>Minimum R.O.</b><br>                                                                                                                                                                                                                                  |
| $\text{Width} = (\text{window width} + 2) - 12.353'' \text{ (314) } \textit{wash mode}^*$<br>$\text{Width} = (\text{window width} + 2) - 8.040'' \text{ (204) } \textit{widest clear opening}^*$<br>$\text{Height} = \text{window height} - 5.694'' \text{ (145)}$ | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br>$\text{Width} = \text{window width} + 1/2'' \text{ (13)}$<br>$\text{Height} = \text{window height} + 1/2'' \text{ (13)}$<br><b>Insert &amp; Flush Fin Frames</b><br>$\text{Width} = \text{window width} + 3/8'' \text{ (10)}$<br>$\text{Height} = \text{window height} + 3/8'' \text{ (10)}$ |
| <b>Vent Opening</b><br>                                                                                                                                                         | <b>Unobst. Glass</b><br>                                                                                                                                                                                                                                 |
| $\text{Width} = \text{window width} - 16.428'' \text{ (417)}$<br>$\text{Height} = \text{window height} - 5.694'' \text{ (145)}$                                                                                                                                    | $\text{Single Sash Width} = (\text{window width} + 2) - 6.50'' \text{ (165)}$<br>$\text{Total Sash Width} = \text{window width} - 13.000'' \text{ (330)}$<br>$\text{Height} = \text{window height} - 6.250'' \text{ (159)}$                                                                                                                  |

\*Widest clear opening hinge will be applied, based on window size, if it allows the window to meet or exceed clear opening area of 5.7 sq. ft. or 0.53 m², clear opening width of 20" (508) and clear opening height of 24" (610). Hinge type cannot be specified.

• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.  
• Dimensions in parentheses are in millimeters.  
• Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.



## Awning Windows

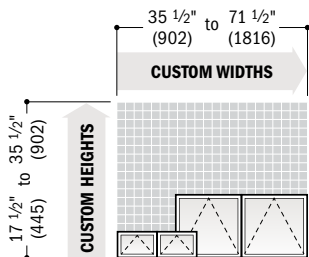


### Single

|                          |                                                                               |                          |                                                                                                                                      |
|--------------------------|-------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = window width - 5.694" (145)<br><br><b>Depth</b> = 8.000" (203) | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13) |
|                          |                                                                               |                          | <b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10)         |
| <b>Vent Opening</b><br>  | <b>Width</b> = window width - 5.694" (145)<br><br><b>Depth</b> = 8.000" (203) | <b>Unobst. Glass</b><br> | <b>Width</b> = window width - 6.250" (159)<br><b>Height</b> = window height - 6.250" (159)                                           |
|                          |                                                                               |                          |                                                                                                                                      |

• Awning windows do not meet clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

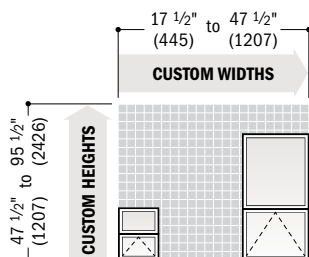
### Twin



|                          |                                                                                     |                          |                                                                                                                                                                       |
|--------------------------|-------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = (window width ÷ 2) - 5.944" (151)<br><br><b>Depth</b> = 8.000" (203) | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13)                                  |
|                          |                                                                                     |                          | <b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10)                                          |
| <b>Vent Opening</b><br>  | <b>Width</b> = (window width ÷ 2) - 5.944" (151)<br><br><b>Depth</b> = 8.000" (203) | <b>Unobst. Glass</b><br> | <b>Single Sash Width</b> = (window width ÷ 2) - 6.50" (165)<br><b>Total Sash Width</b> = window width - 13.000" (330)<br><b>Height</b> = window height - 6.250" (159) |
|                          |                                                                                     |                          |                                                                                                                                                                       |

• Awning windows do not meet clear opening area of 5.7 sq. ft. or 0.53 m<sup>2</sup>, clear opening width of 20" (508) and clear opening height of 24" (610).

### Picture Window Over Awning



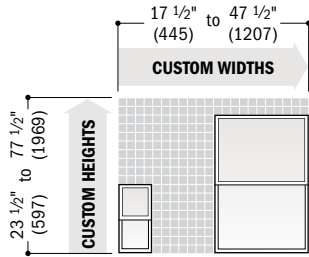
|                          |                                                                               |                          |                                                                                                                                                                                                                                        |
|--------------------------|-------------------------------------------------------------------------------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = window width - 5.694" (145)<br><br><b>Depth</b> = 8.000" (203) | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13)                                                                                                   |
|                          |                                                                               |                          | <b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10)                                                                                                           |
| <b>Vent Opening</b><br>  | <b>Width</b> = window width - 5.694" (145)<br><br><b>Depth</b> = 8.000" (203) | <b>Unobst. Glass</b><br> | <b>Width</b> = window width - 6.250" (159)<br><b>Total Sash Height</b> = window height - 13.000" (330)<br><i>Contact your Andersen supplier for unobstructed glass height dimension of individual stationary sash or venting sash.</i> |
|                          |                                                                               |                          |                                                                                                                                                                                                                                        |

Contact your Andersen supplier for minimum and maximum height dimensions for lower venting sash.

• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.  
 • Dimensions in parentheses are in millimeters.  
 • Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# WINDOW CUSTOM SIZES

## Single-Hung Windows



Windows with a height greater than 77 1/2" (1969) are only available with a 2:1 reverse cottage sash ratio.\*

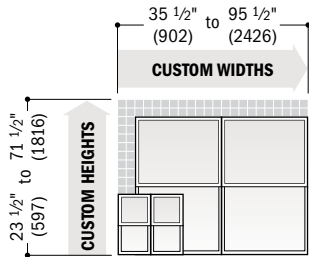
2:1 sash ratio is not available for heights 6'-5 1/2" (1969) and less.

### Equal Sash Ratio

|                          |                                                                                                                               |                          |                                                                                                                                                                                                                                                                          |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = window width - 3.500" (89)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94)                            | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13)<br><br><b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10) |
| <b>Vent Opening</b><br>  | <b>Equal Sash Ratio</b><br><b>Width</b> = window width - 3.500" (89)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94) | <b>Unobst. Glass</b><br> | <b>Equal Sash Ratio</b><br><b>Width</b> = window width - 6.250" (159)<br><br><b>Fixed Sash Height</b> = (window height ÷ 2) - 4.184" (106)<br><b>Venting Sash Height</b> = (window height ÷ 2) - 4.226" (107)<br><b>Total Sash Height</b> = window height - 8.410" (214) |

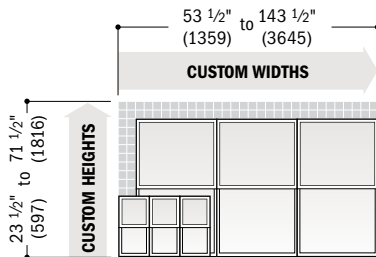
\*Drywall pass-through window is available for custom-size windows wider than 23 1/2" (597) and taller than 53 1/2" (1359). Not available for windows with flush fin frame.  
 \*Windows with a 3:2 reverse cottage sash ratio are available in custom sizes from 17 1/2" (445) to 47 1/2" (1207) in width to 29 1/2" (749) to 77 1/2" (1969) in height. For area and opening specification formulas, visit andersenwindows.com.

### Twin



|                          |                                                                                                                               |                          |                                                                                                                                                                                                                                                                                                                           |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = (window width ÷ 2) - 3.750" (95)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94)                      | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13)<br><br><b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10)                                                  |
| <b>Vent Opening</b><br>  | <b>Equal Sash Ratio</b><br><b>Width</b> = window width - 3.500" (89)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94) | <b>Unobst. Glass</b><br> | <b>Single Sash Width</b> = (window width ÷ 2) - 6.500" (165)<br><b>Total Sash Width</b> = window width - 13.000" (330)<br><br><b>Fixed Sash Height</b> = (window height ÷ 2) - 4.184" (106)<br><b>Venting Sash Height</b> = (window height ÷ 2) - 4.226" (107)<br><b>Total Sash Height</b> = window height - 8.410" (214) |

### Triple



|                          |                                                                                                                                 |                          |                                                                                                                                                                                                                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | <b>Width</b> = (window width ÷ 3) - 3.833" (97)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94)                        | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br><b>Width</b> = window width + 1/2" (13)<br><b>Height</b> = window height + 1/2" (13)<br><br><b>Insert &amp; Flush Fin Frames</b><br><b>Width</b> = window width + 3/8" (10)<br><b>Height</b> = window height + 3/8" (10)                                                  |
| <b>Vent Opening</b><br>  | <b>Equal Sash Ratio</b><br><b>Width</b> = window width - 11.500" (292)<br><br><b>Height</b> = (window height ÷ 2) - 3.711" (94) | <b>Unobst. Glass</b><br> | <b>Single Sash Width</b> = (window width ÷ 3) - 6.583" (167)<br><b>Total Sash Width</b> = window width - 19.750" (502)<br><br><b>Fixed Sash Height</b> = (window height ÷ 2) - 4.184" (106)<br><b>Venting Sash Height</b> = (window height ÷ 2) - 4.226" (107)<br><b>Total Sash Height</b> = window height - 8.410" (214) |

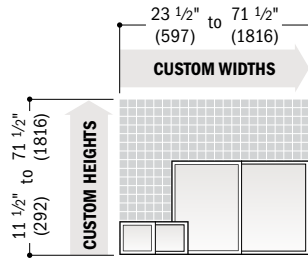
\*Clear Opening formulas provide dimensions for determining area available for egress. Vent Opening formulas provide dimensions for determining area available for passage of air. Minimum R.O. (minimum rough opening) formulas provide minimum rough opening width and height dimensions. Unobst. Glass (unobstructed glass) formulas provide dimensions for determining area available for passage of light.

\*Dimensions in parentheses are in millimeters.

\*Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

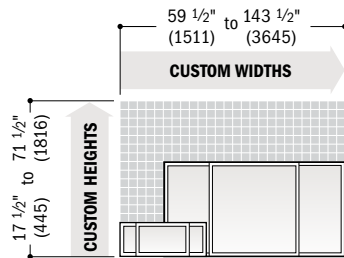
\*Window heights that require a 2:1 reverse cottage sash ratio are available in custom sizes from 17 1/2" (445) to 47 1/2" (1207) in width to 77 5/8" (1972) to 89 1/2" (2273) in height. For area and opening specifications, contact your Andersen supplier.

## Gliding Windows



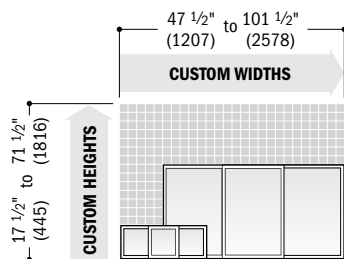
### Active-Stationary or Stationary-Active

|                          |                                                                                           |                          |                                                                                                                                                                                                                                                      |
|--------------------------|-------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | $Width = (window\ width \div 2) - 3.711" (94)$<br>$Height = window\ height - 3.500" (89)$ | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br>$Width = window\ width + 1/2" (13)$<br>$Height = window\ height + 1/2" (13)$<br><b>Insert &amp; Flush Fin Frames</b><br>$Width = window\ width + 3/8" (10)$<br>$Height = window\ height + 3/8" (10)$ |
| <b>Vent Opening</b><br>  | $Width = (window\ width \div 2) - 3.711" (94)$<br>$Height = window\ height - 3.500" (89)$ | <b>Unobst. Glass</b><br> | $Fixed\ Sash\ Width = (window\ width \div 2) - 4.184" (106)$<br>$Venting\ Sash\ Width = (window\ width \div 2) - 4.226" (107)$<br>$Total\ Sash\ Width = window\ width - 8.410" (214)$<br>$Height = window\ height - 6.250" (159)$                    |



### Active-Stationary-Active 1:2:1 Sash Ratio

|                          |                                                                                            |                          |                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | $Width = (window\ width \div 4) - 2.976" (76)$<br>$Height = window\ height - 3.500" (89)$  | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br>$Width = window\ width + 1/2" (13)$<br>$Height = window\ height + 1/2" (13)$<br><b>Insert &amp; Flush Fin Frames</b><br>$Width = window\ width + 3/8" (10)$<br>$Height = window\ height + 3/8" (10)$ |
| <b>Vent Opening</b><br>  | $Width = (window\ width \div 2) - 5.952" (151)$<br>$Height = window\ height - 3.500" (89)$ | <b>Unobst. Glass</b><br> | $Fixed\ Sash\ Width = (window\ width \div 2) - 1.868" (47)$<br>$Venting\ Sash\ Width = (window\ width \div 4) - 4.351" (111)$<br>$Total\ Sash\ Width = window\ width - 10.570" (268)$<br>$Height = window\ height - 6.250" (159)$                    |



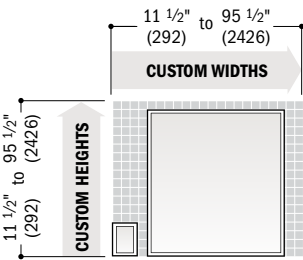
### Active-Stationary-Active 1:1:1 Equal Sash Ratio

|                          |                                                                                            |                          |                                                                                                                                                                                                                                                      |
|--------------------------|--------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Clear Opening</b><br> | $Width = (window\ width \div 3) - 5.164" (131)$<br>$Height = window\ height - 3.500" (89)$ | <b>Minimum R.O.</b><br>  | <b>1 3/8" &amp; 1" Flange Setback Frames</b><br>$Width = window\ width + 1/2" (13)$<br>$Height = window\ height + 1/2" (13)$<br><b>Insert &amp; Flush Fin Frames</b><br>$Width = window\ width + 3/8" (10)$<br>$Height = window\ height + 3/8" (10)$ |
| <b>Vent Opening</b><br>  | $Width = (window\ width \div 3) - 5.164" (131)$<br>$Height = window\ height - 3.500" (89)$ | <b>Unobst. Glass</b><br> | $Fixed\ Sash\ Width = (window\ width \div 3) - 3.496" (89)$<br>$Venting\ Sash\ Width = (window\ width \div 3) - 3.537" (90)$<br>$Total\ Sash\ Width = window\ width - 10.570" (268)$<br>$Height = window\ height - 6.250" (159)$                     |

• **Clear Opening** formulas provide dimensions for determining area available for egress. **Vent Opening** formulas provide dimensions for determining area available for passage of air. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.  
 • Dimensions in parentheses are in millimeters.  
 • Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# WINDOW CUSTOM SIZES

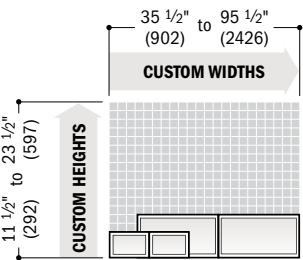
## Picture Windows



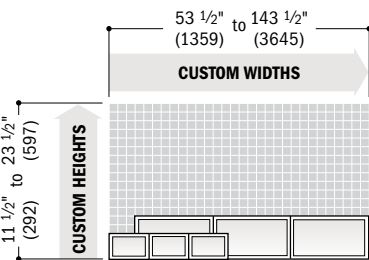
⚠ Either height or width must be 71 1/2" (1816) or less.

| Minimum R.O. | 1 3/8" & 1" Flange Setback Frames                                                                                                                                                                                                                                      | Unobst. Glass | 1 3/8" & 1" Flange Setback, No Flange and Insert Frames                                                                                                                           |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              | <br>Width = window width + 1/2" (13)<br>Height = window height + 1/2" (13)<br><br>Insert & Flush Fin Frames<br>Width = window width + 3/8" (10)<br>Height = window height + 3/8" (10) |               | Width = window width - 6.250" (159)<br>Height = window height - 6.250" (159)<br><br>Flush Fin Frame<br>Width = window width - 3.500" (89)<br>Height = window height - 3.500" (89) |

## Transom Windows



| Twin         |                                                                                                                                                                                                                                                                        |               |                                                                                                                                                   |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum R.O. | 1 3/8" & 1" Flange Setback Frames                                                                                                                                                                                                                                      | Unobst. Glass | Twin                                                                                                                                              |
|              | <br>Width = window width + 1/2" (13)<br>Height = window height + 1/2" (13)<br><br>Insert & Flush Fin Frames<br>Width = window width + 3/8" (10)<br>Height = window height + 3/8" (10) |               | Single Sash Width = (window width + 2) - 6.500" (165)<br>Total Sash Width = window width - 13.000" (330)<br>Height = window height - 6.250" (159) |

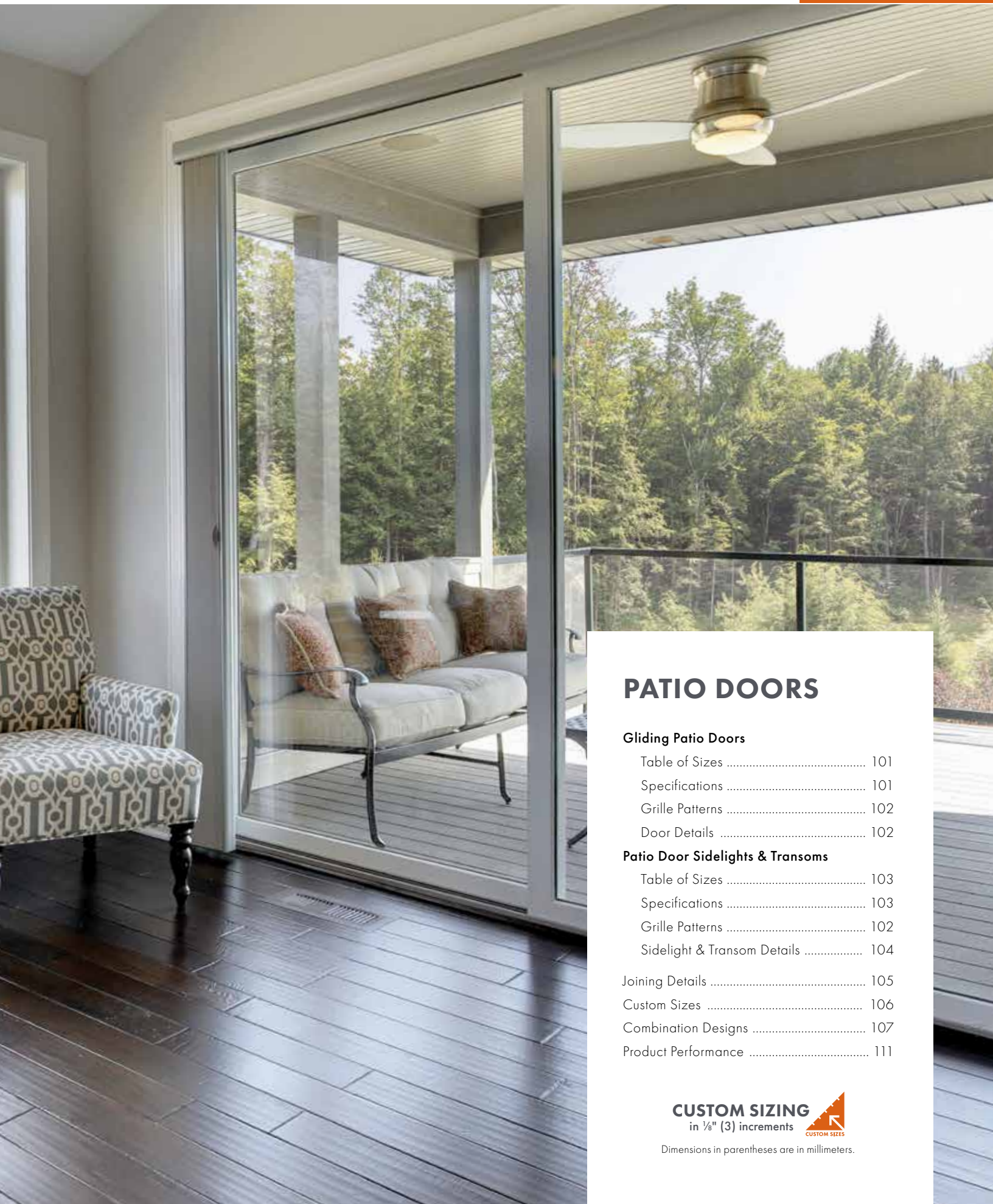


| Triple       |                                                                                                                                                                                                                                                                          |               |                                                                                                                                                   |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Minimum R.O. | 1 3/8" & 1" Flange Setback Frames                                                                                                                                                                                                                                        | Unobst. Glass | Triple                                                                                                                                            |
|              | <br>Width = window width + 1/2" (13)<br>Height = window height + 1/2" (13)<br><br>Insert & Flush Fin Frames<br>Width = window width + 3/8" (10)<br>Height = window height + 3/8" (10) |               | Single Sash Width = (window width + 3) - 6.583" (167)<br>Total Sash Width = window width - 19.750" (502)<br>Height = window height - 6.250" (159) |

Triple transom windows with unequal sash are not available in custom sizes.

• **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.  
• Dimensions in parentheses are in millimeters.  
• Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.





## PATIO DOORS

### Gliding Patio Doors

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### Patio Door Sidelights & Transoms

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**CUSTOM SIZING**  
 in 1/8" (3) increments



Dimensions in parentheses are in millimeters.

# PATIO DOORS

## FEATURES

### GLIDING PATIO DOORS

#### FRAME

**A** The frame is constructed with Fibrex® composite material. This construction produces a rigid frame. The durable, low-maintenance finish won't fade, flake, blister or peel.\*

Factory-assembled doors arrive at the job site ready to install.

**B** Dual felt weatherstrip, applied on the inside pocket of both side jambs and the head jamb, creates a positive seal between the frame and panels. The result is a long-lasting, energy-efficient barrier against wind, water and dust.

A full-length combination weatherstrip/interlock system provides a flexible seal at the meeting stile.

Three frame options include:

- 1 3/8" (35) flange setback for new construction siding applications. An integral rigid vinyl flange helps seal the unit to the structure.
- 1" (25) flange setback with stucco key for new construction stucco applications. An integral rigid vinyl flange helps seal the unit to the structure.
- No flange for door replacement in an existing framed opening.

#### PANEL

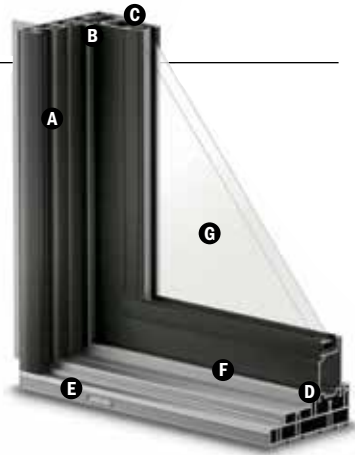
**C** Fibrex material construction provides long-lasting performance.\* The panel, finished with a durable capping, provides maximum protection and a matte low-maintenance finish.

**D** Dual corrosion-resistant\* ball-bearing rollers on the operating door panel provide smooth operation with self-contained leveling adjusters. The rollers have deep grooves to increase engagement with the roller track and resist lateral movement. Metal reinforcement inserted into the panel stile provides additional stability.

#### SILL

**E** The one-piece sill design with weep holes located on the sill exterior provides superior water management. The heavy-gauge PVC construction is wear resistant and neutral gray in color.

