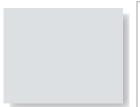


## DynaClad® PVDF Color Chart

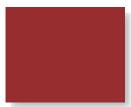


WHITE SRI = 85



**COBALT BLUE** 

SRI = 20



**BRITE RED\*** 

SRI = 44



**BEIGE** 

SRI = 53

SRI = 35

**SANDSTONE** 

**STONE** 

SRI = 49

SRI = 77



**DOVE GREY** 

**SLATE GREY** 

SRI = 47

**PATINA COPPER** SRI = 58

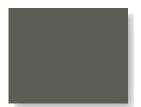


**TERRA COTTA** SRI = 43



**METALLIC SILVER** 

SRI = 53



**MUSKET GREY** 

**SEAPORT** 



**COLONIAL RED** SRI = 34



**SLATE BLUE** SRI = 34



SRI = 51



**BURGUNDY** 



SPARTAN BRONZE

SRI = 30

**DARK BRONZE** 

SRI = 27



**HEMLOCK GREEN** SRI = 31



**CLASSIC BRONZE** 



**ROYAL BLUE** SRI = 27



MATTE BLACK

**LEAF GREEN** 

SRI = 31



SRI = 26





**EVERGREEN** 

SRI = 28



**BROWN** 

SRI = 25



Premium Colors \*\*

**METALLIC COPPER** SRI = 49



**AGED COPPER** SRI = 43



SRI = 37

<sup>†</sup> Metallic colors are directionally sensitive and therefore entire roof areas should be ordered at one time to ensure color uniformity. \*Brite Red has a clear coat. \*\* Premium colors carry an upcharge. SRI = Solar Reflectance Index.

## PROVEN. DEPENDABLE. SUSTAINABLE.

#### METAL ENVELOPE SYSTEMS SINCE 1988



**(** 800.828.1510

www.dmimetals.com

sales@dmimetals.com

**PRODUCT** - DynaClad® Prefinished Architectural Tension Leveled Coil and Flat Sheet is coated with a 70% Full Strength PVDF Paint Finish. The top side is coated with a polyester primer and a 70% full strength PVDF topcoat for a total mil thickness of 1.1 (± .1). The reverse side is a polyester primer and a polyester topcoat with a total dry film thickness of .55 (± .1).

#### Substrates

Galvalume®

Consists of aluminum-zinc alloy coated (55% aluminum, 43.4% zinc, 1.6% silicon, nominal percentage by weight) carbon steel of commercial weight meeting ASTM 792.

HDG-90

Consists of hot-dipped galvanized steel base sheet of commercial weight (AISI G90 designation) meeting ASTM A653.

#### Aluminum

Consists of 3003/3105 H14 alloy aluminum base sheet of commercial weight meeting ASTM B209.

Stocked substrates are produced from 48" wide coil. Standard sized flat sheets are 48" X 120". Custom sized flat sheets can be produced in various widths and lengths with extended lead times and additional costs.

**WARRANTY** - A finish warranty covering color fade, chalking, and film integrity as well as a perforation warranty (Galvalume<sup>®</sup> only) covering base sheet integrity is available at no additional cost.

	DYNA	CLAD® STO	CKING COLOR	R/MATERIAL		
200,000	24 GAGE	22 GAGE	.032 ALUM.	.040 ALUM.	.050 ALUM.	.063 ALUM.
COLOR (IN ALPHABETICAL ORDER)	GALVALUME KYNAR 500	GALVALUME KYNAR 500	3003/3105 H14 KYNAR 500	3003/3105 H14 KYNAR 500	3003/3105 H14 KYNAR 500	3003/3105 H1 KYNAR 500
AGED COPPER	•	TETRAL GOO	•	TOTAL GOO	Terreracion	TOTAL GOO
BEIGE				i wilder		
BRITE RED						
BROWN						
BURGUNDY						
CHAMPAGNE						
CHARCOAL GREY						
CLASSIC BRONZE						
COBALT BLUE						
COLONIAL RED	7.					
DARK BRONZE			•			
DOVE GREY	- Tar-			10.00	-	11-1-1
EVERGREEN				1 T 6 7 T		
HARTFORD GREEN	- 3010					
HEMLOCK GREEN						
LEAF GREEN						
MATTE BLACK						11 - 1
METALLIC COPPER	•					
METALLIC SILVER	- Ter-			_		
MUSKET GREY						
PATINA COPPER			•			
PUTTY		1 5165	•	100		
ROYAL BLUE				- 1		
SANDSTONE					10.0	11 11 11
SEAPORT			•			
SLATE BLUE						
SLATE GREY		•			•	
SPARTAN BRONZE			•			
STONE				J = 17 € C = 4.		
TERRA COTTA						
WEATHERED ZINC						
WHITE				100	0.00	

COLORS LISTED ABOVE ARE AVAILABLE ON ANY OF THE SUBSTRATES BUT WILL HAVE ADDITIONAL LEAD TIMES AND COST.