**F** The roller track has a stainless steel cap that resists denting for smooth, reliable operation.



#### GLASS

Glass spacers are available in stainless steel and black. Stainless steel glass spacer shown.

A glazing bead and silicone provide superior weathertightness and durability.

**H** High-Performance options include:

- Low-E SmartSun™ tempered glass
- Low-E SmartSun HeatLock® tempered glass
- Low-E tempered glass
- Low-E HeatLock tempered glass
- Low-E Sun tempered glass
- Low-E PassiveSun® tempered glass
- Low-E PassiveSun HeatLock tempered glass
- Clear dual-pane tempered glass

Additional glass options are available. Contact your Andersen supplier.

A removable translucent film helps shield the glass from damage during delivery and construction, and simplifies finishing at the job site.

#### Patterned Glass

Patterned glass options are available. See page 13 for more details.

#### HARDWARE

##### Locking System



A two-point locking system engages a steel receiver plate that's secured into the side jamb. This provides enhanced security and a weathertight seal, with the operating panel pulled tightly into the jamb.

## EXTERIORS & INTERIORS

### EXTERIOR COLORS



### INTERIOR COLORS



## HARDWARE



### TULSA

#### Standard Handle

Exterior handle color matches the door's exterior. Interior handle color matches the door's interior.

Exterior handle shown in dark bronze. Interior handle shown in white.

See exterior and interior color swatches shown above.



### AFTON

#### Optional Handle

Antique Brass  
Black  
Bright Brass  
**Satin Nickel**

Bold name denotes finish shown.



## ACCESSORIES Sold Separately

### HARDWARE

#### Auxiliary Foot Lock

Provides an extra measure of security when the door is in a locked position. Available in colors that coordinate with the door's interior.

### GRILLES

Grilles are available in a variety of configurations. See page 14 for details.

### INSECT SCREENS

Insect screens have charcoal gray fiberglass screen mesh. The latch mechanism is contained within the insect screen handle for easy operation. Frames are available in colors to match the door's exterior.

### SIDELIGHTS & TRANSOMS

Patio door sidelights and transoms are available. See page 103.

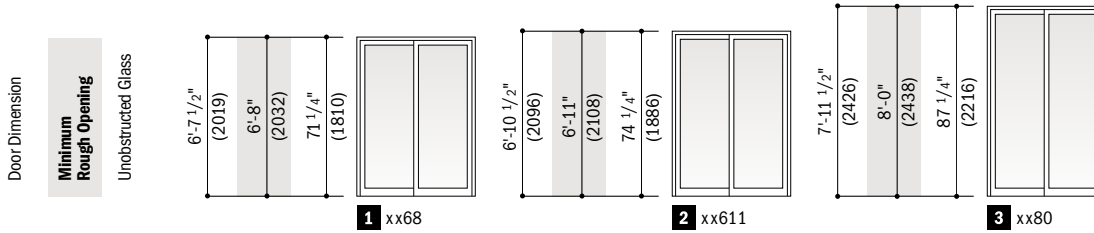
\*Visit [andersenwindows.com/warranty](http://andersenwindows.com/warranty) for details.

\*\*Products with Sandtone, dark bronze and black interiors have matching exteriors.

Dimensions in parentheses are in millimeters.

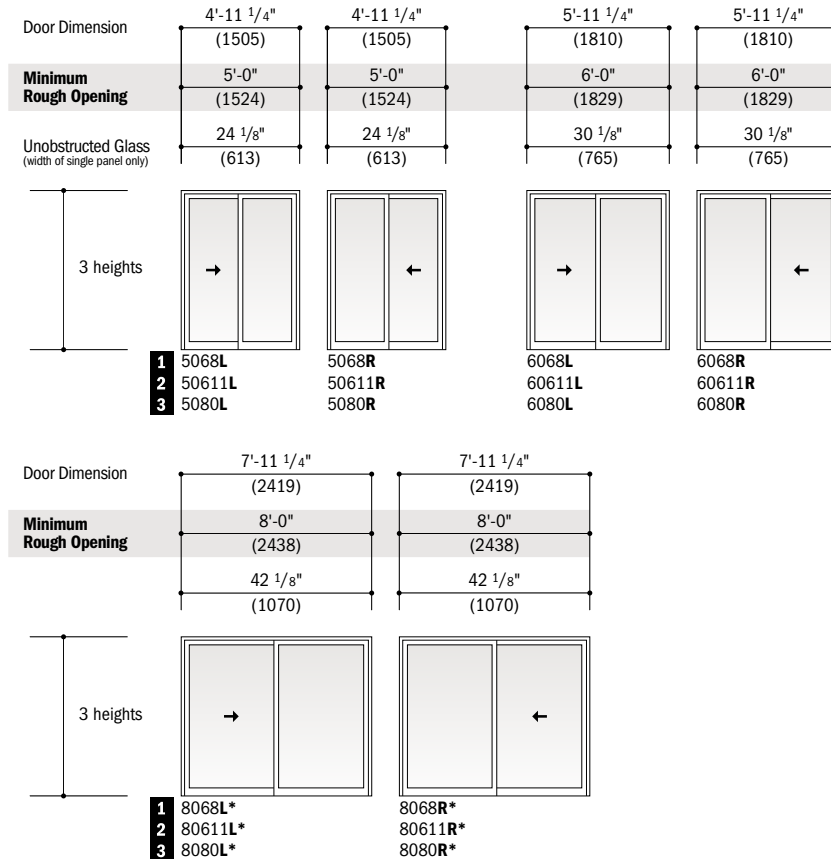
Printing limitations prevent exact replication of colors and finishes. See your Andersen supplier for actual color and finish samples.

## Patio Door Heights



## Table of Gliding Patio Doors Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96



Custom-size patio doors are available in 1/8" (3) increments.

See page 106 for custom sizes and specifications.

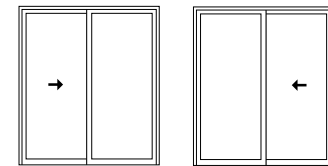
Arrow indicates direction of panel operation as viewed from the exterior.

To meet or exceed a clear opening width of 32" (813), select a door width that requires a rough opening width of 6'-6" (1981) or greater.

Grille patterns and details shown on page 102.

## Order Designation Description

Viewed from the exterior.



6068 L 6068 R

Door Rough Opening Left Gliding Door Rough Opening Right Gliding

- Door Dimension always refers to outside frame-to-frame dimension.
- Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See page 121 for more details.
- Dimensions in parentheses are in millimeters.
- Meets or exceeds a 32" (813) clear opening width.

## Gliding Patio Door Opening and Area Specifications

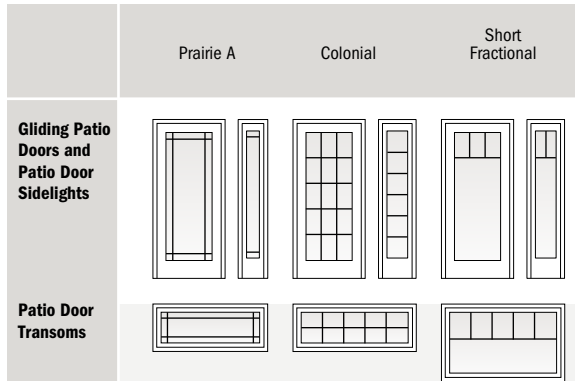
| Door Number | Clear Opening Area* Sq. Ft./ (m <sup>2</sup> ) | Clear Opening in Full Open Position |                    | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Vent Area* Sq. Ft./ (m <sup>2</sup> ) | Overall Door Area Sq. Ft./ (m <sup>2</sup> ) |
|-------------|------------------------------------------------|-------------------------------------|--------------------|---------------------------------------|---------------------------------------|----------------------------------------------|
|             |                                                | Width* Inches/(mm)                  | Height Inches/(mm) |                                       |                                       |                                              |
| 5068        | 12.38 (1.15)                                   | 23 1/2" (597)                       | 75 7/8" (1927)     | 23.87 (2.22)                          | 12.38 (1.15)                          | 32.71 (3.04)                                 |
| 6068        | 15.54 (1.44)                                   | 29 1/2" (749)                       | 75 7/8" (1927)     | 31.27 (2.91)                          | 15.54 (1.44)                          | 39.34 (3.65)                                 |
| 8068        | 21.87 (2.03)                                   | 41 1/2" (1054)                      | 75 7/8" (1927)     | 43.14 (4.01)                          | 21.87 (2.03)                          | 52.59 (4.89)                                 |
| 50611       | 12.87 (1.20)                                   | 23 1/2" (597)                       | 78 7/8" (2003)     | 52.79 (4.90)                          | 12.87 (1.20)                          | 33.95 (3.15)                                 |
| 60611       | 16.16 (1.50)                                   | 29 1/2" (749)                       | 78 7/8" (2003)     | 32.58 (3.03)                          | 16.16 (1.50)                          | 40.82 (3.79)                                 |
| 80611       | 22.73 (2.11)                                   | 41 1/2" (1054)                      | 78 7/8" (2003)     | 44.96 (4.18)                          | 22.73 (2.11)                          | 54.57 (5.07)                                 |
| 5080        | 14.99 (1.39)                                   | 23 1/2" (597)                       | 91 7/8" (2334)     | 31.02 (2.88)                          | 14.99 (1.39)                          | 39.29 (3.65)                                 |
| 6080        | 18.82 (1.75)                                   | 29 1/2" (749)                       | 91 7/8" (2334)     | 38.29 (3.56)                          | 18.82 (1.75)                          | 47.25 (4.39)                                 |
| 8080        | 26.48 (2.46)                                   | 41 1/2" (1054)                      | 91 7/8" (2334)     | 52.83 (4.91)                          | 26.48 (2.46)                          | 63.17 (5.87)                                 |

- Dimensions in parentheses are in millimeters or square meters.
- For doors with Tulsa hardware only. Contact your Andersen supplier for doors with Afton hardware.



# GLIDING PATIO DOORS

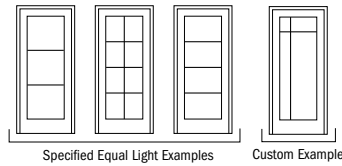
## Grille Patterns



**Number of lights and overall pattern varies with door size. Patterns may not be available in all configurations or sizes.** Specified equal light and custom patterns are also available.

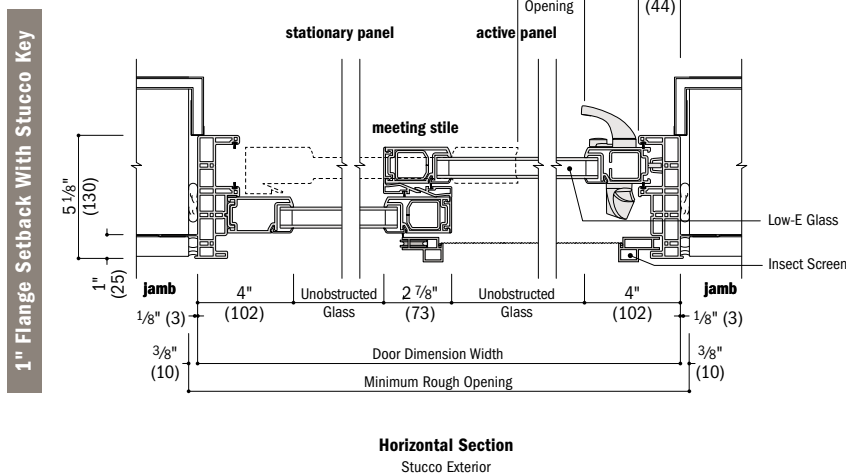
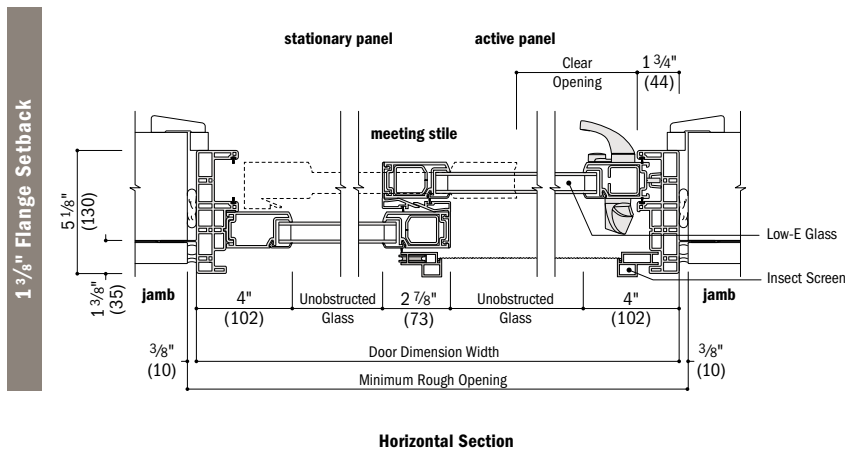
For specified equal light, specify number of same-size rectangles across or down.

For more grille options, see page 14 or visit [andersenwindows.com/grilles](http://andersenwindows.com/grilles).



## Gliding Patio Door Details

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



See page 105 for joining details.

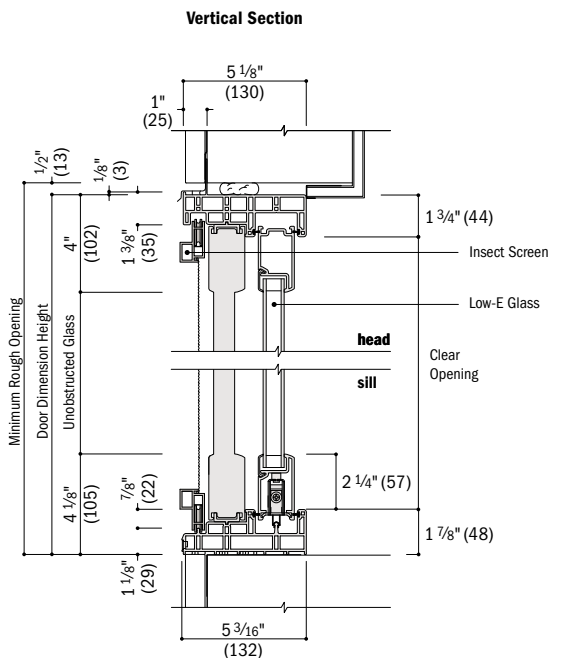
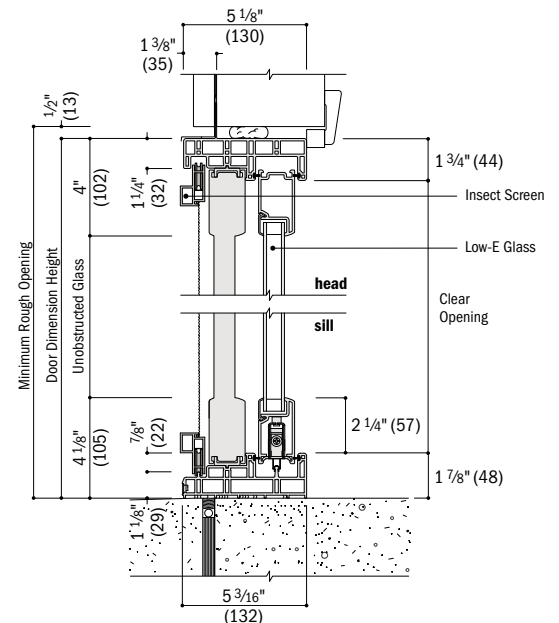
\* Light-colored areas are parts included with door. Dark-colored areas are additional Andersen® parts required to complete door assembly as shown.

\* Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.

\* Drip cap is required to complete door installation as shown but may not be included with door. Use of drip cap is recommended for proper installation.

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at [andersenwindows.com](http://andersenwindows.com).

\* Dimensions in parentheses are in millimeters.



## Table of Patio Door Sidelight and Transom Sizes

Scale 1/8" (3) = 1'-0" (305) – 1:96

| Sidelight/Transom Dimension  | 1'-2 1/4" (362) | 1'-5 1/4" (438) | 1'-11 1/4" (591) | 2'-5 1/4" (743) | 2'-11 1/4" (895) | 3'-11 1/4" (1200) | 4'-11 1/4" (1505) | 5'-11 1/4" (1810) | 7'-11 1/4" (2419) |
|------------------------------|-----------------|-----------------|------------------|-----------------|------------------|-------------------|-------------------|-------------------|-------------------|
| <b>Minimum Rough Opening</b> | 1'-3" (381)     | 1'-6" (457)     | 2'-0" (610)      | 2'-6" (762)     | 3'-0" (914)      | 4'-0" (1219)      | 5'-0" (1524)      | 6'-0" (1829)      | 8'-0" (2438)      |
| Unobstructed Glass           | 6 3/16" (157)   | 9 3/16" (233)   | 15 3/16" (386)   | 21 3/16" (538)  | 27 3/16" (691)   | 39 3/16" (995)    | 51 3/16" (1300)   | 63 3/16" (1605)   | 87 3/16" (2215)   |

**CUSTOM WIDTHS – 14 1/4" to 95 1/4"**

| CUSTOM HEIGHTS – 14 1/4" to 23 1/4" | 1313 | 1613 | 2013 | 2613 | 3013 | 4013 | 5013 | 6013 | 8013 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|
| 1'-2 1/4" (362)                     |      |      |      |      |      |      |      |      |      |
| 1'-5 1/4" (438)                     |      |      |      |      |      |      |      |      |      |
| 1'-11 1/4" (591)                    |      |      |      |      |      |      |      |      |      |

**CUSTOM WIDTHS – 14 1/4" to 47 1/4"**

| CUSTOM HEIGHTS – 79 1/2" to 95 1/2" | 1368 | 1668 | 2068 | 2668 | 3068 | 4068 |
|-------------------------------------|------|------|------|------|------|------|
| 6'-7 1/2" (2019)                    |      |      |      |      |      |      |
| 6'-10 1/2" (2096)                   |      |      |      |      |      |      |
| 7'-11 1/2" (2426)                   |      |      |      |      |      |      |



Custom-size doors are available in 1/8" (3) increments.

See page 106 for custom sizes and specifications.

Grille patterns shown on page 102.

Details shown on page 104.

- Transom/Sidelight Dimension always refers to outside frame-to-frame dimension.
- **Minimum Rough Opening dimensions may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items.** See page 121 for more details.
- Dimensions in parentheses are in millimeters.

## Patio Door Sidelight Area Specifications

| Sidelight Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|------------------|---------------------------------------|------------------------------------------------|
| 1368             | 3.06 (0.28)                           | 7.87 (0.73)                                    |
| 13611            | 3.19 (0.30)                           | 8.16 (0.76)                                    |
| 1380             | 3.75 (0.35)                           | 9.45 (0.88)                                    |
| 1668             | 4.55 (0.42)                           | 9.52 (0.88)                                    |
| 16611            | 4.74 (0.44)                           | 9.88 (0.92)                                    |
| 1680             | 5.57 (0.52)                           | 11.44 (1.06)                                   |
| 2068             | 7.51 (0.70)                           | 12.84 (1.19)                                   |
| 20611            | 7.83 (0.73)                           | 13.32 (1.24)                                   |
| 2080             | 9.20 (0.85)                           | 15.42 (1.43)                                   |
| 2668             | 10.48 (0.97)                          | 16.15 (1.50)                                   |
| 26611            | 10.92 (1.01)                          | 16.76 (1.56)                                   |
| 2680             | 12.84 (1.19)                          | 19.40 (1.80)                                   |
| 3068             | 13.45 (1.25)                          | 19.46 (1.81)                                   |
| 30611            | 14.02 (1.30)                          | 20.20 (1.88)                                   |
| 3080             | 16.47 (1.53)                          | 23.38 (2.17)                                   |
| 4068             | 19.39 (1.80)                          | 26.09 (2.42)                                   |
| 40611            | 20.21 (1.88)                          | 27.07 (2.51)                                   |
| 4080             | 23.74 (2.21)                          | 31.34 (2.91)                                   |

## Patio Door Transom Area Specifications

| Transom Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|----------------|---------------------------------------|------------------------------------------------|
| 1313           | 0.27 (0.03)                           | 1.41 (0.13)                                    |
| 1316           | 0.40 (0.04)                           | 1.71 (0.16)                                    |
| 1320           | 0.65 (0.06)                           | 2.30 (0.21)                                    |
| 1613           | 0.40 (0.04)                           | 1.71 (0.16)                                    |
| 1616           | 0.59 (0.05)                           | 2.07 (0.19)                                    |
| 1620           | 0.97 (0.09)                           | 2.79 (0.26)                                    |
| 2013           | 0.65 (0.06)                           | 2.30 (0.21)                                    |
| 2016           | 0.97 (0.09)                           | 2.79 (0.26)                                    |
| 2020           | 1.61 (0.15)                           | 3.75 (0.35)                                    |
| 2613           | 0.91 (0.09)                           | 2.90 (0.27)                                    |
| 2616           | 1.35 (0.13)                           | 3.50 (0.33)                                    |
| 2620           | 2.24 (0.21)                           | 4.72 (0.44)                                    |
| 3013           | 1.17 (0.11)                           | 3.49 (0.32)                                    |
| 3016           | 1.74 (0.16)                           | 4.22 (0.39)                                    |
| 3020           | 2.87 (0.27)                           | 5.69 (0.53)                                    |
| 4013           | 1.69 (0.16)                           | 4.68 (0.43)                                    |
| 4016           | 2.50 (0.23)                           | 5.66 (0.53)                                    |
| 4020           | 4.13 (0.39)                           | 7.63 (0.71)                                    |

| Transom Number | Glass Area Sq. Ft./ (m <sup>2</sup> ) | Overall Window Area Sq. Ft./ (m <sup>2</sup> ) |
|----------------|---------------------------------------|------------------------------------------------|
| 5013           | 2.20 (0.20)                           | 5.86 (0.55)                                    |
| 5016           | 3.27 (0.30)                           | 7.10 (0.66)                                    |
| 5020           | 5.40 (0.50)                           | 9.57 (0.89)                                    |
| 6013           | 2.72 (0.25)                           | 7.05 (0.66)                                    |
| 6016           | 4.03 (0.38)                           | 8.54 (0.79)                                    |
| 6020           | 6.67 (0.62)                           | 11.50 (1.07)                                   |
| 8013           | 3.75 (0.35)                           | 9.43 (0.88)                                    |
| 8016           | 5.56 (0.52)                           | 11.41 (1.06)                                   |
| 8020           | 9.20 (0.85)                           | 15.38 (1.43)                                   |

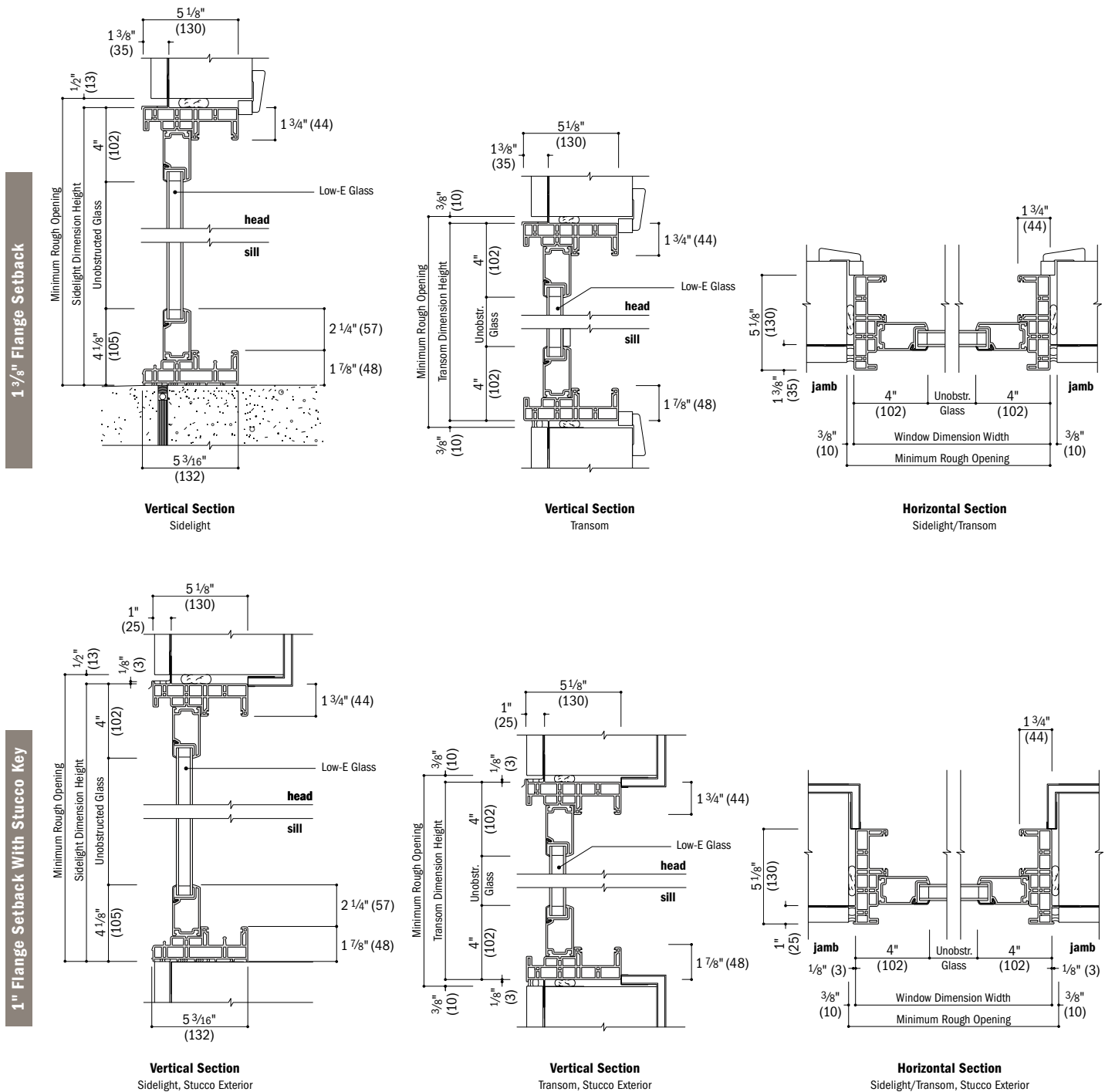
• Dimensions in parentheses are in square meters.