#### STOCKED NON-PAINTED MATERIAL

HDG-90 24 ga, 22 ga, 20 ga, 18 ga, and 16 ga

ACRYLUME® 24 ga and 22 ga

MILL FINISHED ALUMINUM .032, .040, .050, and .063
CLEAR ANODIZED ALUMINUM .032 and .040

COPPER 16 oz. and 20 oz.

RHEINZINK® .7 mm, .8 mm, and 1.0 mm

STAINLESS STEEL TYPE 304 24 ga and 22 ga

DynaClad® is a registered trademark of Dimensional Metals, Inc.

Fluropon® is a registered trademark of Sherwin-Williams.

Galvalume® is a registered trademark of BIEC International Inc. and some of its licensed partners.

Acrylume® is a registered trademark of USX.

crylume® is a registered trademark of USX.

#### PERFORMANCE SPECIFICATION

ABRASION RESISTANCE (ASTM D968)

Passed 80 Liters

ACCELERATED WEATHERING (ASTM D4587, G154)

5,000 hours with no chalking, blistering or loss of adhesion

CHEMICAL RESISTANCE (ASTM E1308)

No visible changes

ADHESION (ASTM D3359)

No coating removed

COLOR CHANGE (ASTM D2244)

After 2,000 hours color change less than 2 NBS units

FLAME TEST (ASTM E84)

Class A

FLORIDA EXTERIOR DURABILITY (ASTM G7, E2244 & D4214)

Less than 5  $\Delta$  units color change and chalk rating of less than 8

FORMABILITY / T BEND (ASTM D522 & D4145)

No adhesion loss on a 1/8" Mandrel and 2T bend

GLOSS (ASTM D523)

30% (±5%) at 60 degrees

55% (±5%) at 85 degrees

**HUMIDITY** (ASTM D2247)

2,000 hours Galvalume® and G-90

3,000 hours Aluminum

IMPACT (ASTM D2794)

No cracking or loss of adhesion

PENCIL HARDNESS (ASTM D3363)

HB Minimum

SALT SPRAY (ASTM B117)

No blisters or adhesion loss after 2,000 hours for Galvalume® & G-90 No blisters or adhesion loss after 3,000 hours for Aluminum

CYCLIC SALT FOG (ASTM D5894)

Acceptance

See dmimetals.com for test reports, thermal

emittance, and SR values.











2020-01

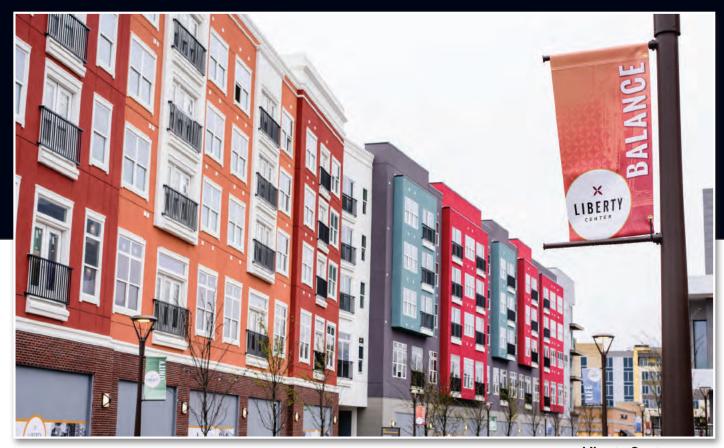
DUBLIN VILLAGE BUILDING 'A' WEST ELEVATION EIFS 12/15/2020



## OUTSULATION® SOLUTIONS FROM DRYVIT



Office Buildings Salt Lake City, UT



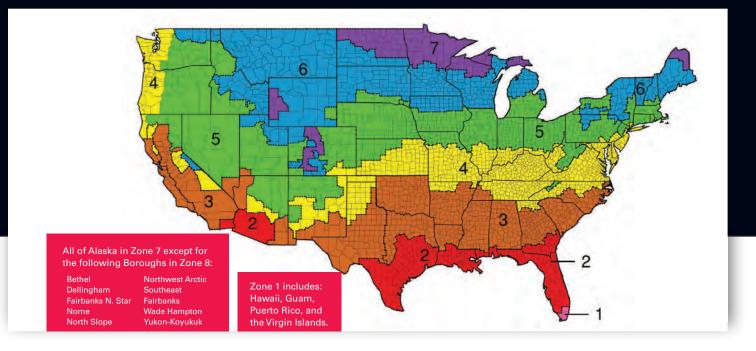
**Liberty Center** Columbus, OH

#### **WELCOME TO OUTSULATION, BY DRYVIT.**

As the name suggests, Outsulation systems place insulation on the outside of the building, and are the most effective solution for meeting today's energy code requirements for continuous insulation (CI).

But there is much more to Outsulation than Cl alone. Outsulation systems deliver the latest in building science solutions for building envelopes, resulting in operational energy efficient, cost effective construction, low maintenance, low embodied energy building solution. Outsulation delivers:

- Engineered moisture drainage for incidental moisture
- Air & water resistive barrier membrane
- Anti-crack, impact resistant scrim
- High R-value with continuous insulation
- Durable and seamless finish veneer that provides a range of aesthetically appealing results



#### **ENERGY CODES AND CI REQUIREMENTS**

The Department of Energy (DOE) has mandated that all states comply with the ASHRAE 90.1-2010 design standard by September 26, 2016, which requires the use of continuous insulation (CI) on commercial buildings in over 90 percent of the United States. Other design standards and codes — such as ASHRAE 189.1, IECC 2012, IgCC 2012; Title 24, (Section 6) and CALGreen — will also require the use of CI, as well as air barriers, as they become adopted. The bottom line is that nearly all new commercial projects in the U.S. will soon require the use of an air barrier and CI as an integral part of exterior wall construction.

CI is much more efficient than the use of insulation in the wall cavity, and 2 inches of CI can have the effective R-value of 8 inches of cavity (batt type) insulation! As such, consider eliminating the use of cavity insulation altogether by using the right amount of CI to meet your total exterior wall insulation goals. An empty wall cavity improves airflow and reduces the dirt and moisture retention associated with batt insulation.

Rigid insulation, such as Expanded Polystyrene (EPS), can also be easily cut and shaped to provide dramatic architectural details and design effects, such as reveals, quoins, cornices and trim, that are much more difficult and expensive to achieve with heavier materials. Using an Outsulation system to combine the design flexibility and CI benefits of EPS is unique and extremely cost-effective.



Ronald McDonald House Salt Lake City, UT



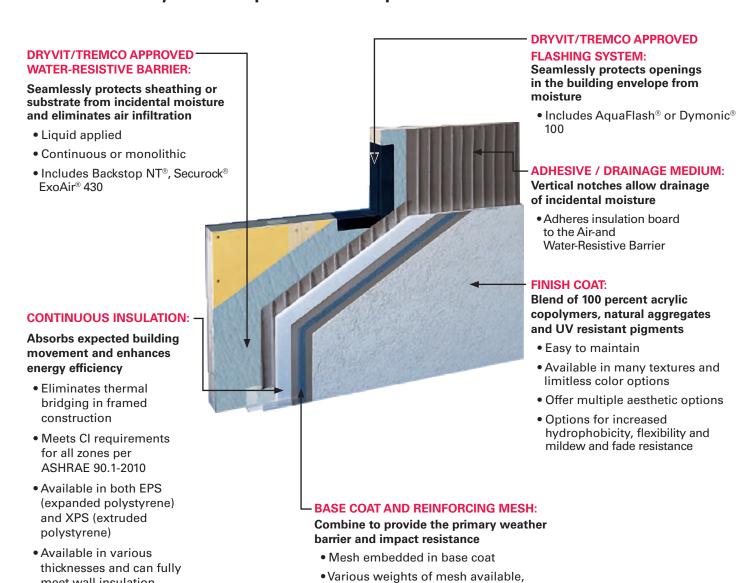
Sarkis & Siran Gabrellian Child Care Learning Center Hackensack, NJ

#### SYSTEM OPTIONS:

All Outsulation systems include adhesive, continuous insulation (CI), fiberglass mesh embedded in base coat, and finish, which are installed sequentially by a trained professional contractor as specified by the design team, and as required by code. Some Outsulation systems protect the underlying wall with an air- and water-resistive barrier under the Cl, which maximizes the energy efficiency. Outsulation systems can be installed in either "barrier," "moisture drainage" or "pressure equalized" configurations, and these systems are engineered to perform in all climates and on all types of structures. On certain types of construction (high-rise) and in certain job conditions (cold weather), lift-in-place, prefabricated wall sections may provide certain benefits.