• Dimensions in parentheses are in square meters.

# PATIO DOOR SIDELIGHTS & TRANSOMS

## Patio Door Sidelight and Transom Details

Scale 1 1/2" (38) = 1'-0" (305) – 1:8



See page 105 for joining details.

- Light-colored areas are parts included with sidelight/transom. Dark-colored areas are additional Andersen® parts required to complete sidelight/transom assembly as shown.
- **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**
- Drip cap is required to complete door installation as shown but may not be included with door. Use of drip cap is recommended for proper installation.
- Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.
- Dimensions in parentheses are in millimeters.

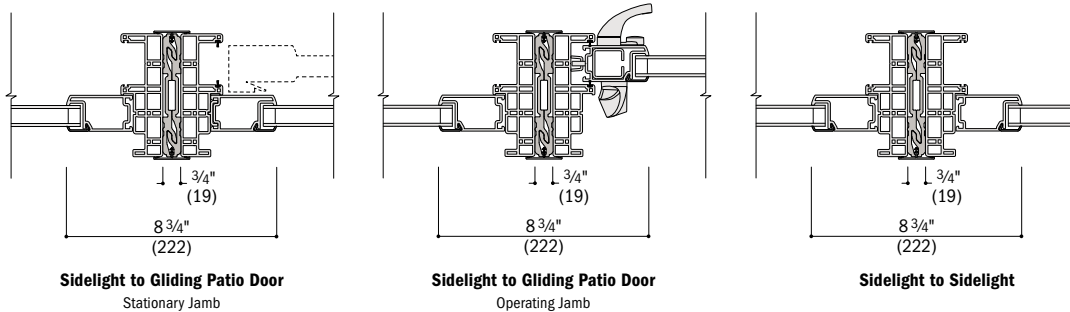
## Vertical (ribbon) Easy Connect Fiberglass Joining Details

Scale 1½" (38) = 1'-0" (305) – 1:8

The addition of joining materials will affect the overall rough opening dimension.

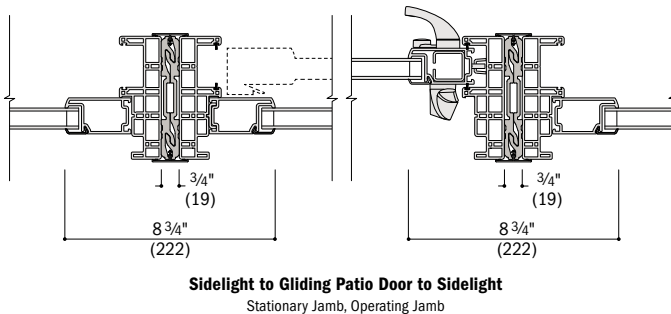
**Overall Door-Sidelight or Sidelight-Sidelight Dimension Width** – Sum of individual door-sidelight or sidelight-sidelight widths plus ¾" (19).

**Overall Minimum Rough Opening Width** – Overall dimension width plus ¾" (19).



**Overall Sidelight-Door-Sidelight Dimension Width** – Sum of individual sidelight-door-sidelight widths plus 1½" (38).

**Overall Minimum Rough Opening Width** – Overall dimension width plus ¾" (19).



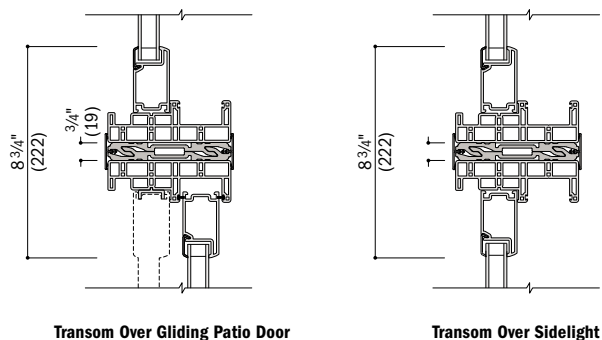
## Horizontal (stack) Easy Connect Fiberglass Joining Details

Scale 1½" (38) = 1'-0" (305) – 1:8

The addition of joining materials will affect the overall rough opening dimension.

**Overall Transom/Door or Transom/Sidelight Dimension Height** – Sum of individual transom/door or transom/sidelight heights plus ¾" (19).

**Overall Minimum Rough Opening Height** – Overall dimension height plus ½" (13).



For more information on joining, refer to the  
**Combination Designs** section starting on page 107.

\* Light-colored areas are parts included with door/sidelight/transom. Dark-colored areas are additional Andersen® parts required to complete door/sidelight/transom assembly as shown.

\* **Minimum rough openings may need to be increased to allow for use of building wraps, flashing, sill panning, brackets, fasteners or other items. See installation information on page 121.**

\* Details are for illustration only and are not intended to represent product installation methods or materials. Refer to product installation instructions at andersenwindows.com.

\* Structural performance of any combination is only as high as the lowest structural performance of any individual product or join in the combination.

\* Contact your Andersen supplier for information on meeting wind load requirements for patio door joined combinations.

\* Dimensions in parentheses are in millimeters.

# PATIO DOOR CUSTOM SIZES

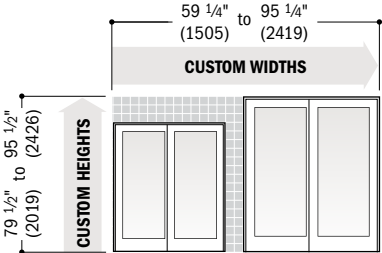
## Custom Sizes and Specification Formulas



100 Series custom-size patio doors and patio door sidelights and transoms are available in 1/8" (3) increments between minimum and maximum widths and heights shown. Some restrictions apply.

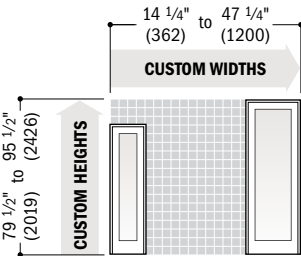
### Gliding Patio Doors

To meet or exceed a clear opening width of 32" (813), select a custom-size door width that requires a rough opening width of 6'-6" (1981) or greater.



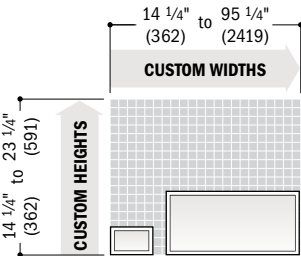
| Clear Opening | Width = (door width ÷ 2) - 6.125" (156)<br>Height = door height - 3.625" (92) | Minimum R.O. | Width = door width + 3/4" (19)<br>Height = door height + 1/2" (13) | Unobst. Glass | Single-Panel<br>Width = (door width ÷ 2) - 5.500" (140)<br>Two-Panel<br>Width = door width - 11.000" (279)<br>Height = door height - 8.250" (210) |
|---------------|-------------------------------------------------------------------------------|--------------|--------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
|               |                                                                               |              |                                                                    |               |                                                                                                                                                   |

### Patio Door Sidelights



| Minimum R.O. | Width = sidelight width + 3/4" (19)<br>Height = sidelight height + 1/2" (13) | Unobst. Glass | Width = sidelight width - 8.048" (204)<br>Height = sidelight height - 8.048" (204) |
|--------------|------------------------------------------------------------------------------|---------------|------------------------------------------------------------------------------------|
|              |                                                                              |               |                                                                                    |

### Patio Door Transoms



| Minimum R.O. | Width = transom width + 3/4" (19)<br>Height = transom height + 3/4" (19) | Unobst. Glass | Width = transom width - 8.048" (204)<br>Height = transom height - 8.048" (204) |
|--------------|--------------------------------------------------------------------------|---------------|--------------------------------------------------------------------------------|
|              |                                                                          |               |                                                                                |

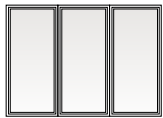
\* **Clear Opening** formulas provide dimensions for determining area available for egress. **Minimum R.O.** (minimum rough opening) formulas provide minimum rough opening width and height dimensions. **Unobst. Glass** (unobstructed glass) formulas provide dimensions for determining area available for passage of light.  
\* Dimensions in parentheses are in millimeters.

# Andersen® window and patio doors make it easy to create a wide variety of combination designs

## Combination Types

Ribbons are horizontal window combinations (vertical joins) where opposite ends (head and sill) of individual windows are fastened to the building structure. Stacks are vertical window combinations (horizontal joins) where opposite sides (both side jambs) of individual windows are fastened to the building structure. One-way configurations or two-way configurations are used in combination designs.

### One-Way



Ribbon Combination



Stack Combination

### Two-Way



Multiple Ribbon/Stack Combination

Two-way combinations exist when multiple vertical stacks and horizontal ribbons are joined together. Unlike one-way combinations, the adjacent sides (head and sill, or both side jambs) of individual units are not necessarily fastened directly to the building structure. Two-way combinations are joined with both vertical and horizontal joining material, and may require reinforced joining materials and brackets depending on the local building code requirement for design wind load (measured in pounds per square foot, psf).

## Determining Design Wind Load Performance

Proper combination design in conformance with local wind load requirements is vital to the success of your project. To make sure a combination is safe and that it complies with local building codes, the combination design wind load performance capacity must be determined. Correctly determining this performance capacity involves the following three steps:

### STEP 1: Determine Building Code Requirement

Make sure you have the proper local codes and have identified specified compliance values. This calculated value (psf) will be used to determine if the combination will be acceptable (STEP 3).



### STEP 2: Determine Product Performance

Compare product Design Pressure Rating data to the local building code (psf) requirement. This will show whether the individual units in a combination design are acceptable.



### STEP 3: Determine Combination Performance

This step helps determine whether a given product, size, configuration and joining material type will meet the local building code design wind load requirement. To determine what joining material type to use (non-reinforced or reinforced), compare the local building code design wind load requirement to the design wind load table value for a particular joining material on the following pages.

## Andersen Joining Material

For a successful installation, one engineered to provide the required design pressure, it is important Andersen joining materials and installation accessories be specified by a project architect or contractor. For one- and two-way combinations, Andersen offers a fiberglass joining system that meets specified performance requirements and enhances the look of Andersen products without sacrificing performance.

The addition of joining materials will affect the overall rough opening dimension. See page 121. **For all joining methods, read and follow product joining and installation instructions in their entirety. Visit [andersenwindows.com](http://andersenwindows.com) for instructions.**

Exterior trim strips and trim strip end caps are included with each kit for finishing the exterior join. Interior trim is included with each joining kit for finishing the join on the interior. Components used with each joining system will vary depending on products being joined. Check with your Andersen supplier for more information.

Reinforced joining material is used to create product alignment, positive joining and load transfer between Andersen windows and doors and the rough opening. They provide added strength capable of withstanding a greater range of wind load pressures. Non-reinforced joining material is used to create alignment and positive joining between windows. Joining materials are not connected to the rough opening structure. The structural performance of any combination is only as high as the lowest structural performance rating of any individual unit or joining material in the combination.

Contact your Andersen supplier for specific performance and product recommendations.

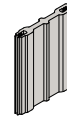
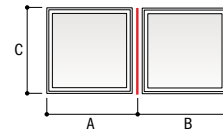
# COMBINATION DESIGNS

## 1-Way Non-Reinforced Fiberglass Joining

100 Series Windows: Picture to Picture, Casement to Casement, Awning to Awning, Casement to Picture, Awning to Picture

Applicable for flanged or flangeless installations into wood or metal. Ratings for windows installed into concrete or masonry are lower.

|                                   |                                   |                        |                        |                        |                        |                        |                        |                        |
|-----------------------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Average Adjacent Window Dimension | (A + B) ÷ 2 = <b>6'-0"</b> (1829) | 50                     | 50                     | 43                     | 37                     | 32                     | 29                     | 26                     |
|                                   | (A + B) ÷ 2 = <b>5'-6"</b> (1676) | 50                     | 50                     | 44                     | 38                     | 33                     | 30                     | 27                     |
|                                   | (A + B) ÷ 2 = <b>5'-0"</b> (1524) | 50                     | 50                     | 45                     | 39                     | 35                     | 31                     | 28                     |
|                                   | (A + B) ÷ 2 = <b>4'-6"</b> (1372) | 50                     | 50                     | 46                     | 41                     | 36                     | 33                     | 30                     |
|                                   | (A + B) ÷ 2 = <b>4'-0"</b> (1219) | 50                     | 50                     | 49                     | 43                     | 39                     | 35                     | 32                     |
|                                   | (A + B) ÷ 2 = <b>3'-6"</b> (1067) | 50                     | 50                     | 50                     | 47                     | 42                     | 39                     | 36                     |
|                                   | (A + B) ÷ 2 = <b>3'-0"</b> (914)  | 50                     | 50                     | 50                     | 50                     | 47                     | 43                     | 40                     |
|                                   | (A + B) ÷ 2 = <b>2'-6"</b> (762)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 46                     |
|                                   | (A + B) ÷ 2 = <b>2'-0"</b> (610)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     |
| <b>C = (length of join)</b>       |                                   | <b>5'-0"</b><br>(1524) | <b>5'-6"</b><br>(1676) | <b>6'-0"</b><br>(1829) | <b>6'-6"</b><br>(1981) | <b>7'-0"</b><br>(2134) | <b>7'-6"</b><br>(2286) | <b>8'-0"</b><br>(2438) |



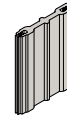
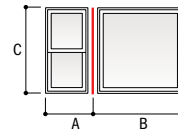
**1/2" (13) x 3 1/4" (83)**  
Fiberglass Joining Material

## 1-Way Non-Reinforced Fiberglass Joining

100 Series Windows: Single-Hung to Picture, Gliding to Picture

Applicable for flanged or flangeless installations into wood or metal. Ratings for windows installed into concrete or masonry are lower.

|                       |                                   |                        |                        |                        |                        |                        |                        |                        |
|-----------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Avg. Adj. Window Dim. | (A + B) ÷ 2 = <b>5'-0"</b> (1524) | 50                     | 50                     | 45                     | 39                     | 35                     | 31                     | 28                     |
|                       | (A + B) ÷ 2 = <b>4'-6"</b> (1372) | 50                     | 50                     | 46                     | 41                     | 36                     | 33                     | 30                     |
|                       | (A + B) ÷ 2 = <b>4'-0"</b> (1219) | 50                     | 50                     | 49                     | 43                     | 39                     | 35                     | 32                     |
|                       | (A + B) ÷ 2 = <b>3'-6"</b> (1067) | 50                     | 50                     | 50                     | 47                     | 42                     | 39                     | 36                     |
|                       | (A + B) ÷ 2 = <b>3'-0"</b> (914)  | 50                     | 50                     | 50                     | 50                     | 47                     | 43                     | 40                     |
|                       | (A + B) ÷ 2 = <b>2'-6"</b> (762)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 46                     |
|                       | (A + B) ÷ 2 = <b>2'-0"</b> (610)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     |
|                       | <b>C = (length of join)</b>       | <b>5'-0"</b><br>(1524) | <b>5'-6"</b><br>(1676) | <b>6'-0"</b><br>(1829) | <b>6'-6"</b><br>(1981) | <b>7'-0"</b><br>(2134) | <b>7'-6"</b><br>(2286) | <b>8'-0"</b><br>(2438) |



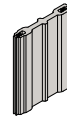
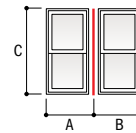
**1/2" (13) x 3 1/4" (83)**  
Fiberglass Joining Material

## 1-Way Non-Reinforced Fiberglass Joining

100 Series Windows: Single-Hung to Single-Hung, Gliding to Gliding, Single-Hung to Casement, Single-Hung to Awning

Applicable for flanged or flangeless installations into wood or metal. Ratings for windows installed into concrete or masonry are lower.

|                             |                                   |                        |                        |                        |                        |                        |                        |                        |
|-----------------------------|-----------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Avg. Adj. Window Dim.       | (A + B) ÷ 2 = <b>4'-0"</b> (1219) | 50                     | 50                     | 49                     | 43                     | 39                     | 34                     | 30                     |
|                             | (A + B) ÷ 2 = <b>3'-6"</b> (1067) | 50                     | 50                     | 50                     | 47                     | 42                     | 38                     | 33                     |
|                             | (A + B) ÷ 2 = <b>3'-0"</b> (914)  | 50                     | 50                     | 50                     | 50                     | 47                     | 43                     | 38                     |
|                             | (A + B) ÷ 2 = <b>2'-6"</b> (762)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 45                     |
|                             | (A + B) ÷ 2 = <b>2'-0"</b> (610)  | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     |
| <b>C = (length of join)</b> |                                   | <b>5'-0"</b><br>(1524) | <b>5'-6"</b><br>(1676) | <b>6'-0"</b><br>(1829) | <b>6'-6"</b><br>(1981) | <b>7'-0"</b><br>(2134) | <b>7'-6"</b><br>(2286) | <b>8'-0"</b><br>(2438) |



**1/2" (13) x 3 1/4" (83)**  
Fiberglass Joining Material

\* Numerical values in charts represent structural pressure only.

\* Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

\* Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.

\* Andersen® products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at [andersenwindows.com](http://andersenwindows.com).

\* Dimensions in parentheses are in millimeters.

\* Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

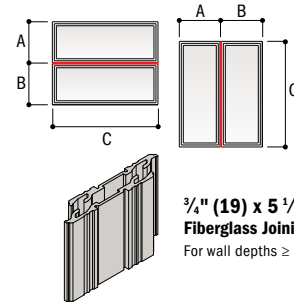
\* Transom windows use picture frame type. Integral transom windows use single-hung frame type. Combination performance should be determined accordingly.



## 1-Way Reinforced Easy Connect Fiberglass Joining

## 100 Series Windows: Casement, Awning, Single-Hung, Gliding, Picture

Applicable for flanged or flangeless installations into wood, metal, concrete or masonry.

[illegible]

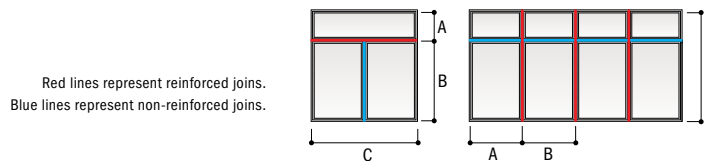
**$\frac{3}{4}$ " (19) x 5  $\frac{1}{8}$ " (130)**  
**Fiberglass Joining Material**  
 For wall depths  $\geq 4 \frac{9}{16}$ " (116).

## 2-Way Reinforced Easy Connect Fiberglass Joining\*

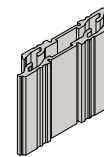
### 100 Series Windows: Casement, Awning, Single-Hung, Gliding, Picture

Applicable for flanged or flangeless installations into wood, metal, concrete or masonry.

|                                   |                                   |                       |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                         |                         |                         |                         |                         |    |
|-----------------------------------|-----------------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|----|
| Average Adjacent Window Dimension | (A + B) ÷ 2 = <b>6'-0"</b> (1829) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 49                     | 44                      | 40                      | 26                      | 23                      | 21                      | 20 |
|                                   | (A + B) ÷ 2 = <b>5'-6"</b> (1676) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 48                      | 43                      | 28                      | 26                      | 23                      | 21 |
|                                   | (A + B) ÷ 2 = <b>5'-0"</b> (1524) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 48                      | 32                      | 30                      | 26                      | 24 |
|                                   | (A + B) ÷ 2 = <b>4'-6"</b> (1372) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 36                      | 33                      | 27                      | 25 |
|                                   | (A + B) ÷ 2 = <b>4'-0"</b> (1219) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 41                      | 37                      | 30                      | 28 |
|                                   | (A + B) ÷ 2 = <b>3'-9"</b> (1372) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 43                      | 40                      | 32                      | 30 |
|                                   | (A + B) ÷ 2 = <b>3'-6"</b> (1067) | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 47                      | 42                      | 35                      | 32 |
|                                   | (A + B) ÷ 2 = <b>3'-0"</b> (914)  | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 50                      | 50                      | 40                      | 37 |
|                                   | (A + B) ÷ 2 = <b>2'-6"</b> (762)  | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 50                      | 50                      | 43                      | 40 |
|                                   | (A + B) ÷ 2 = <b>2'-0"</b> (610)  | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 50                      | 50                      | 50                      | 50 |
|                                   | (A + B) ÷ 2 = <b>1'-6"</b> (457)  | 50                    | 50                    | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                     | 50                      | 50                      | 50                      | 50                      | 50                      | 50 |
| <b>C = (length of join)</b>       | <b>2'-0"</b><br>(610)             | <b>2'-6"</b><br>(762) | <b>3'-0"</b><br>(914) | <b>3'-6"</b><br>(1067) | <b>4'-0"</b><br>(1219) | <b>4'-6"</b><br>(1372) | <b>5'-0"</b><br>(1524) | <b>5'-6"</b><br>(1676) | <b>6'-0"</b><br>(1829) | <b>6'-6"</b><br>(1981) | <b>7'-0"</b><br>(2134) | <b>7'-6"</b><br>(2286) | <b>8'-0"</b><br>(2438) | <b>8'-6"</b><br>(2591) | <b>9'-0"</b><br>(2743) | <b>9'-6"</b><br>(2896) | <b>10'-0"</b><br>(3048) | <b>10'-6"</b><br>(3200) | <b>11'-0"</b><br>(3353) | <b>11'-6"</b><br>(3505) | <b>12'-0"</b><br>(3658) |    |



Red lines represent reinforced joins.  
Blue lines represent non-reinforced joins.



**3/4" (19) x 5 1/8" (130)**  
**Fiberglass Joining Material**  
For wall depths  $\geq 4 \frac{9}{16}$ " (116).

- \* Numerical values in charts represent structural pressure only.
- \* Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.
- \* Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.
- \* Andersen® products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at [andersenwindows.com](http://andersenwindows.com).
- \* Dimensions in parentheses are in millimeters.
- \* Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.
- \* Transom windows use picture frame type. Integral transom windows use single-hung frame type. Combination performance should be determined accordingly.
- \* Performance of two-way combinations may be limited by non-reinforced joins 6" (1829) or greater in length. Verify performance of non-reinforced joins within two-way combinations using the appropriate non-reinforced joining table.
- \* All low-pressure joining requires both non-reinforced and reinforced elements. Intersecting reinforced or non-reinforced joins are not available.

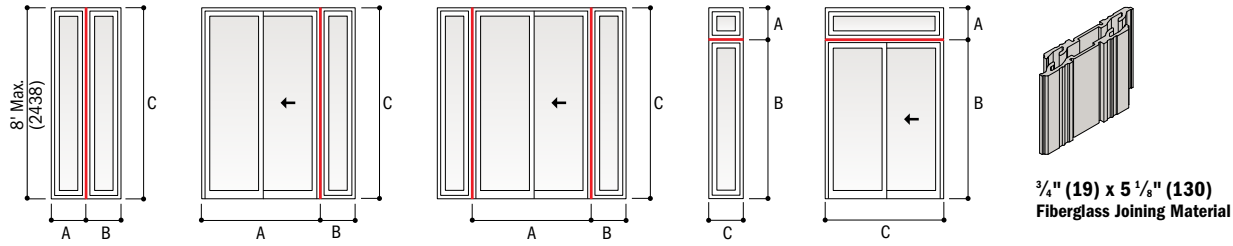
**Combination Designs,  
Product Performance  
& Installation**

# COMBINATION DESIGNS

## 1-Way Reinforced Easy Connect Fiberglass Joining

100 Series Patio Doors: Gliding Patio Doors, Patio Door Sidelights and Transoms

Applicable for field joining kits only.



|                                                   |                                   |                       |                       |                       |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |
|---------------------------------------------------|-----------------------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Average Adjacent Door/Sidelight/Transom Dimension | (A + B) + 2 = <b>8'-0"</b> (2438) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>7'-6"</b> (2286) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>7'-0"</b> (2134) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>6'-6"</b> (1981) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>6'-0"</b> (1829) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>5'-6"</b> (1676) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>5'-0"</b> (1524) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>4'-6"</b> (1372) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>4'-0"</b> (1219) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>3'-9"</b> (1372) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>3'-6"</b> (1067) | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>3'-0"</b> (914)  | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>2'-6"</b> (762)  | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>2'-0"</b> (610)  | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | (A + B) + 2 = <b>1'-6"</b> (457)  | 30                    | 30                    | 30                    | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     | 30                     |
|                                                   | <b>C = (length of join)</b>       | <b>2'-0"</b><br>(610) | <b>2'-6"</b><br>(762) | <b>3'-0"</b><br>(914) | <b>3'-6"</b><br>(1067) | <b>4'-0"</b><br>(1219) | <b>4'-6"</b><br>(1372) | <b>5'-0"</b><br>(1524) | <b>5'-6"</b><br>(1676) | <b>6'-0"</b><br>(1829) | <b>6'-6"</b><br>(1981) | <b>7'-0"</b><br>(2134) | <b>7'-6"</b><br>(2286) | <b>8'-0"</b><br>(2438) |

\* Numerical values in charts represent structural pressure only.

\* Structural performance of any combination is only as high as the lowest structural performance of any individual unit or joining material in the combination.

\* Easy Connect and other fiberglass joins are certified up to PG50 when installed according to Andersen installation instructions.

\* Andersen® products must be installed and anchored properly according to joining and installation instructions to meet rated structural performance. Refer to product joining and installation instructions at andersenwindows.com.

\* Dimensions in parentheses are in millimeters.

\* Contact your Andersen supplier for joining windows to patio doors and for specific performance and product recommendations.

## Altitude Limits

The chart below gives the altitude limit in feet for 100 Series products in this guide. If the installation of a given product is at an altitude greater than that shown in this chart, a capillary breather tube must be ordered. Be aware that the use of a capillary breather tube eliminates argon gas blend fill and will result in a slightly lower thermal performance (approximately 0.02 increase in window U-Factor). For NFRC certified total unit performance on units with capillary breather tubes for higher altitude applications, see your Andersen supplier.

The use of dual-pane insulating glass without capillary breather tubes at altitudes higher than its rating will result in severe glass distortion, increased glass breakage potential and a risk of seal failure. Smaller windows are most affected by altitude changes. An increase in altitude results in a decrease in atmospheric pressure. A sealed insulating glass unit attempts to combat this change by increasing its volume to reduce its pressure. One way to increase its volume is by glass deflection. A smaller window is stiffer and does not deflect as much as a larger window; therefore, it cannot relieve the pressure as readily. Thus, the load applied to the glass is greater, resulting in a greater risk for breakage. Another way the window tries to increase its volume is by increasing the edge area; i.e., the seal area. The increased pressure applied to the edge seal load for a smaller window is therefore greater, increasing the chance for seal failure.

| Andersen® Product                                                          | 3,000 |      |      | 4,000 |       |      | 5,000 |       | 6,000 | 7,000 |      | 8,000 | 9,000 |       | 10,000 |       |       |
|----------------------------------------------------------------------------|-------|------|------|-------|-------|------|-------|-------|-------|-------|------|-------|-------|-------|--------|-------|-------|
| 100 Series<br>Casement Windows                                             |       |      |      | 1620  | 1650  |      | 2020  | 2050  | 2660  | 2626  | 2656 | 3056  | 3030  |       |        |       |       |
|                                                                            |       |      |      | 1626  | 1656  |      | 2026  | 2056  |       | 2630  | 3026 | 3060  | 3036  |       |        |       |       |
|                                                                            |       |      |      | 1630  | 1660  |      | 2030  | 2060  |       | 2636  |      |       | 3040  |       |        |       |       |
|                                                                            |       |      |      | 1636  |       |      | 2036  | 2620  |       | 2640  |      |       | 3046  |       |        |       |       |
|                                                                            |       |      |      | 1640  |       |      | 2040  | 3020  |       | 2646  |      |       | 3050  |       |        |       |       |
|                                                                            |       |      |      | 1646  |       |      | 2046  |       |       | 2650  |      |       |       |       |        |       |       |
| 100 Series<br>Awning Windows                                               |       |      |      | 1616  | 2016  | 4016 | 2020  | 3020  |       | 2626  | 4026 |       | 3030  |       |        |       |       |
|                                                                            |       |      |      | 1620  | 2616  |      | 2026  | 3620  |       | 2630  |      |       | 3630  |       |        |       |       |
|                                                                            |       |      |      | 1626  | 3016  |      | 2030  | 4020  |       | 3026  |      |       | 4030  |       |        |       |       |
|                                                                            |       |      |      | 1630  | 3616  |      | 2620  |       |       | 3626  |      |       |       |       |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
| 100 Series<br>Single-Hung Windows                                          | 1620  |      |      | 1626  | 1666  | 3030 | 2036  | 2076  | 2640  | 2646  | 3646 | 3050  | 3056  |       | 3660   |       |       |
|                                                                            | 2020  |      |      | 1630  | 1670  | 3626 | 2040  | 2636  | 3040  | 2650  | 4046 | 3650  | 3060  |       | 3666   |       |       |
|                                                                            | 2620  |      |      | 1636  | 1676  | 3630 | 2046  | 3036  | 3640  | 2656  |      | 4050  | 3066  |       | 3670   |       |       |
|                                                                            | 3020  |      |      | 1640  | 2026  | 4026 | 2050  | 3636  | 4040  | 2660  |      |       | 3070  |       | 3676   |       |       |
|                                                                            | 3620  |      |      | 1646  | 2030  | 4030 | 2056  | 4036  |       | 2666  |      |       | 3076  |       | 4060   |       |       |
|                                                                            | 4020  |      |      | 1650  | 2626  |      | 2060  |       |       | 2670  |      |       | 3656  |       | 4066   |       |       |
|                                                                            |       |      |      | 1656  | 2630  |      | 2066  |       |       | 2676  |      |       | 4056  |       | 4070   |       |       |
|                                                                            |       |      |      | 1660  | 3026  |      | 2070  |       |       | 3046  |      |       |       |       | 4076   |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
| 100 Series<br>Gliding Windows<br>Active-Stationary or<br>Stationary-Active | 2010  | 2056 | 4016 | 2620  | 3020  | 3620 | 3626  | 4626  | 4030  | 4630  | 5630 | 5036  | 5636  |       | 6040   |       |       |
|                                                                            | 2016  | 2060 | 4610 | 2626  | 3026  | 4020 | 3630  | 5026  | 4036  | 4636  | 6030 | 5040  | 5640  |       | 6046   |       |       |
|                                                                            | 2020  | 2610 | 4616 | 2630  | 3030  | 4620 | 3636  | 5626  | 4040  | 4640  |      | 5046  | 5646  |       |        |       |       |
|                                                                            | 2026  | 2616 | 5010 | 2636  | 3036  | 5020 | 3640  | 6026  | 4046  | 4646  |      | 5050  | 5650  |       |        |       |       |
|                                                                            | 2030  | 3010 | 5016 | 2640  | 3040  | 5620 | 3646  |       | 4050  | 4650  |      | 5056  | 6036  |       |        |       |       |
|                                                                            | 2036  | 3016 | 5610 | 2646  | 3046  | 6020 | 3650  |       | 4056  | 4656  |      | 5656  | 6050  |       |        |       |       |
|                                                                            | 2040  | 3610 | 5616 | 2650  | 3050  |      | 3656  |       | 4060  | 4660  |      | 5660  | 6056  |       |        |       |       |
|                                                                            | 2046  | 3616 | 6010 | 2656  | 3056  |      | 3660  |       |       | 5030  |      |       | 6060  |       |        |       |       |
|                                                                            | 2050  | 4010 | 6016 | 2660  | 3060  |      | 4026  |       |       | 5060  |      |       |       |       |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
| 100 Series<br>Gliding Windows<br>Active-Stationary-Active                  |       |      |      | 5016  | 6020  |      | 6036  | 8020  | 7040  | 8040  | 7640 | 8636  | 8646  | 9050  | 12056  | 10056 |       |
|                                                                            |       |      |      | 5020  | 6026  |      | 6040  | 8620  | 7046  |       | 7646 | 8640  | 8650  | 9056  | 12060  | 11060 |       |
|                                                                            |       |      |      | 5026  | 6030  |      | 6046  | 9020  | 7050  |       | 7650 | 9026  | 8656  | 9060  |        | 12036 |       |
|                                                                            |       |      |      | 5030  | 7016  |      | 6050  | 10020 | 7056  |       | 7656 | 9030  | 8660  | 10060 |        | 12040 |       |
|                                                                            |       |      |      | 5036  | 7616  |      | 6056  | 11020 | 7060  |       | 7660 | 9036  | 10030 | 11030 |        | 12046 |       |
|                                                                            |       |      |      | 5040  | 8016  |      | 6060  | 12020 | 7626  |       | 8046 | 9040  | 10036 | 11036 |        |       |       |
|                                                                            |       |      |      | 5046  | 8616  |      | 7020  |       | 7630  |       | 8050 | 9046  | 10040 | 11040 |        |       |       |
|                                                                            |       |      |      | 5050  | 9016  |      | 7026  |       | 7636  |       | 8056 | 10026 | 10046 | 11046 |        |       |       |
|                                                                            |       |      |      | 5056  | 10016 |      | 7030  |       | 8026  |       | 8060 | 11026 | 10050 | 11050 |        |       |       |
|                                                                            |       |      |      | 5060  | 11016 |      | 7036  |       | 8030  |       | 8626 | 12026 | 11056 | 12030 |        |       |       |
|                                                                            |       |      |      | 6016  | 12016 |      | 7620  |       | 8036  |       | 8630 |       |       | 12050 |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       |        |       |       |
| 100 Series<br>Picture, Transom and<br>Specialty Windows                    | 1010  | 5610 |      | 1616  | 2060  | 7016 | 2626  |       |       | 3030  |      |       | 3636  |       | 4040   | 5066  | 6646  |
|                                                                            | 1016  | 6010 |      | 1620  | 2066  | 7020 | 2630  |       |       | 3036  |      |       | 3640  |       | 4046   | 5070  | 6650  |
|                                                                            | 1020  | 6610 |      | 1626  | 2070  | 7616 | 2636  |       |       | 3040  |      |       | 3646  |       | 4050   | 5076  | 6656  |
|                                                                            | 1026  | 7010 |      | 1630  | 2076  | 7620 | 2640  |       |       | 3046  |      |       | 3650  |       | 4056   | 5080  | 6660  |
|                                                                            | 1030  | 7610 |      | 1636  | 2080  | 8016 | 2646  |       |       | 3050  |      |       | 3656  |       | 4060   | 5640  | 7040  |
|                                                                            | 1036  | 8010 |      | 1640  | 2616  | 8020 | 2650  |       |       | 3056  |      |       | 3660  |       | 4066   | 5646  | 7046  |
|                                                                            | 1040  |      |      | 1646  | 2620  |      | 2656  |       |       | 3060  |      |       | 3666  |       | 4070   | 5650  | 7050  |
|                                                                            | 1046  |      |      | 1650  | 3016  |      | 2660  |       |       | 3066  |      |       | 3670  |       | 4076   | 5656  | 7056  |
|                                                                            | 1050  |      |      | 1656  | 3020  |      | 2666  |       |       | 3070  |      |       | 3676  |       | 4080   | 5660  | 7060  |
|                                                                            | 1056  |      |      | 1660  | 3616  |      | 2670  |       |       | 3076  |      |       | 3680  |       | 4640   | 5666  | 7640  |
|                                                                            | 1060  |      |      | 1666  | 3620  |      | 2676  |       |       | 3080  |      |       | 4036  |       | 4646   | 5670  | 7646  |
|                                                                            | 1066  |      |      | 1670  | 4016  |      | 2680  |       |       | 3630  |      |       | 4636  |       | 4650   | 5676  | 7650  |
|                                                                            | 1070  |      |      | 1676  | 4020  |      | 3026  |       |       | 4030  |      |       | 5036  |       | 4656   | 5680  | 7656  |
|                                                                            | 1076  |      |      | 1680  | 4616  |      | 3626  |       |       | 4630  |      |       | 5636  |       | 4660   | 6040  | 7660  |
|                                                                            | 1080  |      |      | 2016  | 4620  |      | 4026  |       |       | 5030  |      |       | 6036  |       | 4666   | 6046  | 8040  |
|                                                                            | 1610  |      |      | 2020  | 5016  |      | 4626  |       |       | 5630  |      |       | 6636  |       | 4670   | 6050  | 8046  |
|                                                                            | 2010  |      |      | 2026  | 5020  |      | 5026  |       |       | 6030  |      |       | 7036  |       | 4676   | 6055  | 8050  |
|                                                                            | 2610  |      |      | 2030  | 5616  |      | 5626  |       |       | 6630  |      |       | 7636  |       | 4680   | 6060  | 8056  |
|                                                                            | 3010  |      |      | 2036  | 5620  |      | 6026  |       |       | 7030  |      |       | 8036  |       | 5040   | 6066  | 8060  |
|                                                                            | 3610  |      |      | 2040  | 6016  |      | 6626  |       |       | 7630  |      |       |       |       | 5046   | 6070  |       |
|                                                                            | 4010  |      |      | 2046  | 6020  |      | 7026  |       |       | 8030  |      |       |       |       | 5050   | 6076  |       |
|                                                                            | 4610  |      |      | 2050  | 6616  |      | 7626  |       |       |       |      |       |       |       | 5056   | 6080  |       |
|                                                                            | 5010  |      |      | 2056  | 6620  |      | 8026  |       |       |       |      |       |       |       | 5060   | 6640  |       |
| 100 Series<br>Gliding Patio Doors                                          |       |      |      |       |       |      |       |       |       |       |      |       |       |       | 5068   | 6068  | 8068  |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       | 50611  | 60611 | 80611 |
|                                                                            |       |      |      |       |       |      |       |       |       |       |      |       |       |       | 5080   | 6080  | 8080  |
| 100 Series<br>Patio Door Sidelights                                        | 1368  |      |      | 1668  |       |      |       |       |       |       |      | 2068  |       |       | 2668   | 3068  | 4068  |
|                                                                            | 13611 |      |      | 16611 |       |      |       |       |       |       |      | 20611 |       |       | 26611  | 30611 | 40611 |
|                                                                            | 1380  |      |      | 1680  |       |      |       |       |       |       |      | 2080  |       |       | 2680   | 3080  | 4080  |
| 100 Series<br>Patio Door Transoms                                          | 1313  | 2016 | 5013 | 2020  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 1316  | 2613 | 5016 | 2620  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 1320  | 2616 | 6013 | 3020  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 1613  | 3013 | 6016 | 4020  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 1616  | 3016 | 8013 | 5020  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 1620  | 4013 | 8016 | 6020  |       |      |       |       |       |       |      |       |       |       |        |       |       |
|                                                                            | 2013  | 4016 |      | 8020  |       |      |       |       |       |       |      |       |       |       |        |       |       |

• Deflection of glass will occur on units with larger glass areas. If interior/exterior grilles are used on single-hung windows, gliding windows or gliding patio doors at higher altitudes without capillary breather tubes, some interference may occur, affecting operation.

• Altitude limits for patio doors shown in two-panel configurations. These limits also qualify for same-size panels used in single-panel configurations.

• **Contact your Andersen supplier for altitude limits for custom-sized windows and doors.**

# PRODUCT PERFORMANCE

## PERFORMANCE STANDARDS

The Window and Door Manufacturers Association (WDMA), the American Architectural Manufacturers Association (AAMA) and the Canadian Standards Association (CSA) jointly release the North American Fenestration Standard/Specification for Windows, Doors and Skylights (NAFS). NAFS is also referred to as AAMA/WDMA/CSA 101/I.S.2/A440, which is how the International Code Council (ICC) lists this standard in the International Residential Code (IRC) and International Building Code (IBC) as the means to indicate the window, door or skylights design pressure rating used to determine compliance to the job site design pressure requirements.

A product only achieves a "Performance Grade" or "PG" rating when it complies with all of the NAFS performance requirements such as ease of operation, air infiltration resistance, resistance to water penetration and resistance to forced entry, etc. A "Design Pressure Rating" or "DP" rating only depicts the design and structural load performance.

### Performance Classes

The NAFS Standard/Specification defines requirements for four performance classes. Performance classes are designated R, LC, CW and AW. This classification system provides for several levels of performance. Product selection is always based on the performance and building code requirements of the particular project.

### Elements of Performance Grade (PG) Designations

In order to qualify for a given performance grade (PG), test specimens need to pass all required performance tests for the following, in addition to all required auxiliary (durability) and applicable material/component tests (not shown here) for the applicable product type and desired performance class:

**(a) Operating force (if applicable):** Maximum operating force varies by product type and performance class.

**(b) Air leakage resistance:** Tested in accordance with ASTM E283 at a test pressure of 1.57 psf. Allowable air infiltration for R, LC and CW class designations is 0.3 cubic feet per minute per square foot of frame (cfm/ft<sup>2</sup>).

**(c) Water penetration resistance:** Tested in accordance with ASTM E547 with the specified test pressure applied per NAFS. Test consists of four cycles. Each cycle consists of five minutes with pressure applied and one minute with the pressure released, during which the water spray is continuously applied. Water spray shall be uniformly applied at a constant rate of 5 U.S. gal/ft<sup>2</sup> · hr.

**(d) Uniform load deflection test:** Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS) with the load maintained for a period of 10 seconds. The test specimen shall be evaluated for deflection during each load for permanent damage after each load and for any effects on the normal operation of the specimen. *Starting with the 2008 version of NAFS, design pressure (DP) will only represent the "uniform load deflection test."*

**(e) Uniform load structural test:** Tested in accordance with ASTM E330 for both positive and negative pressure (pressure defined by NAFS) with the load maintained for a period of 10 seconds. After loads are removed, there shall be no permanent deformation in excess of 0.4% of its span and no damage to the unit, which would make it inoperable.

**(f) Forced-entry resistance (if applicable):** Tested in accordance with ASTM F588 (windows), F476 (swinging doors) and F842 (sliding doors) at a performance level 10 rating.

### Performance Grades (PG) and Corresponding Test Pressures (psf)

| Performance Class/<br>Performance Grade |     | Air Infiltration<br>Test Pressure |      | Maximum Allowable Air<br>Infiltration/<br>Exfiltration Rate |                     | Water Penetration<br>Resistance Test<br>Pressure |       | Design Pressure |        | Structural Test<br>Pressure |        |
|-----------------------------------------|-----|-----------------------------------|------|-------------------------------------------------------------|---------------------|--------------------------------------------------|-------|-----------------|--------|-----------------------------|--------|
| R                                       | LC  | Pa                                | psf  | L/s-m <sup>2</sup>                                          | cfm/ft <sup>2</sup> | Pa                                               | psf   | Pa              | psf    | Pa                          | psf    |
| 15                                      | -   | 75                                | 1.57 | 1.5                                                         | 0.30                | 140                                              | 2.92  | 720             | 15.04  | 1080                        | 22.56  |
| 20                                      | -   | 75                                | 1.57 | 1.5                                                         | 0.30                | 150                                              | 3.13  | 960             | 20.05  | 1440                        | 30.08  |
| 25                                      | 25  | 75                                | 1.57 | 1.5                                                         | 0.30                | 180                                              | 3.76  | 1200            | 25.06  | 1800                        | 37.59  |
| 30                                      | 30  | 75                                | 1.57 | 1.5                                                         | 0.30                | 220                                              | 4.59  | 1440            | 30.08  | 2160                        | 45.11  |
| 35                                      | 35  | 75                                | 1.57 | 1.5                                                         | 0.30                | 260                                              | 5.43  | 1680            | 35.09  | 2520                        | 52.63  |
| 40                                      | 40  | 75                                | 1.57 | 1.5                                                         | 0.30                | 290                                              | 6.06  | 1920            | 40.10  | 2880                        | 60.15  |
| 45                                      | 45  | 75                                | 1.57 | 1.5                                                         | 0.30                | 330                                              | 6.89  | 2160            | 45.11  | 3240                        | 67.67  |
| 50                                      | 50  | 75                                | 1.57 | 1.5                                                         | 0.30                | 360                                              | 7.52  | 2400            | 50.13  | 3600                        | 75.19  |
| 55                                      | 55  | 75                                | 1.57 | 1.5                                                         | 0.30                | 400                                              | 8.35  | 2640            | 55.14  | 3960                        | 82.71  |
| 60                                      | 60  | 75                                | 1.57 | 1.5                                                         | 0.30                | 440                                              | 9.19  | 2880            | 60.15  | 4320                        | 90.23  |
| 65                                      | 65  | 75                                | 1.57 | 1.5                                                         | 0.30                | 470                                              | 9.82  | 3120            | 65.16  | 4680                        | 97.74  |
| 70                                      | 70  | 75                                | 1.57 | 1.5                                                         | 0.30                | 510                                              | 10.65 | 3360            | 70.18  | 5040                        | 105.26 |
| 75                                      | 75  | 75                                | 1.57 | 1.5                                                         | 0.30                | 540                                              | 11.28 | 3600            | 75.19  | 5400                        | 112.78 |
| 80                                      | 80  | 75                                | 1.57 | 1.5                                                         | 0.30                | 580                                              | 12.11 | 3840            | 80.20  | 5760                        | 120.30 |
| 85                                      | 85  | 75                                | 1.57 | 1.5                                                         | 0.30                | 620                                              | 12.94 | 4080            | 85.21  | 6120                        | 127.82 |
| 90                                      | 90  | 75                                | 1.57 | 1.5                                                         | 0.30                | 660                                              | 13.78 | 4320            | 90.23  | 6480                        | 135.34 |
| 95                                      | 95  | 75                                | 1.57 | 1.5                                                         | 0.30                | 682                                              | 14.25 | 4560            | 95.24  | 6840                        | 142.86 |
| 100                                     | 100 | 75                                | 1.57 | 1.5                                                         | 0.30                | 718                                              | 15.00 | 4800            | 100.25 | 7200                        | 150.38 |

## HALLMARK CERTIFICATION

The Window and Door Manufacturers Association (WDMA)-sponsored Hallmark Certification Program provides manufacturers with certification to the AAMA/WDMA/CSA 101/I.S.2/A440 Standard and is designed to provide builders, architects, specifiers and consumers with an easily recognizable means of identifying products that have been manufactured and tested in accordance with NAFS (AAMA/WDMA/CSA 101/I.S.2/A440) industry standards and other applicable performance standards. Conformance is determined by periodic in-plant inspections by a third-party administrator. Inspections include auditing licensee quality control procedures and processes, and a review to confirm products are manufactured in accordance with the appropriate performance standards. Periodic testing of representative product constructions and components by an independent testing laboratory is also required. When all of the program requirements are met, the licensee is authorized to use the WDMA Hallmark registered logo on their certification label as a means of identifying products and their performance ratings.

Products successfully obtaining Hallmark Certification will be labeled with a three-part code, which includes performance class, performance grade and size tested. In addition to this mandatory requirement, you are allowed to list the design pressure on a separate line.

|                                                                                                    |                                                                                                                        |
|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <br>www.wdma.com | Andersen Corporation<br>100 SERIES CASEMENT WINDOW<br>Manufacturer stipulates certification as indicated below.        |
| STANDARD                                                                                           | RATING                                                                                                                 |
| AAMA/WDMA/CSA 101/I.S.2/A440-11                                                                    | Class LC <sup>(1)</sup> - PG40 <sup>(2)</sup> - Size Tested 71.5 x 71.5 in. <sup>(3)</sup><br>DP+40/-45 <sup>(4)</sup> |

(1) - Performance Class

(2) - Performance Grade

(3) - Size Tested

(4) - Design Pressure

In the example above, the performance class is LC, the performance grade (PG) is 40 pounds per square foot (psf) and the size tested is 71.5" x 71.5". What this means to the specifier is, based on the performance grade chart, the laboratory-tested air infiltration was less than 0.3 cfm/ft<sup>2</sup> (test pressure is always 1.57 psf and the allowable airflow is 0.3 cfm/ft<sup>2</sup>), the product tested successfully resisted a laboratory water penetration test at a test pressure of 6.0 psf, the product tested successfully withstood a laboratory positive test pressure of 60 psf and a laboratory negative test pressure of 67 psf, and the product tested passed the laboratory requirements for operational force and forced-entry resistance. Based on this test, all products of the same design that are smaller than the tested size can be labeled with this product performance rating.

## IMPORTANT

Building codes prescribe design pressure based on a variety of criteria (i.e., windspeed zone, building height, building type, job site exposure, etc.). Design pressures derived from Performance Grade (PG) test requirements should be used to determine compliance to building code required design pressures. Structural test pressures, which are tested at 1.5 times the design pressure, should **not** be used for determining design pressure code compliance. In the example above, a PG 40 performance grade rating, which passes a 40 psf design pressure, should be used for determining code compliance, not the structural test pressure of 60 psf.

If you need further details about how Andersen® products perform to this standard, contact your Andersen supplier.

If you need further information about the AAMA/WDMA/CSA 101/I.S.2/A440 standard or the Hallmark Certification Program, please contact: WDMA, 2001 K Street NW, 3rd Floor North, Washington, D.C. 20006. Phone: 202-367-1157 Website: **wdma.com**

Where designated, Andersen products are tested, certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.

## Performance Grade and Air Infiltration Ratings

For current performance information, please visit [andersenwindows.com](https://andersenwindows.com).

| Andersen® 100 Series Product                                  | AAMA/WDMA/CSA<br>101/LS2/A440<br>Performance Grade (PG) | +/-<br>Corresponding Design<br>Pressure (DP) | Air Infiltration<br>CFM/FT <sup>2</sup> |
|---------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|-----------------------------------------|
| <b>Casement Windows</b>                                       |                                                         |                                              |                                         |
| Single and Twin (venting/stationary)                          | Class LC-PG40 Size Tested 71.5" x 71.5"                 | 40/45                                        | < 0.2                                   |
| Single and Twin, PG Upgrade (venting/stationary)              | Class LC-PG50 Size Tested 71.5" x 71.5"                 | 50/50*                                       | < 0.2                                   |
| Picture With Flanking Casements                               | Class LC-PG40 Size Tested 143.5" x 71.5"                | 40/40                                        | < 0.2                                   |
| Picture With Flanking Casements, PG Upgrade                   | Class LC-PG50 Size Tested 143.5" x 65.5"                | 50/50*                                       | < 0.2                                   |
| <b>Awning Windows</b>                                         |                                                         |                                              |                                         |
| Single and Twin (venting/stationary)                          | Class LC-PG40 Size Tested 47.5" x 95.5"                 | 40/45                                        | < 0.2                                   |
| Single and Twin, PG Upgrade (venting/stationary)              | Class LC-PG50 Size Tested 47.5" x 95.5"                 | 50/50*                                       | < 0.2                                   |
| Picture Over Awning                                           | Class LC-PG40 Size Tested 47.5" x 95.5"                 | 40/45                                        | < 0.2                                   |
| Picture Over Awning, PG Upgrade                               | Class LC-PG50 Size Tested 47.5" x 95.5"                 | 50/50*                                       | < 0.2                                   |
| <b>Single-Hung Windows</b>                                    |                                                         |                                              |                                         |
| Arch Single-Hung                                              | Class LC-PG30 Size Tested 41.5" x 95.0"                 | 30/30                                        | < 0.2                                   |
| Arch Single-Hung, PG Upgrade                                  | Class LC-PG50 Size Tested 41.5" x 83.0"                 | 50/50*                                       | < 0.2                                   |
| Single-Hung                                                   | Class LC-PG30 Size Tested 47.5" x 77.5"                 | 30/30                                        | < 0.2                                   |
| Single-Hung, PG Upgrade                                       | Class LC-PG50 Size Tested 47.5" x 77.5"                 | 50/50*                                       | < 0.2                                   |
| Twin and Triple Single-Hung                                   | Class LC-PG30 Size Tested 143.5" x 71.5"                | 30/30                                        | < 0.2                                   |
| Twin and Triple Single-Hung, PG Upgrade                       | Class LC-PG50 Size Tested 143.5" x 65.5"                | 50/50*                                       | < 0.2                                   |
| Transom Over Single-Hung                                      | Class LC-PG30 Size Tested 47.5" x 95.5"                 | 30/30                                        | < 0.2                                   |
| Transom Over Single-Hung, PG Upgrade                          | Class LC-PG50 Size Tested 47.5" x 95.5"                 | 50/50*                                       | < 0.2                                   |
| Picture With Flanking Single-Hungs                            | Class LC-PG30 Size Tested 143.5" x 71.5"                | 30/30                                        | < 0.2                                   |
| Picture With Flanking Single-Hungs, PG Upgrade                | Class LC-PG50 Size Tested 143.5" x 59.5"                | 50/50*                                       | < 0.2                                   |
| <b>Gliding Windows</b>                                        |                                                         |                                              |                                         |
| Gliding (active-stationary or stationary-active)              | Class LC-PG30 Size Tested 71.5" x 71.5"                 | 30/30                                        | < 0.2                                   |
| Gliding, PG Upgrade (active-stationary or stationary-active)  | Class LC-PG50 Size Tested 71.5" x 59.5"                 | 50/50*                                       | < 0.2                                   |
| Picture Over Gliding (active-stationary or stationary-active) | Class LC-PG30 Size Tested 59.5" x 83.5"                 | 30/30                                        | < 0.2                                   |
| Gliding (active-stationary-active)                            | Class LC-PG30 Size Tested 143.5" x 71.5"                | 30/30                                        | < 0.2                                   |
| Gliding, PG Upgrade (active-stationary-active)                | Class LC-PG50 Size Tested 101.5" x 59.5"                | 50/50*                                       | < 0.2                                   |
| Picture Over Gliding (active-stationary-active)               | Class LC-PG30 Size Tested 107.5" x 83.5"                | 30/30                                        | < 0.2                                   |
| <b>Picture, Transom &amp; Specialty Windows</b>               |                                                         |                                              |                                         |
| Picture, Transom and Specialty                                | Class LC-PG40 Size Tested 95.5" x 84.3"                 | 40/40                                        | < 0.2                                   |
| Picture, Transom and Specialty, PG Upgrade                    | Class LC-PG50 Size Tested 95.5" x 71.5"                 | 50/50*                                       | < 0.2                                   |
| <b>Gliding Patio Doors</b>                                    | Class LC-PG30 Size Tested 95.3" x 95.5"                 | 30/30                                        | < 0.2                                   |
| <b>Patio Door Sidelights</b>                                  | Class LC-PG30 Size Tested 47.3" x 95.3"                 | 30/30                                        | < 0.2                                   |
| <b>Patio Door Transoms</b>                                    | Class LC-PG30 Size Tested 95.3" x 23.3"                 | 30/30                                        | < 0.2                                   |

For windows with flush fin frame, see chart below.

For sound transmission ratings, see page 114.

• Performance Grade (PG) ratings may vary from tested performance rating for larger or smaller units of a particular type.  
 • This data is accurate as of August 2023. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.  
 • Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.  
 • Contact your Andersen supplier for more information.  
 • PG upgrade ratings do not apply to windows with insert frames.  
 • Data does not apply to windows with flush fin frames.  
 • \*Available for select sizes. Contact your Andersen supplier.

Combination Designs,  
Product Performance  
& Installation

## Performance Grade and Air Infiltration Ratings for Windows With Flush Fin Frames

For current performance information, please visit [andersenwindows.com](https://andersenwindows.com).

| Andersen® 100 Series Product                     | AAMA/WDMA/CSA<br>101/LS2/A440<br>Performance Grade (PG) | +/-<br>Corresponding Design<br>Pressure (DP) | Air Infiltration<br>CFM/FT <sup>2</sup> |
|--------------------------------------------------|---------------------------------------------------------|----------------------------------------------|-----------------------------------------|
| <b>Casement Windows</b>                          |                                                         |                                              |                                         |
| Single and Twin (venting/stationary)             | Class LC-PG40 Size Tested 71.5" x 71.5"                 | 40/45                                        | < 0.2                                   |
| <b>Awning Windows</b>                            |                                                         |                                              |                                         |
| Single and Twin (venting/stationary)             | Class LC-PG40 Size Tested 47.5" x 95.5"                 | 40/45                                        | < 0.2                                   |
| Picture Over Awning                              | Class LC-PG40 Size Tested 47.5" x 95.5"                 | 40/45                                        | < 0.2                                   |
| <b>Single-Hung Windows</b>                       |                                                         |                                              |                                         |
| Single-Hung                                      | Class LC-PG30 Size Tested 47.5" x 89.5"                 | 30/30                                        | < 0.2                                   |
| Twin and Triple Single-Hung                      | Class LC-PG30 Size Tested 143.5" x 71.5"                | 30/30                                        | < 0.2                                   |
| <b>Gliding Windows</b>                           |                                                         |                                              |                                         |
| Gliding (active-stationary or stationary-active) | Class LC-PG30 Size Tested 71.5" x 71.5"                 | 30/30                                        | < 0.2                                   |
| Gliding (active-stationary-active)               | Class LC-PG30 Size Tested 143.5" x 71.5"                | 30/30                                        | < 0.2                                   |
| <b>Picture, Transom &amp; Specialty Windows</b>  | Class LC-PG40 Size Tested 95.5" x 84.3"                 | 40/40                                        | < 0.2                                   |

• Performance Grade (PG) ratings may vary from tested performance rating for larger or smaller units of a particular type.  
 • This data is accurate as of August 2023. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.  
 • Where designated, Andersen products are certified and labeled to the requirements of the Hallmark Certification Program. Actual performance may vary based on variations in manufacturing, shipping, installation, environmental conditions and conditions of use.  
 • Contact your Andersen supplier for more information.  
 • PG upgrades are not available for windows with flush fin frames.  
 • Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

# PRODUCT PERFORMANCE

## Sound Transmission Ratings

For current performance information, please visit [andersenwindows.com](https://andersenwindows.com).

| Andersen® 100 Series Product                                                                              | STANDARD GLASS                 |                                          | STC UPGRADE GLASS              |                                          |
|-----------------------------------------------------------------------------------------------------------|--------------------------------|------------------------------------------|--------------------------------|------------------------------------------|
|                                                                                                           | Sound Transmission Class (STC) | Outdoor/Indoor Transmission Class (OITC) | Sound Transmission Class (STC) | Outdoor/Indoor Transmission Class (OITC) |
| <b>Casement Windows</b>                                                                                   |                                |                                          |                                |                                          |
| Single (venting/stationary)                                                                               | 30                             | 25                                       | 33                             | 28                                       |
| Single, PG Upgrade (venting/stationary)                                                                   | 30                             | 25                                       | 33                             | 28                                       |
| <b>Awning Windows</b>                                                                                     |                                |                                          |                                |                                          |
| Single (venting/stationary)                                                                               | -                              | -                                        | -                              | -                                        |
| Single, PG Upgrade (venting/stationary)                                                                   | -                              | -                                        | -                              | -                                        |
| <b>Single-Hung Windows</b>                                                                                |                                |                                          |                                |                                          |
| Arch Single-Hung                                                                                          | 28                             | 23                                       | 32                             | 26                                       |
| Arch Single-Hung, PG Upgrade                                                                              | 28                             | 23                                       | 32                             | 26                                       |
| Single-Hung                                                                                               | 28                             | 23                                       | 32                             | 26                                       |
| Single-Hung, PG Upgrade                                                                                   | 28                             | 23                                       | 32                             | 26                                       |
| <b>Gliding Windows</b>                                                                                    |                                |                                          |                                |                                          |
| Gliding (active-stationary or stationary-active)                                                          | -                              | -                                        | 32                             | 27                                       |
| Gliding, PG Upgrade (active-stationary or stationary-active)                                              | -                              | -                                        | 32                             | 27                                       |
| Gliding (active-stationary-active)                                                                        | -                              | -                                        | -                              | -                                        |
| Gliding, PG Upgrade (active-stationary-active)                                                            | -                              | -                                        | -                              | -                                        |
| <b>Picture, Transom &amp; Specialty Windows</b>                                                           |                                |                                          |                                |                                          |
| Picture and Specialty – 1 3/8" Flange Setback, 1" Flange Setback, No Flange and Insert Frames             | 29                             | 24                                       | 32                             | 27                                       |
| Picture and Specialty, PG Upgrade – 1 3/8" Flange Setback, 1" Flange Setback, No Flange and Insert Frames | 29                             | 24                                       | 32                             | 27                                       |
| Picture and Specialty – Flush Fin Frame                                                                   | 29                             | 24                                       | 32                             | 27                                       |
| Picture and Specialty, PG Upgrade – Flush Fin Frame                                                       | 29                             | 24                                       | 32                             | 27                                       |
| Transom                                                                                                   | -                              | -                                        | -                              | -                                        |
| Transom, PG Upgrade                                                                                       | -                              | -                                        | -                              | -                                        |
| <b>Gliding Patio Doors</b>                                                                                | 28                             | 23                                       | 29                             | 25                                       |
| <b>Patio Door Sidelights</b>                                                                              | -                              | -                                        | -                              | -                                        |
| <b>Patio Door Transoms</b>                                                                                | -                              | -                                        | 31                             | 26                                       |

• Sound Transmission Class (STC) and Outdoor/Indoor Transmission Class (OITC) ratings are for individual units based on independent tests and represent entire unit.

• This data is accurate as of August 2023. Due to ongoing product changes, updated test results or new industry standards, this data may change over time.

• Contact your Andersen supplier for more information.

• Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.



## Center of Glass Performance Data

For current performance information, please visit [andersenwindows.com](https://andersenwindows.com).

| Andersen® 100 Series Product                                                                       | VT <sup>1</sup> | SC <sup>2</sup> | SHGC <sup>3</sup> | RHG <sup>4</sup> | Fading |     | %RH @ center <sup>7</sup> | IGST <sup>8</sup> |
|----------------------------------------------------------------------------------------------------|-----------------|-----------------|-------------------|------------------|--------|-----|---------------------------|-------------------|
| Low-E                                                                                              |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 72%             | 0.48            | 0.41              | 98               | 16%    | 33% | 61%                       | 56°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 72%             | 0.48            | 0.41              | 98               | 16%    | 33% | 61%                       | 56°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 72%             | 0.47            | 0.41              | 98               | 16%    | 33% | 60%                       | 55°F              |
| Gliding Patio Doors                                                                                | 72%             | 0.47            | 0.41              | 98               | 16%    | 33% | 60%                       | 55°F              |
| Patio Door Sidelights and Transoms                                                                 | 72%             | 0.47            | 0.41              | 98               | 16%    | 33% | 60%                       | 55°F              |
| Low-E With HeatLock® Technology                                                                    |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 70%             | 0.47            | 0.41              | 96               | 16%    | 33% | 44%                       | 47°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 70%             | 0.47            | 0.41              | 96               | 16%    | 33% | 44%                       | 47°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 70%             | 0.47            | 0.40              | 95               | 16%    | 33% | 44%                       | 47°F              |
| Gliding Patio Doors                                                                                | 70%             | 0.47            | 0.40              | 95               | 16%    | 33% | 44%                       | 47°F              |
| Patio Door Sidelights and Transoms                                                                 | 70%             | 0.47            | 0.40              | 95               | 16%    | 33% | 44%                       | 47°F              |
| Low-E SmartSun™                                                                                    |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 65%             | 0.31            | 0.27              | 66               | 5%     | 21% | 62%                       | 56°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 65%             | 0.31            | 0.27              | 66               | 5%     | 21% | 62%                       | 56°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 65%             | 0.31            | 0.27              | 65               | 5%     | 21% | 61%                       | 56°F              |
| Gliding Patio Doors                                                                                | 65%             | 0.31            | 0.27              | 65               | 5%     | 21% | 61%                       | 56°F              |
| Patio Door Sidelights and Transoms                                                                 | 65%             | 0.31            | 0.27              | 65               | 5%     | 21% | 61%                       | 56°F              |
| Low-E SmartSun With HeatLock Technology                                                            |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 63%             | 0.31            | 0.27              | 64               | 5%     | 21% | 46%                       | 48°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 63%             | 0.31            | 0.27              | 64               | 5%     | 21% | 46%                       | 48°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 63%             | 0.31            | 0.27              | 63               | 5%     | 21% | 44%                       | 47°F              |
| Gliding Patio Doors                                                                                | 63%             | 0.31            | 0.27              | 63               | 5%     | 21% | 44%                       | 47°F              |
| Patio Door Sidelights and Transoms                                                                 | 63%             | 0.31            | 0.27              | 63               | 5%     | 21% | 44%                       | 47°F              |
| Sun                                                                                                |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 40%             | 0.29            | 0.25              | 61               | 16%    | 24% | 60%                       | 55°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 40%             | 0.29            | 0.25              | 61               | 16%    | 24% | 60%                       | 55°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 40%             | 0.29            | 0.25              | 60               | 16%    | 24% | 59%                       | 55°F              |
| Gliding Patio Doors                                                                                | 40%             | 0.29            | 0.25              | 60               | 16%    | 24% | 59%                       | 55°F              |
| Patio Door Sidelights and Transoms                                                                 | 40%             | 0.29            | 0.25              | 60               | 16%    | 24% | 59%                       | 55°F              |
| Low-E PassiveSun                                                                                   |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 79%             | 0.79            | 0.69              | 161              | 29%    | 42% | 60%                       | 55°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 79%             | 0.79            | 0.69              | 161              | 29%    | 42% | 60%                       | 55°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 79%             | 0.79            | 0.69              | 161              | 29%    | 42% | 59%                       | 55°F              |
| Gliding Patio Doors                                                                                | 79%             | 0.79            | 0.69              | 161              | 29%    | 42% | 59%                       | 55°F              |
| Patio Door Sidelights and Transoms                                                                 | 79%             | 0.79            | 0.69              | 161              | 29%    | 42% | 59%                       | 55°F              |
| Low-E PassiveSun With HeatLock Technology                                                          |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 77%             | 0.72            | 0.62              | 146              | 27%    | 40% | 42%                       | 46°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 77%             | 0.72            | 0.62              | 146              | 27%    | 40% | 42%                       | 46°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 77%             | 0.72            | 0.63              | 146              | 27%    | 40% | 42%                       | 46°F              |
| Gliding Patio Doors                                                                                | 77%             | 0.72            | 0.63              | 146              | 27%    | 40% | 42%                       | 46°F              |
| Patio Door Sidelights and Transoms                                                                 | 77%             | 0.72            | 0.63              | 146              | 27%    | 40% | 42%                       | 46°F              |
| Clear Dual-Pane                                                                                    |                 |                 |                   |                  |        |     |                           |                   |
| Casement, Awning, Single-Hung, Gliding and Transom Windows (all frames types)                      | 82%             | 0.89            | 0.78              | 186              | 58%    | 61% | 39%                       | 44°F              |
| Picture and Specialty Windows – Flush Fin Frame                                                    | 82%             | 0.89            | 0.78              | 186              | 58%    | 61% | 39%                       | 44°F              |
| Picture and Specialty Windows – 1 3/8" Flange Setback, 1" Flange Setback, No Flange, Insert Frames | 82%             | 0.89            | 0.78              | 186              | 58%    | 61% | 39%                       | 44°F              |
| Gliding Patio Doors                                                                                | 82%             | 0.89            | 0.78              | 186              | 58%    | 61% | 39%                       | 44°F              |
| Patio Door Sidelights and Transoms                                                                 | 82%             | 0.89            | 0.78              | 186              | 58%    | 61% | 39%                       | 44°F              |

\*Based on NFRC testing/simulation conditions using Windows v7.4.6.0 and NFRC validated spectral data. 0°F outside temperature, 70°F inside temperature and a 15 mph wind. 1) Visible Transmittance (VT) measures how much light comes through the glass. The higher the value, from 0 to 1, the more daylight the glass lets in. Visible Transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum. 2) Shading Coefficient (SC) defines the amount of heat gain through the glass compared to a single lite of clear 1/8" (3) glass. 3) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 4) Relative Heat Gain (RHG) is the amount of heat gain through a glazing incorporating U-Factor and Solar Heat Gain Coefficient. 5) Transmission Ultra-Violet Energy (Tuv). The transmission of short-wave energy in the 300-380 nanometer portion of the solar spectrum. The energy can cause fabric fading. 6) Transmission Damage Function (Tdw). The transmission of UV and visible light energy in the 300-600 nanometer portion of the solar spectrum. The value includes both the UV and visible light energy that can cause fabric fading. This rating has also been referred to as the Krochmann Damage Function. This rating better predicts fading potential than UV transmission alone. The lower the Damage Function rating, the less transmission of short-wave energy through the glass that can potentially cause fabric fading. Fabric type is also a key component of fading potential. 7) Percent relative humidity before condensation occurs at the center of glass, taken using center of glass temperature. 8) Inside glass surface temperatures are taken at the center of glass.

\*This data is accurate as of November 2023. Due to ongoing product changes, updated test results or new industry standards, this data may change over time. Contact your Andersen supplier for current performance information or upgrade options.

\*Contact your Andersen supplier for center of glass performance data on windows with patterned glass, tempered glass and products ordered with capillary breather tubes.

\*Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.



# PRODUCT PERFORMANCE

## NFRC Certified Total Unit Performance

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

| Andersen® Product                                                  |                           | High-Performance Dual-Pane Glass Type   | U-Factor <sup>1</sup> | SHGC <sup>2</sup> | VT <sup>3</sup> |
|--------------------------------------------------------------------|---------------------------|-----------------------------------------|-----------------------|-------------------|-----------------|
| <b>100 Series Casement Windows</b><br>AND-N-84<br><br>2.2 mm glass | Low-E                     | Without Grilles                         | 0.28                  | 0.28              | 0.48            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.28                  | 0.25              | 0.43            |
|                                                                    |                           | Finelight™ Grilles                      | 0.28                  | 0.25              | 0.43            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    | Low-E w/HeatLock®         | Full Divided Light Grilles              | 0.29                  | 0.25              | 0.43            |
|                                                                    |                           | Without Grilles                         | 0.24                  | 0.27              | 0.47            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.24                  | 0.25              | 0.42            |
|                                                                    |                           | Finelight Grilles                       | 0.24                  | 0.25              | 0.42            |
|                                                                    | Low-E SmartSun™           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.26                  | 0.25              | 0.42            |
|                                                                    |                           | Without Grilles                         | 0.27                  | 0.18              | 0.43            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.27                  | 0.17              | 0.39            |
|                                                                    | Low-E SmartSun w/HeatLock | Finelight Grilles                       | 0.27                  | 0.17              | 0.39            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.28                  | 0.17              | 0.39            |
|                                                                    |                           | Without Grilles                         | 0.24                  | 0.18              | 0.42            |
|                                                                    | Low-E Sun                 | Simulated Divided Light Grilles         | 0.24                  | 0.16              | 0.38            |
|                                                                    |                           | Finelight Grilles                       | 0.24                  | 0.16              | 0.38            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.25                  | 0.16              | 0.38            |
|                                                                    | Low-E PassiveSun®         | Without Grilles                         | 0.28                  | 0.17              | 0.26            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.28                  | 0.16              | 0.24            |
|                                                                    |                           | Finelight Grilles                       | 0.28                  | 0.16              | 0.24            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    | Clear Dual-Pane           | Full Divided Light Grilles              | 0.29                  | 0.42              | 0.47            |
|                                                                    |                           | Without Grilles                         | 0.41                  | 0.52              | 0.55            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.41                  | 0.48              | 0.49            |
|                                                                    |                           | Finelight Grilles                       | 0.41                  | 0.48              | 0.49            |
| <b>100 Series Awning Windows</b><br>AND-N-85<br><br>2.2 mm glass   | Low-E                     | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.42                  | 0.48              | 0.49            |
|                                                                    |                           | Without Grilles                         | 0.28                  | 0.28              | 0.48            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.28                  | 0.25              | 0.43            |
|                                                                    | Low-E w/HeatLock®         | Finelight™ Grilles                      | 0.28                  | 0.25              | 0.43            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.29                  | 0.25              | 0.43            |
|                                                                    |                           | Without Grilles                         | 0.25                  | 0.27              | 0.47            |
|                                                                    | Low-E SmartSun™           | Simulated Divided Light Grilles         | 0.25                  | 0.25              | 0.42            |
|                                                                    |                           | Finelight Grilles                       | 0.25                  | 0.25              | 0.42            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.26                  | 0.25              | 0.42            |
|                                                                    | Low-E SmartSun w/HeatLock | Without Grilles                         | 0.27                  | 0.18              | 0.43            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.27                  | 0.17              | 0.39            |
|                                                                    |                           | Finelight Grilles                       | 0.27                  | 0.17              | 0.39            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    | Low-E Sun                 | Full Divided Light Grilles              | 0.28                  | 0.17              | 0.39            |
|                                                                    |                           | Without Grilles                         | 0.24                  | 0.18              | 0.42            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.24                  | 0.16              | 0.38            |
|                                                                    |                           | Finelight Grilles                       | 0.24                  | 0.16              | 0.38            |
|                                                                    | Low-E PassiveSun®         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.26                  | 0.16              | 0.38            |
|                                                                    |                           | Without Grilles                         | 0.28                  | 0.17              | 0.26            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.28                  | 0.16              | 0.24            |
|                                                                    | Clear Dual-Pane           | Finelight Grilles                       | 0.28                  | 0.16              | 0.24            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.29                  | 0.16              | 0.24            |
|                                                                    |                           | Without Grilles                         | 0.42                  | 0.52              | 0.55            |
|                                                                    |                           | Simulated Divided Light Grilles         | 0.42                  | 0.48              | 0.49            |
|                                                                    |                           | Finelight Grilles                       | 0.42                  | 0.48              | 0.49            |
|                                                                    |                           | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                           | Full Divided Light Grilles              | 0.42                  | 0.48              | 0.49            |

| Andersen® Product                                                         |                                         | High-Performance Dual-Pane Glass Type   | U-Factor <sup>1</sup> | SHGC <sup>2</sup> | VT <sup>3</sup> |
|---------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------|-------------------|-----------------|
| <b>100 Series<br/>Single-Hung Windows</b><br>AND-N-80<br><br>2.2 mm glass | Low-E                                   | Without Grilles                         | 0.30                  | 0.31              | 0.54            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.30                  | 0.28              | 0.48            |
|                                                                           |                                         | Finelight™ Grilles                      | 0.30                  | 0.28              | 0.48            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.31                  | 0.28              | 0.48            |
|                                                                           | Low-E w/HeatLock®                       | Without Grilles                         | 0.26                  | 0.31              | 0.53            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.26                  | 0.28              | 0.47            |
|                                                                           |                                         | Finelight Grilles                       | 0.26                  | 0.28              | 0.47            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.28                  | 0.28              | 0.47            |
|                                                                           | Low-E SmartSun™                         | Without Grilles                         | 0.29                  | 0.21              | 0.49            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.19              | 0.43            |
|                                                                           |                                         | Finelight Grilles                       | 0.29                  | 0.19              | 0.43            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.31                  | 0.19              | 0.43            |
|                                                                           | Low-E SmartSun w/HeatLock               | Without Grilles                         | 0.25                  | 0.20              | 0.48            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.25                  | 0.18              | 0.42            |
|                                                                           |                                         | Finelight Grilles                       | 0.25                  | 0.18              | 0.42            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.28                  | 0.18              | 0.42            |
|                                                                           | Low-E Sun                               | Without Grilles                         | 0.30                  | 0.19              | 0.30            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.30                  | 0.17              | 0.27            |
|                                                                           |                                         | Finelight Grilles                       | 0.30                  | 0.17              | 0.27            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.32                  | 0.17              | 0.27            |
|                                                                           | Low-E PassiveSun®                       | Without Grilles                         | 0.31                  | 0.52              | 0.60            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.31                  | 0.47              | 0.53            |
|                                                                           |                                         | Finelight Grilles                       | 0.31                  | 0.47              | 0.53            |
| Finelight With Exterior Applied Grilles                                   |                                         | -                                       | -                     | -                 |                 |
| Full Divided Light Grilles                                                |                                         | 0.32                                    | 0.47                  | 0.53              |                 |
| Clear Dual-Pane                                                           | Without Grilles                         | 0.46                                    | 0.59                  | 0.62              |                 |
|                                                                           | Simulated Divided Light Grilles         | 0.46                                    | 0.53                  | 0.55              |                 |
|                                                                           | Finelight Grilles                       | 0.46                                    | 0.53                  | 0.55              |                 |
|                                                                           | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                           | Full Divided Light Grilles              | 0.47                                    | 0.53                  | 0.55              |                 |
| <b>100 Series<br/>Gliding Windows</b><br>AND-N-81<br><br>2.2 mm glass     | Low-E                                   | Without Grilles                         | 0.30                  | 0.31              | 0.54            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.30                  | 0.28              | 0.48            |
|                                                                           |                                         | Finelight™ Grilles                      | 0.30                  | 0.28              | 0.48            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.31                  | 0.28              | 0.48            |
|                                                                           | Low-E w/HeatLock®                       | Without Grilles                         | 0.26                  | 0.31              | 0.53            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.26                  | 0.28              | 0.47            |
|                                                                           |                                         | Finelight Grilles                       | 0.26                  | 0.28              | 0.47            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.28                  | 0.28              | 0.47            |
|                                                                           | Low-E SmartSun™                         | Without Grilles                         | 0.29                  | 0.21              | 0.49            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.19              | 0.43            |
|                                                                           |                                         | Finelight Grilles                       | 0.29                  | 0.19              | 0.43            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.31                  | 0.19              | 0.43            |
|                                                                           | Low-E SmartSun w/HeatLock               | Without Grilles                         | 0.26                  | 0.20              | 0.48            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.26                  | 0.18              | 0.42            |
|                                                                           |                                         | Finelight Grilles                       | 0.26                  | 0.18              | 0.42            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.28                  | 0.18              | 0.42            |
|                                                                           | Low-E Sun                               | Without Grilles                         | 0.30                  | 0.19              | 0.30            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.30                  | 0.17              | 0.27            |
|                                                                           |                                         | Finelight Grilles                       | 0.30                  | 0.17              | 0.27            |
|                                                                           |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                           |                                         | Full Divided Light Grilles              | 0.32                  | 0.17              | 0.27            |
|                                                                           | Low-E PassiveSun®                       | Without Grilles                         | 0.31                  | 0.52              | 0.60            |
|                                                                           |                                         | Simulated Divided Light Grilles         | 0.31                  | 0.47              | 0.53            |
|                                                                           |                                         | Finelight Grilles                       | 0.31                  | 0.47              | 0.53            |
| Finelight With Exterior Applied Grilles                                   |                                         | -                                       | -                     | -                 |                 |
| Full Divided Light Grilles                                                |                                         | 0.32                                    | 0.47                  | 0.53              |                 |
| Clear Dual-Pane                                                           | Without Grilles                         | 0.46                                    | 0.59                  | 0.62              |                 |
|                                                                           | Simulated Divided Light Grilles         | 0.46                                    | 0.53                  | 0.55              |                 |
|                                                                           | Finelight Grilles                       | 0.46                                    | 0.53                  | 0.55              |                 |
|                                                                           | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                           | Full Divided Light Grilles              | 0.47                                    | 0.53                  | 0.55              |                 |

1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft<sup>2</sup>·°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See [andersenwindows.com/nfrc](http://andersenwindows.com/nfrc) for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible light transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

\* NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

\* This data is accurate as of August 2023. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on unit size, use of tempered glass, different grille options, glass for high altitudes, etc.

\* Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and 1" (25 mm) grilles for door products.

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**NFRC Certified Total Unit Performance** (continued)

For current performance information, please visit [andersenwindows.com](http://andersenwindows.com).

| Andersen® Product                                                                                                                                                               | High-Performance Dual-Pane Glass Type   |                                         | U-Factor <sup>1</sup> | SHGC <sup>2</sup> | VT <sup>3</sup> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------|-------------------|-----------------|
| <b>100 Series<br/>Picture &amp; Specialty<br/>Windows</b><br><br>1 3/8" Flange Setback,<br>1" Flange Setback,<br>No Flange and<br>Insert Frames<br>AND-N-82<br><br>3.0 mm glass | Low-E                                   | Without Grilles                         | 0.27                  | 0.32              | 0.56            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.27                  | 0.29              | 0.50            |
|                                                                                                                                                                                 |                                         | Finelight™ Grilles                      | 0.27                  | 0.29              | 0.50            |
|                                                                                                                                                                                 |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 | Low-E<br>w/HeatLock®                    | Full Divided Light Grilles              | 0.29                  | 0.29              | 0.50            |
|                                                                                                                                                                                 |                                         | Without Grilles                         | 0.23                  | 0.32              | 0.55            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.23                  | 0.29              | 0.49            |
|                                                                                                                                                                                 |                                         | Finelight Grilles                       | 0.23                  | 0.29              | 0.49            |
|                                                                                                                                                                                 | Low-E<br>SmartSun™                      | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 |                                         | Full Divided Light Grilles              | 0.26                  | 0.29              | 0.49            |
|                                                                                                                                                                                 |                                         | Without Grilles                         | 0.27                  | 0.22              | 0.50            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.27                  | 0.20              | 0.45            |
|                                                                                                                                                                                 | Low-E<br>SmartSun<br>w/HeatLock         | Finelight Grilles                       | 0.27                  | 0.20              | 0.45            |
|                                                                                                                                                                                 |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 |                                         | Full Divided Light Grilles              | 0.29                  | 0.20              | 0.45            |
|                                                                                                                                                                                 |                                         | Without Grilles                         | 0.23                  | 0.21              | 0.49            |
|                                                                                                                                                                                 | Low-E<br>Sun                            | Simulated Divided Light Grilles         | 0.23                  | 0.19              | 0.44            |
|                                                                                                                                                                                 |                                         | Finelight Grilles                       | 0.23                  | 0.19              | 0.44            |
|                                                                                                                                                                                 |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 |                                         | Full Divided Light Grilles              | 0.25                  | 0.19              | 0.44            |
|                                                                                                                                                                                 | Low-E<br>PassiveSun®                    | Without Grilles                         | 0.28                  | 0.20              | 0.31            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.28                  | 0.18              | 0.28            |
|                                                                                                                                                                                 |                                         | Finelight Grilles                       | 0.28                  | 0.18              | 0.28            |
|                                                                                                                                                                                 |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 | Low-E<br>PassiveSun®                    | Full Divided Light Grilles              | 0.30                  | 0.18              | 0.28            |
|                                                                                                                                                                                 |                                         | Without Grilles                         | 0.28                  | 0.54              | 0.61            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.28                  | 0.48              | 0.55            |
|                                                                                                                                                                                 |                                         | Finelight Grilles                       | 0.28                  | 0.48              | 0.55            |
|                                                                                                                                                                                 | Clear<br>Dual-Pane                      | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                                                                                                                                 |                                         | Full Divided Light Grilles              | 0.30                  | 0.48              | 0.55            |
|                                                                                                                                                                                 |                                         | Without Grilles                         | 0.44                  | 0.61              | 0.64            |
|                                                                                                                                                                                 |                                         | Simulated Divided Light Grilles         | 0.44                  | 0.55              | 0.57            |
| Clear<br>Dual-Pane                                                                                                                                                              | Finelight Grilles                       | 0.44                                    | 0.55                  | 0.57              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                                                                                                                                 | Full Divided Light Grilles              | 0.45                                    | 0.55                  | 0.57              |                 |
|                                                                                                                                                                                 | Without Grilles                         | 0.27                                    | 0.36                  | 0.63              |                 |
| Low-E                                                                                                                                                                           | Simulated Divided Light Grilles         | 0.27                                    | 0.33                  | 0.56              |                 |
|                                                                                                                                                                                 | Finelight™ Grilles                      | 0.27                                    | 0.33                  | 0.56              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                                                                                                                                 | Full Divided Light Grilles              | 0.29                                    | 0.33                  | 0.56              |                 |
| Low-E<br>w/HeatLock®                                                                                                                                                            | Without Grilles                         | 0.23                                    | 0.35                  | 0.61              |                 |
|                                                                                                                                                                                 | Simulated Divided Light Grilles         | 0.23                                    | 0.32                  | 0.55              |                 |
|                                                                                                                                                                                 | Finelight Grilles                       | 0.23                                    | 0.32                  | 0.55              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
| Low-E<br>SmartSun™                                                                                                                                                              | Full Divided Light Grilles              | 0.25                                    | 0.32                  | 0.55              |                 |
|                                                                                                                                                                                 | Without Grilles                         | 0.26                                    | 0.24                  | 0.56              |                 |
|                                                                                                                                                                                 | Simulated Divided Light Grilles         | 0.26                                    | 0.22                  | 0.51              |                 |
|                                                                                                                                                                                 | Finelight Grilles                       | 0.26                                    | 0.22                  | 0.51              |                 |
| Low-E<br>SmartSun<br>w/HeatLock                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                                                                                                                                 | Full Divided Light Grilles              | 0.28                                    | 0.22                  | 0.51              |                 |
|                                                                                                                                                                                 | Without Grilles                         | 0.22                                    | 0.23                  | 0.55              |                 |
|                                                                                                                                                                                 | Simulated Divided Light Grilles         | 0.22                                    | 0.21                  | 0.49              |                 |
| Low-E<br>Sun                                                                                                                                                                    | Finelight Grilles                       | 0.22                                    | 0.21                  | 0.49              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                                                                                                                                 | Full Divided Light Grilles              | 0.29                                    | 0.20                  | 0.31              |                 |
|                                                                                                                                                                                 | Without Grilles                         | 0.28                                    | 0.60                  | 0.69              |                 |
| Low-E<br>PassiveSun®                                                                                                                                                            | Simulated Divided Light Grilles         | 0.28                                    | 0.54                  | 0.62              |                 |
|                                                                                                                                                                                 | Finelight Grilles                       | 0.28                                    | 0.54                  | 0.62              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                                                                                                                                 | Full Divided Light Grilles              | 0.29                                    | 0.54                  | 0.62              |                 |
| Clear<br>Dual-Pane                                                                                                                                                              | Without Grilles                         | 0.46                                    | 0.68                  | 0.72              |                 |
|                                                                                                                                                                                 | Simulated Divided Light Grilles         | 0.46                                    | 0.61                  | 0.64              |                 |
|                                                                                                                                                                                 | Finelight Grilles                       | 0.46                                    | 0.61                  | 0.64              |                 |
|                                                                                                                                                                                 | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
| Clear<br>Dual-Pane                                                                                                                                                              | Full Divided Light Grilles              | 0.47                                    | 0.61                  | 0.64              |                 |
|                                                                                                                                                                                 | Without Grilles                         | 0.46                                    | 0.68                  | 0.72              |                 |
|                                                                                                                                                                                 | Simulated Divided Light Grilles         | 0.46                                    | 0.61                  | 0.64              |                 |
|                                                                                                                                                                                 | Finelight Grilles                       | 0.46                                    | 0.61                  | 0.64              |                 |

| Andersen® Product                                                  | High-Performance Dual-Pane Glass Type   |                                         | U-Factor <sup>1</sup> | SHGC <sup>2</sup> | VT <sup>3</sup> |
|--------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------|-------------------|-----------------|
| 100 Series<br>Transom Windows<br>AND-N-83<br><br>3.0 mm glass      | Low-E                                   | Without Grilles                         | 0.29                  | 0.32              | 0.56            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.29              | 0.50            |
|                                                                    |                                         | Finelight™ Grilles                      | 0.29                  | 0.29              | 0.50            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    | Low-E w/HeatLock®                       | Full Divided Light Grilles              | 0.31                  | 0.29              | 0.50            |
|                                                                    |                                         | Without Grilles                         | 0.25                  | 0.32              | 0.55            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.25                  | 0.29              | 0.49            |
|                                                                    |                                         | Finelight Grilles                       | 0.25                  | 0.29              | 0.49            |
|                                                                    | Low-E SmartSun™                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                                         | Full Divided Light Grilles              | 0.27                  | 0.29              | 0.49            |
|                                                                    |                                         | Without Grilles                         | 0.28                  | 0.22              | 0.50            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.28                  | 0.19              | 0.45            |
|                                                                    | Low-E SmartSun w/HeatLock               | Finelight Grilles                       | 0.28                  | 0.19              | 0.45            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                                         | Full Divided Light Grilles              | 0.30                  | 0.19              | 0.45            |
|                                                                    |                                         | Without Grilles                         | 0.25                  | 0.21              | 0.49            |
|                                                                    | Low-E Sun                               | Simulated Divided Light Grilles         | 0.25                  | 0.19              | 0.44            |
|                                                                    |                                         | Finelight Grilles                       | 0.25                  | 0.19              | 0.44            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                                         | Full Divided Light Grilles              | 0.27                  | 0.19              | 0.44            |
|                                                                    | Low-E PassiveSun®                       | Without Grilles                         | 0.30                  | 0.20              | 0.31            |
|                                                                    |                                         | Simulated Divided Light Grilles         | -                     | -                 | -               |
|                                                                    |                                         | Finelight Grilles                       | 0.30                  | 0.18              | 0.28            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    | Low-E PassiveSun®                       | Full Divided Light Grilles              | 0.31                  | 0.18              | 0.28            |
|                                                                    |                                         | Without Grilles                         | 0.30                  | 0.54              | 0.61            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.30                  | 0.48              | 0.55            |
|                                                                    |                                         | Finelight Grilles                       | 0.30                  | 0.48              | 0.55            |
|                                                                    | Low-E PassiveSun®                       | Finelight With Exterior Applied Grilles | -                     | -                 | -               |
|                                                                    |                                         | Full Divided Light Grilles              | 0.31                  | 0.48              | 0.55            |
|                                                                    |                                         | Without Grilles                         | 0.46                  | 0.61              | 0.64            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.46                  | 0.54              | 0.57            |
| Clear Dual-Pane                                                    | Finelight Grilles                       | 0.46                                    | 0.54                  | 0.57              |                 |
|                                                                    | Finelight With Exterior Applied Grilles | -                                       | -                     | -                 |                 |
|                                                                    | Full Divided Light Grilles              | 0.47                                    | 0.54                  | 0.57              |                 |
|                                                                    | Without Grilles                         | 0.30                                    | 0.32                  | 0.55              |                 |
| 100 Series<br>Gliding Patio Doors<br>AND-N-100<br><br>3.1 mm glass | Low-E                                   | Simulated Divided Light Grilles         | 0.30                  | 0.25              | 0.42            |
|                                                                    |                                         | Finelight™ Grilles                      | 0.30                  | 0.29              | 0.48            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | 0.30                  | 0.25              | 0.42            |
|                                                                    |                                         | Full Divided Light Grilles              | 0.35                  | 0.25              | 0.42            |
|                                                                    | Low-E w/HeatLock®                       | Without Grilles                         | 0.26                  | 0.32              | 0.54            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.26                  | 0.25              | 0.41            |
|                                                                    |                                         | Finelight Grilles                       | 0.26                  | 0.28              | 0.47            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | 0.26                  | 0.25              | 0.41            |
|                                                                    | Low-E w/HeatLock®                       | Full Divided Light Grilles              | 0.33                  | 0.25              | 0.41            |
|                                                                    |                                         | Without Grilles                         | 0.29                  | 0.21              | 0.50            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.17              | 0.38            |
|                                                                    |                                         | Finelight Grilles                       | 0.29                  | 0.19              | 0.44            |
|                                                                    | Low-E SmartSun™                         | Finelight With Exterior Applied Grilles | 0.29                  | 0.17              | 0.38            |
|                                                                    |                                         | Full Divided Light Grilles              | 0.34                  | 0.17              | 0.38            |
|                                                                    |                                         | Without Grilles                         | 0.25                  | 0.21              | 0.49            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.25                  | 0.17              | 0.37            |
|                                                                    | Low-E SmartSun w/HeatLock               | Finelight Grilles                       | 0.25                  | 0.19              | 0.43            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | 0.25                  | 0.17              | 0.37            |
|                                                                    |                                         | Full Divided Light Grilles              | 0.32                  | 0.17              | 0.37            |
|                                                                    |                                         | Without Grilles                         | 0.30                  | 0.20              | 0.31            |
|                                                                    | Low-E Sun                               | Simulated Divided Light Grilles         | 0.30                  | 0.16              | 0.23            |
|                                                                    |                                         | Finelight Grilles                       | 0.30                  | 0.18              | 0.27            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | 0.30                  | 0.16              | 0.23            |
|                                                                    |                                         | Full Divided Light Grilles              | 0.35                  | 0.16              | 0.23            |
|                                                                    | Low-E PassiveSun®                       | Without Grilles                         | 0.31                  | 0.53              | 0.61            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.31                  | 0.41              | 0.46            |
|                                                                    |                                         | Finelight Grilles                       | 0.31                  | 0.47              | 0.53            |
|                                                                    |                                         | Finelight With Exterior Applied Grilles | 0.31                  | 0.41              | 0.46            |
|                                                                    | Low-E PassiveSun®                       | Full Divided Light Grilles              | 0.35                  | 0.41              | 0.46            |
|                                                                    |                                         | Without Grilles                         | 0.46                  | 0.60              | 0.63            |
|                                                                    |                                         | Simulated Divided Light Grilles         | 0.46                  | 0.46              | 0.48            |
|                                                                    |                                         | Finelight Grilles                       | 0.46                  | 0.53              | 0.55            |
| Clear Dual-Pane                                                    | Finelight With Exterior Applied Grilles | 0.46                                    | 0.46                  | 0.48              |                 |
|                                                                    | Full Divided Light Grilles              | 0.49                                    | 0.46                  | 0.48              |                 |
|                                                                    | Without Grilles                         | 0.46                                    | 0.60                  | 0.63              |                 |
|                                                                    | Simulated Divided Light Grilles         | 0.46                                    | 0.46                  | 0.48              |                 |

1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft<sup>2</sup>-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See [andersenwindows.com/nfrc](http://andersenwindows.com/nfrc) for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible light transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

• This data is accurate as of August 2023. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on unit size, use of tempered glass, different grille options, glass for high altitudes, etc.

• Values are for single units with given pane thickness and 3/4" (19 mm) grilles for windows and 1" (25 mm) grilles for door products.

• Windows with flush fin frame are available in select Southwestern states including Arizona, California, Nevada, New Mexico and Utah. Limited configuration availability. See your Andersen supplier for more information.

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# PRODUCT PERFORMANCE

## NFRC Certified Total Unit Performance *(continued)*

For current performance information, please visit [andersenwindows.com](https://andersenwindows.com).

| Andersen® Product                                                          | High-Performance Dual-Pane Glass Type   |                                         | U-Factor <sup>1</sup> | SHGC <sup>2</sup> | VT <sup>3</sup> |
|----------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-----------------------|-------------------|-----------------|
| <b>100 Series<br/>Patio Door Transoms<br/>AND-N-98</b><br><br>3.0 mm glass | Low-E                                   | Without Grilles                         | 0.32                  | 0.25              | 0.43            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.32                  | 0.20              | 0.34            |
|                                                                            |                                         | Finelight™ Grilles                      | 0.32                  | 0.23              | 0.38            |
|                                                                            |                                         | Finelight With Exterior Applied Grilles | 0.32                  | 0.20              | 0.34            |
|                                                                            |                                         | Full Divided Light Grilles              | 0.35                  | 0.20              | 0.34            |
|                                                                            | Low-E<br>w/HeatLock®                    | Without Grilles                         | 0.29                  | 0.25              | 0.42            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.20              | 0.33            |
|                                                                            |                                         | Finelight Grilles                       | 0.29                  | 0.22              | 0.37            |
|                                                                            |                                         | Finelight With Exterior Applied Grilles | 0.29                  | 0.20              | 0.33            |
|                                                                            |                                         | Full Divided Light Grilles              | 0.33                  | 0.20              | 0.33            |
|                                                                            | Low-E<br>SmartSun™                      | Without Grilles                         | 0.31                  | 0.17              | 0.38            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.31                  | 0.14              | 0.30            |
|                                                                            |                                         | Finelight Grilles                       | 0.31                  | 0.15              | 0.34            |
|                                                                            |                                         | Finelight With Exterior Applied Grilles | 0.31                  | 0.14              | 0.30            |
|                                                                            |                                         | Full Divided Light Grilles              | 0.34                  | 0.14              | 0.30            |
|                                                                            | Low-E<br>SmartSun<br>w/HeatLock         | Without Grilles                         | 0.29                  | 0.17              | 0.37            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.29                  | 0.14              | 0.30            |
|                                                                            |                                         | Finelight Grilles                       | 0.29                  | 0.15              | 0.33            |
|                                                                            |                                         | Finelight With Exterior Applied Grilles | 0.29                  | 0.14              | 0.30            |
|                                                                            |                                         | Full Divided Light Grilles              | 0.33                  | 0.14              | 0.30            |
|                                                                            | Low-E<br>Sun                            | Without Grilles                         | 0.32                  | 0.16              | 0.24            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.32                  | 0.13              | 0.19            |
|                                                                            |                                         | Finelight Grilles                       | 0.32                  | 0.14              | 0.21            |
|                                                                            |                                         | Finelight With Exterior Applied Grilles | 0.32                  | 0.13              | 0.19            |
|                                                                            |                                         | Full Divided Light Grilles              | 0.35                  | 0.13              | 0.19            |
|                                                                            | Low-E<br>PassiveSun®                    | Without Grilles                         | 0.33                  | 0.41              | 0.47            |
|                                                                            |                                         | Simulated Divided Light Grilles         | 0.33                  | 0.33              | 0.37            |
|                                                                            |                                         | Finelight Grilles                       | 0.33                  | 0.37              | 0.42            |
| Finelight With Exterior Applied Grilles                                    |                                         | 0.33                                    | 0.33                  | 0.37              |                 |
| Full Divided Light Grilles                                                 |                                         | 0.35                                    | 0.33                  | 0.37              |                 |
| Clear<br>Dual-Pane                                                         | Without Grilles                         | 0.45                                    | 0.47                  | 0.49              |                 |
|                                                                            | Simulated Divided Light Grilles         | 0.45                                    | 0.38                  | 0.38              |                 |
|                                                                            | Finelight Grilles                       | 0.45                                    | 0.42                  | 0.43              |                 |
|                                                                            | Finelight With Exterior Applied Grilles | 0.45                                    | 0.38                  | 0.38              |                 |
|                                                                            | Full Divided Light Grilles              | 0.46                                    | 0.38                  | 0.38              |                 |

| Andersen® Product                                                            | High-Performance Dual-Pane Glass Type   | U-Factor <sup>1</sup>                   | SHGC <sup>2</sup> | VT <sup>3</sup> |      |
|------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------------|-------------------|-----------------|------|
| <b>100 Series<br/>Patio Door Sidelights<br/>AND-N-97</b><br><br>3.0 mm glass | Low-E                                   | Without Grilles                         | 0.31              | 0.25            | 0.43 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.31              | 0.21            | 0.34 |
|                                                                              |                                         | Finelight™ Grilles                      | 0.31              | 0.23            | 0.38 |
|                                                                              |                                         | Finelight With Exterior Applied Grilles | 0.31              | 0.21            | 0.34 |
|                                                                              |                                         | Full Divided Light Grilles              | 0.34              | 0.21            | 0.34 |
|                                                                              | Low-E<br>w/HeatLock®                    | Without Grilles                         | 0.28              | 0.25            | 0.42 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.28              | 0.20            | 0.33 |
|                                                                              |                                         | Finelight Grilles                       | 0.28              | 0.23            | 0.37 |
|                                                                              |                                         | Finelight With Exterior Applied Grilles | 0.28              | 0.20            | 0.33 |
|                                                                              |                                         | Full Divided Light Grilles              | 0.33              | 0.20            | 0.33 |
|                                                                              | Low-E<br>SmartSun <sup>®</sup>          | Without Grilles                         | 0.31              | 0.17            | 0.38 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.31              | 0.14            | 0.31 |
|                                                                              |                                         | Finelight Grilles                       | 0.31              | 0.15            | 0.34 |
|                                                                              |                                         | Finelight With Exterior Applied Grilles | 0.31              | 0.14            | 0.31 |
|                                                                              |                                         | Full Divided Light Grilles              | 0.34              | 0.14            | 0.31 |
|                                                                              | Low-E<br>SmartSun<br>w/HeatLock         | Without Grilles                         | 0.28              | 0.17            | 0.38 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.28              | 0.14            | 0.30 |
|                                                                              |                                         | Finelight Grilles                       | 0.28              | 0.15            | 0.34 |
|                                                                              |                                         | Finelight With Exterior Applied Grilles | 0.28              | 0.14            | 0.30 |
|                                                                              |                                         | Full Divided Light Grilles              | 0.32              | 0.14            | 0.30 |
|                                                                              | Low-E<br>Sun                            | Without Grilles                         | 0.32              | 0.16            | 0.24 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.32              | 0.13            | 0.19 |
|                                                                              |                                         | Finelight Grilles                       | 0.32              | 0.14            | 0.21 |
|                                                                              |                                         | Finelight With Exterior Applied Grilles | 0.32              | 0.13            | 0.19 |
|                                                                              |                                         | Full Divided Light Grilles              | 0.35              | 0.13            | 0.19 |
|                                                                              | Low-E<br>PassiveSun <sup>®</sup>        | Without Grilles                         | 0.32              | 0.42            | 0.47 |
|                                                                              |                                         | Simulated Divided Light Grilles         | 0.32              | 0.34            | 0.37 |
|                                                                              |                                         | Finelight Grilles                       | 0.32              | 0.37            | 0.42 |
| Finelight With Exterior Applied Grilles                                      |                                         | 0.32                                    | 0.34              | 0.37            |      |
| Full Divided Light Grilles                                                   |                                         | 0.35                                    | 0.34              | 0.37            |      |
| Clear<br>Dual-Pane                                                           | Without Grilles                         | 0.44                                    | 0.47              | 0.49            |      |
|                                                                              | Simulated Divided Light Grilles         | 0.44                                    | 0.38              | 0.39            |      |
|                                                                              | Finelight Grilles                       | 0.44                                    | 0.42              | 0.44            |      |
|                                                                              | Finelight With Exterior Applied Grilles | 0.44                                    | 0.38              | 0.39            |      |
|                                                                              | Full Divided Light Grilles              | 0.45                                    | 0.38              | 0.39            |      |

1) U-Factor defines the amount of heat loss through the total unit in BTU/hr-ft<sup>2</sup>-°F. The lower the value, the less heat is lost through the entire product. Window values represent non-tempered glass. Use of tempered glass can increase U-Factor ratings. See [andersenwindows.com/nfrc](https://andersenwindows.com/nfrc) for specific performance values. Door values represent tempered glass. 2) Solar Heat Gain Coefficient (SHGC) defines the fraction of solar radiation admitted through the glass directly transmitted, as well as absorbed and subsequently released inward. The lower the value, the less heat is transmitted through the product. 3) Visible Transmittance (VT) measures how much light comes through a product (glass and frame). The higher the value, from 0 to 1, the more daylight the product lets in over the product's total unit area. Visible light transmittance is measured over the 380 to 760 nanometer portion of the solar spectrum.

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.

• This data is accurate as of August 2023. Due to ongoing product changes, updated test results, or new industry standards or requirements, this data may change over time. Ratings are for sizes specified by NFRC for testing and certification. Ratings may vary depending on unit size, use of tempered glass, different grille options, glass for high altitudes, etc.

• Values are for single units with given pane thickness and ¾" (19 mm) grilles for windows and 1" (25 mm) grilles for door products.

### About the Label

Look for this certification label on every window and patio door you buy. The NFRC section was designed by the National Fenestration Rating Council to provide accurate information that helps you promote the energy efficiency of the homes you build. These ratings allow you – and your customers – to measure and compare the energy performance of similar products. If the product does not have this label, the NFRC has not verified its claims.

### About the NFRC

The National Fenestration Rating Council (NFRC) is a nonpartisan coalition of professionals whose purpose is to provide fair, accurate and credible energy performance ratings for fenestration products. NFRC's membership includes manufacturers, suppliers, designers, specifiers, utility companies, government agencies and other building industry representatives.

Andersen Corporation is a founding member of the NFRC and continues to support its work by providing fair, accurate and credible energy performance ratings to consumers and the building industry. If you have any questions about the NFRC, its program or energy performance ratings, write them at: NFRC, 6305 Ivy Lane, Suite 410, Greenbelt, MD 20770. Phone: 301-589-1776. Website: [nfrf.org](http://nfrf.org)

**U-Factor** indicates how well a product prevents heat from escaping (the lower the number, the better).

**Visible Transmittance** refers to how much visible light comes through a product (the closer to 1.0, the more light is transmitted).

**WDMA Hallmark Certification** verifies the performance ratings of this product were tested by an independent testing laboratory and verified by a third-party certification program.

**Test Standards**

**Energy Rating (ER)** represents “Energy Rating” and is a rating used in Canada for product comparison purposes (the higher the ER number, the more energy saved during the heating season).

**ENERGY STAR® Climate Zone Map** is based on U-Factor and solar heat gain coefficient criteria for specific ENERGY STAR climate zones within the United States and Canada. The shading of the map shows which climate zone(s) a particular product and glass type is ENERGY STAR Version 7.0 certified in. Visit [andersenwindows.com/energystar](http://andersenwindows.com/energystar) for more details.

**Solar Heat Gain Coefficient** measures how well a product blocks heat caused by sunlight (the lower the number, the more it will help reduce the use of air conditioning and as a result, reduce electrical bills and energy use).

**Performance Grade (PG) and Design Pressure (DP) Ratings**

**Glass Construction** used with this product type.

Do not remove until final code inspection. Save label for future reference.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ENERGY STAR® Certified in Highlighted Regions</b><br><b>Certifié ENERGY STAR dans les régions en surbrillance</b>                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                   |
| <b>Canada</b><br><a href="http://energystar.gc.ca">energystar.gc.ca</a><br><br><b>U.S. / É.U.</b><br><a href="http://energystar.gov">energystar.gov</a>                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                   |
| <b>DO NOT REMOVE UNTIL FINAL INSPECTION/NE PAS RETIRER AVANT L'INSPECTION FINALE</b>                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                   |
| <br><b>National Fenestration Rating Council®</b><br><b>CERTIFIED</b>                                                                                                                                                                                                                                                                                                                                                                                                                         | <br><b>100 Series Single Hung Window</b><br>AND-N-80-02062-00001<br>Fibrex Composite Frame, Low-E SmartSun<br>HeatLock with Argon<br>Product Type: Single Hung                                    |
| <b>ENERGY PERFORMANCE RATINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                   |
| <b>U-Factor</b><br><b>0.25</b><br>(U.S./I-P)                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>1.42</b><br>(Metric/SI)                                                                                                                                                                        |
| <b>Solar Heat Gain Coefficient</b><br><b>0.20</b>                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                   |
| <b>ADDITIONAL PERFORMANCE RATINGS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                   |
| <b>Visible Transmittance</b><br><b>0.48</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                   |
| <small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.</small><br><a href="http://www.nfrc.org">www.nfrc.org</a> |                                                                                                                                                                                                   |
| <br><b>WDMA</b><br>Hallmark Certified<br><a href="http://www.wdma.com">www.wdma.com</a>                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                   |
| <b>Licensee: 129-H-899</b><br><b>Andersen Corporation</b><br><b>100 Series Single-Hung Window</b><br><small>Manufacturer stipulates Hallmark Certification as indicated below.</small>                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                   |
| <b>STANDARD</b><br>AAMA/WDMA/CSA 101/I.S.2/A440-11                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>RATING</b><br>Class LC-PG30 Size Tested 143.5" x 71.5"<br>DP=30-30                                                                                                                             |
| AAMA/WDMA/CSA 101/I.S.2/A440-08                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Class LC-PG30 Size Tested 143.5" x 71.5"<br>DP=30-30                                                                                                                                              |
| AAMA/WDMA/CSA 101/I.S.2/A440-08<br>A440S1-09                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Class LC-PG30 - 3645mm x 1816mm<br>Positive/Negative Design Pressure (DP) = 1440 Pa/1440 Pa<br>Water Penetration Resistance Test Pressure = 220 Pa<br>Canadian Air Infiltration/Exfiltration = A3 |
| FL 15906                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                   |
| Glazing: 2.2mm AN outer/2.2mm AN inner                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                   |
| <b>WARNING</b><br><small>This product can expose you to chemicals including titanium dioxide, which is known in the state of California to cause cancer, and methanol, which is known to the state of California to cause birth defects or other reproductive harm.<br/>         For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a></small>                                                                                                       |                                                                                                                                                                                                   |
| <small>Meets or exceeds CEC &amp; IECC Air Infiltration Requirements of 0.2 CFM/sq. ft. or lower.<br/>         WDMA Hallmark Certification Program. Complies with HUD UM Bulletin No. 111.</small>                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                   |

• NFRC ratings are based on modeling by a third-party agency as validated by an independent test lab in compliance with NFRC program and procedural requirements.  
 • “ENERGY STAR” is a registered trademark of the U.S. Environmental Protection Agency.

# INSTALLATION ACCESSORIES

## INSTALLATION ACCESSORIES

Optional accessories are available for the installation of Andersen® windows and patio doors. Keep instructions and safety information in mind when considering the installation and use of any Andersen product. For questions, contact your local Andersen supplier.

### Fibrex® Trim Board



This solid cellular Fibrex trim board can be cut or ripped to size, and fastened using nails or screws. 3 1/2" (89) x 3/4" (19) thick in 10' (3048) lengths. Available in white, canvas, prairie grass, Sandtone, Terratone, cocoa bean, dark bronze, red rock, forest green, dove gray and black.

### Vinyl Channels



Rigid vinyl "J" and "h" channels are 1/2" (13) deep and come in 150" (3810) lengths. "J" channels are 3/4" (19) wide and "h" channels are 1" (25) wide. "J" and "h" channels are available in white, Sandtone and Terratone. "H" channels are 3/4" (19) deep and come in 84" (2134) and 150" (3810) lengths. White "H" channels are 3/4" (19) wide. Sandtone and Terratone "H" channels are 1" (25) wide.

### Auxiliary Casing



Made of cellular Fibrex material. 1 3/16" (30) x 1 3/16" (30) thick in 150" (3810) lengths. Available in white, canvas, Sandtone, Terratone, dark bronze, forest green and black.

### Drip Cap

Heavy 24-gauge corrosion-resistant aluminum construction in two profiles to match frames. Available in 6' (1829), 10' (3048) and 12'-7 1/2" (3848) lengths in white, canvas, Sandtone, Terratone, dark bronze, forest green and black.

### Coil Stock



Made from .018" thick aluminum, Andersen coil stock is available in 24" (610) x 50' (15240) rolls and can be ordered in white, canvas, prairie grass, Sandtone, Terratone, cocoa bean, dark bronze, red rock, forest green, dove gray and black. Color-matched 1 1/4" (32)-long stainless steel trim nails are also available and can be ordered in 1 lb/454 kg boxes. Coil stock can be cut and formed to profiles at the job site. For insert window frames, coil stock fits into the exterior accessory kerf in the window frame, then wraps the existing wood window trim.

### Shims

Flat self-hanging shims help with a secure installation. Available in boxes of 248 shims.

### Straight Flashing Tape

Superior high-tack acrylic adhesive sticks and stays adhered. Split release liner for easy and accurate application. Available in 4" (102) or 6" (152) widths in 33' (10058) or 75' (22860) lengths in a single roll or case of 12.

### Installation Foam

Available for sealing the unit into the rough opening, our minimally expanding low-pressure build foam remains soft and pliable.

### Foam Backer Rod

3/8" (10) backer rod helps provide an air seal around the frame. Available in 100' (30480) rolls.

### Color-Matched Sealant

This high-performance sealant provides excellent long-term durability and adhesion to Andersen product substrates and common building materials. Color-matched sealant, in white, canvas, prairie grass, Sandtone, Terratone, cocoa bean, dark bronze, red rock, forest green, dove gray and black, is available in single 10.1 ounce/300 ml tubes or in a case of 12 tubes. 20 ounce/591 ml foil packs are available in white, dark bronze and black.

### Installation Screws

Properly sized installation screws are provided for windows that will be secured through the jamb.

## ADDITIONAL INSTALLATION ACCESSORIES FOR INSERT & FLUSH FIN WINDOWS

### Exterior Sill Extender for Insert Windows



1" (25)-wide PVC (shown) or 2" (51)-wide Fibrex sill extender fits into an exterior accessory kerf on the insert window frame to hide the gap between the new insert window and the existing window frame at the sill. Precut to fit a 14° sill slope, it can be cut to fit other slopes or lengths as needed. Available in white, Sandtone, Terratone, dark bronze and black.

### Exterior Frame Extender for Insert Windows



1" (25)-wide PVC or 2" (51)-wide Fibrex (shown) frame extender fits into exterior accessory kerfs on the insert window frame to hide the gap around the sides and/or at the head between the new insert window and the existing window frame. Available in long lengths or can be ordered cut to approximate lengths for convenience at the job site. Available in white, Sandtone, Terratone, dark bronze and black.

### Head Expander for Insert Windows



A head expander assists in filling the opening at the top of the insert window frame when doing an interior installation. Available in white, dark bronze and black. Two-tone options are available in black/white or dark bronze/white.

### Interior Trim for Flush Fin Windows



Flat or curved interior trim for flush fin window frame provides a fast and easy way to cover existing aluminum window frames. The trim is pre-scored for easy sizing and includes a 3/4" (19) adhesive strip on the back side for secure positioning. Flat interior trim is available in 12' (3658) lengths, and curved interior trim will come cut to the size of the unit. Available in white, Sandtone, dark bronze and black.



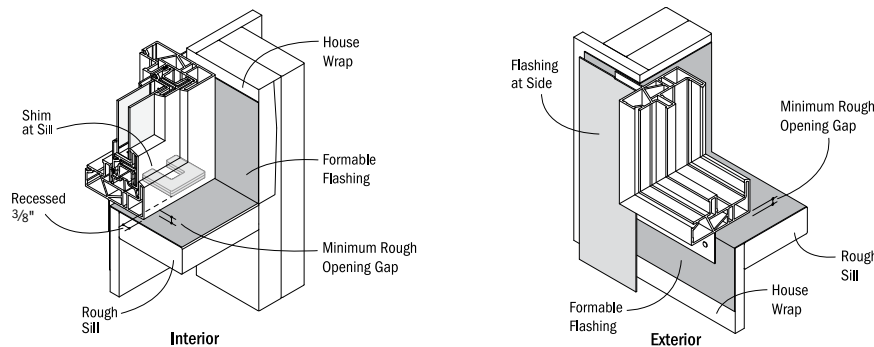
Insert window shown with exterior frame extenders and sill extender in dark bronze.

## INSTALLATION INFORMATION

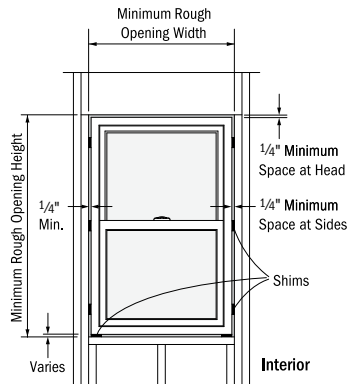
### ROUGH OPENINGS

The purpose of a rough opening is to allow for proper spacing between the window or patio door unit and the building structure. The space is required for locating, leveling and squaring the unit during installation and to provide an area for insulation. A rough opening that is incorrectly sized may affect unit operation and may not allow for adequate fastening of the unit to the building structure. Andersen® rough opening dimensions are provided as a guideline to help determine the minimum amount of space needed between the window or patio door and the building structure. See appropriate product sections for rough opening guidelines for each product.

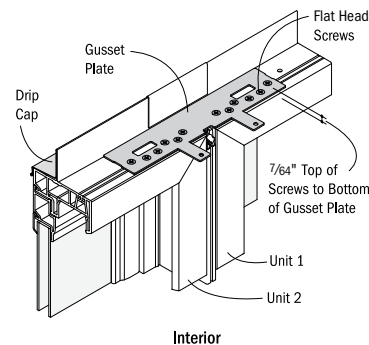
Keep in mind that rough opening dimensions may need to be altered from published guidelines, depending on installation methods, joining methods, replacement methods, etc. For example, flashing systems can reduce the amount of available rough opening space and should be factored in when calculating rough opening dimensions. The use of support or joining materials will encroach on the rough opening and may require additional rough opening space between the unit and the building structure, depending on the thickness of the flashing system and joining materials used. To facilitate drainage, the rough opening sill plate should never slope toward the interior. For challenging environments and other information, refer to EEBA's (Energy and Environmental Building Association) Water Management Guide ([eeba.org](http://eeba.org)).



Interior and exterior example of window sill flashing in a membrane drainage system.



Example of window unit installed using Andersen published minimum rough opening dimensions.



Example of two units joined together with the use of gusset plates and flat head screws that will require additional rough opening space.

### IMPORTANCE OF PROPER INSTALLATION

Proper installation and maintenance of Andersen products is essential to attain optimum performance and operation. Installation instructions that provide guidelines for proper installation are typically provided with Andersen products. They are also available by visiting [andersenwindows.com](http://andersenwindows.com). Remember that every installation is different, and Andersen strongly recommends consultation with the local supplier or an experienced contractor, architect or structural engineer prior to the installation of any Andersen product. The method of attachment for Andersen products, fastener selection and code compliance is the responsibility of the architect, building owner, contractor, installer and/or consumer. For more complete installation details, visit [andersenwindows.com](http://andersenwindows.com) or see your Andersen supplier.

### GENERAL NOTES

When ordering, make certain you specify, then verify, the exact product, unit dimensions, configuration requirements, color and options you desire on each window or patio door. Before installing the product, we suggest you verify that it includes the features and options you ordered. Visit [andersenwindows.com](http://andersenwindows.com) for product installation and joining guides. Printing limitations prohibit exact color duplication of products. View actual samples for building specifications. Andersen Corporation reserves the right to change details, specifications or sizes without notice. The customer assumes all risk of alterations made to Andersen products.



# INSTALLATION INFORMATION

## CODES

Appropriate selection of Andersen® products that conform to all applicable laws, ordinances, building codes and safety requirements is the sole responsibility of the architect, designer, building owner and/or contractor. Check with your local building code officials for specific information. Unit wind load, performance grade and energy performance information is provided on pages 111-119. For up-to-date product performance information, visit [andersenwindows.com](http://andersenwindows.com). The performance of any building system depends on the design and construction of the building system in its entirety, which should meet building code requirements, as well as address product and material limitations, and local environment and climate.

## DRIP CAPS

Drip caps are a specific type of flashing or trim used at the head of a window or door to direct water from the drainage plane out beyond the face of the unit.

## FLASHING

Flashing is an important element in a building's water management system. It is used to shed and direct water to the building exterior or to the drainage plane. Flashing materials are typically applied starting from the bottom and working upward, with each successive layer overlapping the previous one in shingle fashion. Water infiltration problems in any type of building can be reduced by properly flashing and/or sealing around all building openings, including windows and doors.

## USE OF SHIMS

Shims are used along the side jambs of windows and doors to center the unit in the rough opening and to position it plumb, level and square. In addition, shims are always required for windows under the sill at the side jambs to lift it off the rough opening sill plate. Shims also enable a straight frame for proper weatherstrip contact and unit operation. If not placed properly, unit performance and operation can be affected. Use waterproof shims capable of supporting the weight of the product. When using tapered shims, use them in pairs with the tapers opposing each other to avoid tilting the unit or twisting (rotating) of the jambs.

## SEALANTS

Sealants are elastic materials used to block the passage of water and/or air while allowing movement between the two sides of the joint. A sealant should bond tightly, and be able to expand and contract to accommodate joint movement without cracking or tearing away from the substrate. Surfaces must be clean, dry and sound for adequate sealant adhesion. Choose a sealant that is compatible with, and that will adhere adequately to, all building materials used in the window and patio door area. Proper sealant joint design is based upon the expected movement of adjacent materials and the movement capability of the sealant. A general rule of thumb is that the depth of the sealant joint should be equal to half the width ( $D = W/2$ ), but generally not less than 1/4" (6) or more than 1/2" (13). Foam-plastic backer rod can be used to limit the depth of the sealant joint, to provide a backstop for tooling the sealant without damage to the bond. It also acts as a bond breaker to help minimize stress in the sealant. Sealants should be maintained seasonally, and repaired and/or replaced as needed.

## GENERAL INSTALLATION GUIDELINES

1. Read and follow the installation guide in its entirety.
2. Decide whether you are integrating to a surface barrier or a membrane drainage system before installing the product. The appropriate method for your installation may vary based on building design, application and industry practices.
3. Make certain the drainage plane is continuous (proper overlaps to shed water, taped seams, etc.).
4. Andersen products should be installed only in the vertical position.
5. Check the rough opening to make sure it is sized properly, is square and is level.
6. Install the window or door plumb.
7. Install the window or door level.
8. Install the window or door square. Diagonal measurements should be within 1/8" (3).
9. Follow installation instructions to properly locate shims and to make sure that units are plumb, level and square. Shims are always required under the window jambs at the sill and along the jambs on the sides for windows and doors.
10. Check for squareness of unit before final anchoring of the product into the wall.
11. Anchor unit as directed with appropriate fasteners.
12. Integrate the window and door into the drainage plane of the wall using quality flashing and sealing materials. All flashing materials should be properly overlapped to shed water.
13. Allow 1/4" (6) minimum space for a sealant joint around perimeter of unit between exterior finish materials and unit.
14. Insulate and seal the interior cavity between the window or door frame and the rough opening.
15. Check operation before application of interior trim.

## CAUTIONS

1. Do not apply any type of film to insulating glass. Thermal stress and glass damage can result. Andersen Corporation is not responsible for product performance when films are applied to Andersen products.
2. The use of removable insulating materials such as insulated window coverings, shutters and other shading devices may also cause thermal stress conditions and/or deformation of protective vinyl. In addition, excessive condensation may result, which can have a deteriorating effect on the window or door unit(s) involved. Andersen Corporation is not responsible for product performance when these kinds of materials or devices are applied to or used in conjunction with Andersen products.
3. In wall construction utilizing brick facades, leave adequate clearance between sill, jambs and brick for sealing and dimensional change of framework.
4. Acid solutions commonly used to wash brick and other masonry materials will damage glass, fasteners, hardware and metal flashing. Protect unit and follow cleaning product instructions carefully. Damage caused by acid solution is not covered under the Andersen limited warranty.

5. Andersen windows may be combined in almost unlimited ribbons or stacks if each unit is positively secured to structural elements on opposing sides and if the proper joining system is used. See page 107 for more information.

## SAFETY GLASS

Unless specifically ordered, Andersen windows are not made with safety glass and, if broken, the glass could fragment, causing injury. Andersen windows may be ordered with tempered glass which may reduce the likelihood of injury when broken. All Andersen patio doors are made with tempered glass. Differences in appearance between tempered and non-tempered glass can be expected. Slight visual distortions may be noticeable and occur normally as a result of the tempering process. Building codes require safety glass in locations adjacent to or near doors and other locations.

## WINDOW AND PATIO DOOR SAFETY

Windows may provide a secondary avenue of escape or rescue in an emergency, such as a fire. Every family should develop an escape plan and make sure family members know how to escape from the home in an emergency. In your plan, include two ways to escape from every room in case one way is blocked by fire or smoke, and make sure you have a designated meeting place outside. A window or a patio door is an alternate means of escape or rescue. Practice your plan until each member of the family understands it and is able to escape without assistance. Remember, you may not be able to reach children during a fire emergency. Teach children – even very young children – that they must escape from a fire in the home and never hide from the fire or from emergency personnel.

## LOOKOUT FOR KIDS® PROGRAM

The Consumer Product Safety Commission has said: "Keep children away from open windows to prevent falls. Don't depend on insect screens to keep the child from falling out of the window. They are designed to keep insects out, not children in. Avoid placing furniture near windows to keep children from climbing to a window seat or sill." In an effort to educate consumers about the potential for child falls from windows, Andersen Corporation created the LookOut For Kids Program. It combines a window and door safety brochure and specific product instructions to help make window and door safety an important priority for consumers. For more information on child safety, write:

Andersen Corporation  
LookOut For Kids Program  
100 Fourth Avenue North  
Bayport, MN 55003  
Call 800-313-8889 or email  
[lofk@andersencorp.com](mailto:lofk@andersencorp.com)

**Look  
OUT!**  
for kids®



# Andersen® windows and patio doors can make significant contributions to the success of sustainable design strategies

As a charter member of the U.S. Green Building Council, we're active supporters of certified green buildings. Our products can help customers in pursuing green building programs, such as Leadership in Energy and Environmental Design (LEED®), the National Green Building Standard, Green Globes, GreenStar and more. Below is an overview of how our products may assist project teams with pursuing LEED v4 or the NAHB National Green Building Standard rating systems. More detailed credit summaries, as well as information about how Andersen products can support earlier versions of LEED certification (e.g., LEED v3 or LEED 2008), are available at [andersenwindows.com](http://andersenwindows.com).

## LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: NEW CONSTRUCTION AND MAJOR RENOVATIONS

### Integrative Process Credit:

#### Energy & Atmosphere

- Minimum energy performance prerequisite
- Optimize energy performance credit
- Renewable energy production credit
- Green power and carbon offsets credit

#### Materials & Resources

- Construction and demolition waste management planning credit
- Building product disclosure and optimization sourcing of raw materials credit
- Construction and demolition waste management credit

#### Indoor Environmental Quality

- Minimum indoor air quality performance prerequisite
- Minimum acoustic performance prerequisite – schools
- Enhanced indoor air quality strategies credit
- Low-emitting materials credit
- Thermal comfort credit
- Daylight credit
- Quality views credit
- Acoustic performance credit (option 2)

## LEED V4 FOR BUILDING DESIGN AND CONSTRUCTION: HOMES AND MULTI-FAMILY MIDRISES

### Energy & Atmosphere

- Minimum energy performance prerequisite
- Education of the homeowner, tenant or building prerequisite
- Annual energy use credit
- Building orientation for passive solar credit
- Air infiltration credit
- Windows credit

### Materials & Resources

- Durability management prerequisite
- Environmentally preferable products credit
- Construction waste management credit

### Indoor Environmental Quality

- Ventilation prerequisite
- Low-emitting products credit

## ANSI ICC/ASHRAE 700-2015 NATIONAL GREEN BUILDING STANDARD

NGBS section numbers are referenced in parentheses.

### Resource Efficiency

- Prefinished materials (601.7)
- Flashing (602.12)
- Exterior doors, including storm doors (602.1.10)
- Recycled construction materials (605.3)
- Bio-based products (606.1)
- Wood-based products (606.2)
- Manufacturer's environmental management system concepts (611.1)

### Energy Efficiency

- Mandatory requirements (701.1)
- Building thermal envelope air sealing (701.4.3.1)
- Multi-family air leakage alternative (701.4.3.3)
- Fenestration air leakage (701.4.3.4)
- ICC IECC analysis (702.2.1)
- Energy performance analysis (702.2.2)
- UA improvement (703.2.1)
- Fenestration (703.2.5)
- Sun-tempered design (703.7.1)
- Passive cooling design (703.7.3)
- Passive solar heating design (703.7.4)

### Indoor Environmental Quality

- Wood materials (901.4)
- Interior architectural coatings (901.9)
- Interior adhesives & sealants (901.9)
- Operable windows & sliding glass doors (902.1.5)

### Energy Efficient

- Homeowner's manual (1001.1)
- Building construction manual (1002.1)



## THE ENVIRONMENT HAS A BUSINESS PARTNER

Respect for the environment is nothing new at Andersen. For more than a century, it has been part of who we are. Our commitment to recycle and reclaim materials began simply because it was good business. Now it's part of our broader commitment to sustainability and responsible stewardship of all of our resources. Andersen is committed to providing you with long-lasting,\* energy-efficient windows and patio doors. Visit [andersenwindows.com/sustainability](https://andersenwindows.com/sustainability) for more information.



Andersen® products are certified under the National Fenestration Rating Council (NFRC) voluntary third-party certification program designed to ensure accurate energy performance ratings and labeling.



The Window & Door Manufacturers Association (WDMA) Hallmark Certification program includes product testing and quality-control process audits to verify that Andersen windows and doors are produced in conformance with the industry standards for air, water resistance and structural performance.



Andersen Corporation is proud to be an ENERGY STAR® partner. For over 120 years, Andersen has built a reputation for environmental stewardship and energy-efficient products. In fact, Andersen has been part of the ENERGY STAR program since it started and was the first window manufacturer to be named an ENERGY STAR National Window Partner of the Year in 1999.



100 Series windows and doors are Indoor Advantage Gold™ Certified by SCS Global Services for indoor air quality. Andersen was the first window manufacturer to certify products for indoor air quality, beginning in 2008. For products covered, values, and certificate details, visit [andersenwindows.com/environmental](https://andersenwindows.com/environmental).

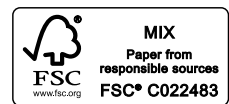


100 Series windows and doors are Recycled Content Certified by SCS Global Services. For values and certificate details, visit [andersenwindows.com/environmental](https://andersenwindows.com/environmental).

\*Visit [andersenwindows.com/warranty](https://andersenwindows.com/warranty) for details.  
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|    |                                |    |                                   |     |                                                         |     |                                    |     |                                       |     |                                             |     |                                |
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WEB VERSION Revised 10/2025



Welcome to an overview of the enhanced navigation tools available in this PDF. Before you begin be sure you are using the latest version of Adobe Acrobat Reader (March 2023), available at – <https://get.adobe.com/reader/>

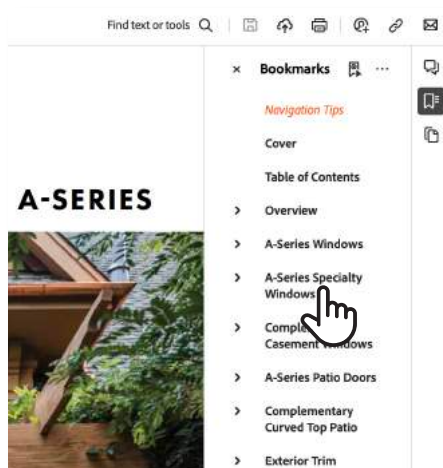
## BOOKMARK NAVIGATION

①

Acrobat will display the bookmarks panel on the right side when you open the PDF.

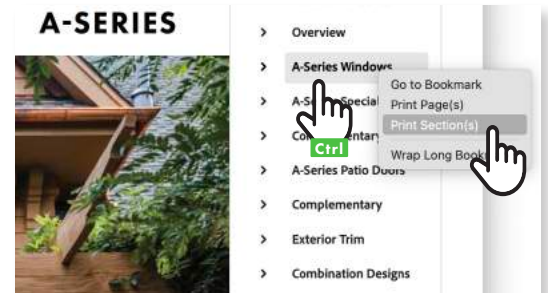
**Bookmarks** are the easiest way to find specific product information.

Select a topic and that page will be displayed.



②

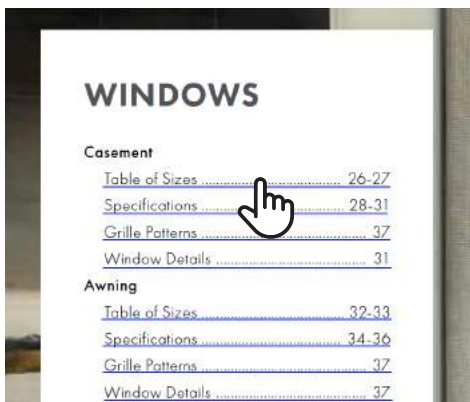
In the bookmarks panel you can print a specific section by holding down your **"Ctrl"** key and **clicking** on the section you want to print. Then choose **Print Section**.



## LINKS AND URL NAVIGATION

③

You can also use the **embedded links** to navigate between sections. All links are underlined in blue.



④

**Website links** automatically open in your web browser.

### GLASS SPACER OPTIONS



Black or white glass spacers are available as a standard offering on A-Series products, in addition to stainless steel glass spacers, to provide more ways to

### BETWEEN-THE-GLASS ART GLASS

With our between-the-glass art glass you can add interest, create focal points and make your work stand out. See [page 16](#) or visit [andersenwindows.com/artglass](https://andersenwindows.com/artglass) for more information.

### BLINDS-BETWEEN-THE-GLASS FOR PATIO DOORS





## PDF NAVIGATION TIPS *(continued)*



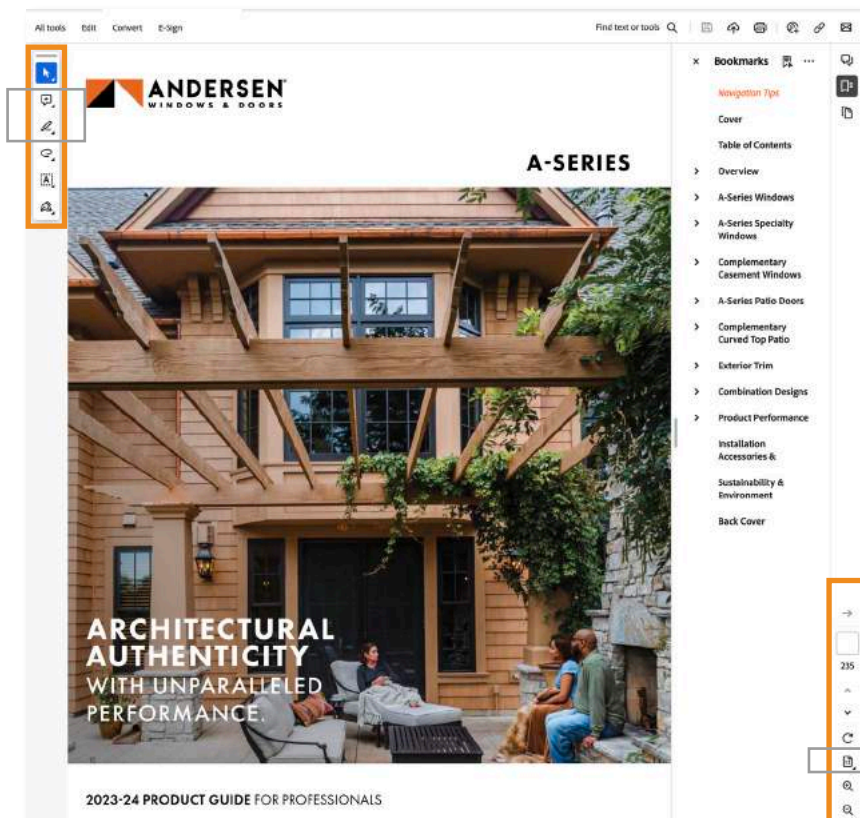
### TOOL BAR NAVIGATION

5

Top left side  
navigation tools.



The “commenting” and  
“highlight” tools here.



6

Lower right side  
navigation tools.



Click on the icon  
shown above to  
**scroll through a  
list of additional  
tools.**

Add additional navigation tools by adjusting the default settings in Acrobat.

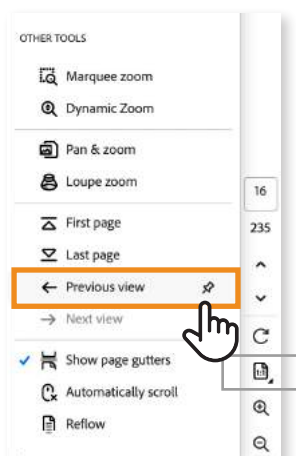
7

Add “**Previous View**” tool.

Go to the lower right side  
navigation tools. **Scroll  
through the list and “pin”  
the previous view icon**



A left facing arrow will be  
added to the tool bar allowing  
you to go back to the previous  
page you viewed.



8

Add “**Loupe Zoom**” tool.

Go to the lower right side  
navigation tools. **Scroll  
through the list and “pin”  
the loupe zoom icon.**



The loupe icon will be added  
to the tool bar allowing you  
to zoom in on details without  
changing the page view.