#### **HOW IT WORKS**

Outsulation systems typically consist of the following components, as determined by code and performance requirements.



depending on impact resistance required

meet wall insulation

requirements

#### **SUSTAINABLE SOLUTIONS:**

Outsulation systems have been evaluated by the National Institute for Standards and Technology (NIST) and have less environmental impact than other common claddings. They can also contribute toward achieving LEED credits, depending upon project design and location.

Outsulation systems are more cost-effective throughout their lifecycle because the manufacturing process requires less energy than other common claddings, and the lightweight composition reduces fuel costs associated with transport. After application, Outsulation systems continue to keep heating and cooling costs low for the life of the building. Visit **dryvit.com** for more information.

All Dryvit North American manufacturing facilities are ISO 9001:2008 and ISO 14001:2004 certified.

#### **OUTSULATION**

## OUTSULATION PLUS MD SYSTEM

## OUTSULATION MD SYSTEM

## OUTSULATION HDCI<sup>TM</sup>

#### OUTSULATION X™ SYSTEM

## **OUTSULATION LCMD SYSTEM**

## OUTSULATION PE SYSTEM

## OUTSULATION RMD SYSTEM

OUTSULATION SYSTEMS WITH SE430

- Intended for use in commercial construction or over masonry
- · Insulation adhered directly to substrate
- Designed as a barrier system
- · Qualifies for all construction types
- Incorporates a liquid-applied, air-and water-resistive barrier
- Vertical adhesive beads facilitate moisture drainage
- · Corrugated strip or track is incorporated at the base of the wall
- · Passive drainage
- · Qualifies for all construction types
- Incorporates a liquid-applied, air- and water-resistive barrier
- Grooved insulation board facilitates moisture drainage
- Vent track and vent assembly are incorporated at the base of the wall
- Engineered drainage
- Provides a 20-year warranty on puncture resistance
- Incorporates a liquid-applied, air-and water-resistive barrier
- Corrugated strip or track is incorporated at the base of the wall
- Features DOW® XNERGY™ Extruded Polystyrene (XPS) insulation board
- Incorporates a liquid-applied, air- and water-resistive barrier
- Vertical adhesive beads facilitate moisture drainage
- Drainage strip is incorporated at the base of the wall
- Qualifies for all construction typesSupplemental fasteners required

· Qualifies for commercial construction

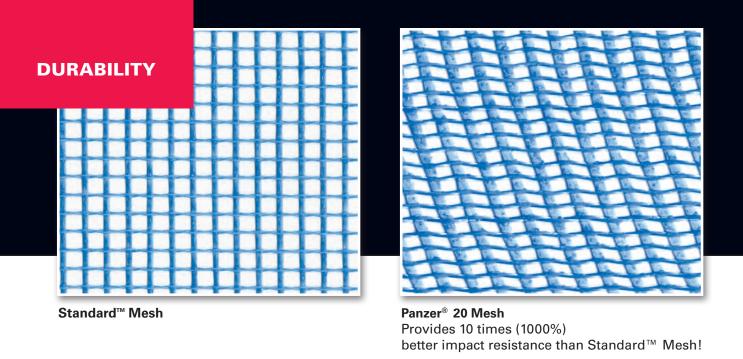
Provides a 20-year warranty on

puncture resistance

Passive drainage

· Passive drainage

- Qualifies for all construction types
- Mechanically fastened over sheet type water-resistive barriers (by others)
- Corrugated strip or track incorporated at the base of the wall
- Multiple drainage and attachment options available
- · Qualifies for all construction types
- Incorporates a liquid-applied, air- and water-resistive barrier
- Closure blocks are configured to "compartmentalize" the wall for pressure equalization
- Vent track and vent assembly are incorporated at the base of the wall
- Engineered moisture drainage and pressure equalization
- Intended for residential, wood framed (one and two family) construction
- Can incorporate a liquid applied air- and water-resistive barrier or sheet membrane and drainage mat
- Drainage strips or track incorporated at the base of the wall
- Multiple drainage and attachment options available
- Outsulation MD Securock ExoAir 430
- Outsulation Plus MD Securock ExoAir 430
- Outsulation HDCl Securock ExoAir 430
- Outsulation PE Securock ExoAir 430
- Outsulation X Securock ExoAir 430



#### **DURABILITY**

All Outsulation systems incorporate alkali and fire-resistant fiberglass mesh that is embedded into the base coat over the entire surface of the insulation board.

This combination provides the primary weather barrier, as well as tensile strength and impact resistance for the system, and these factors all play a critical role in protecting the physical integrity and beauty of the building exterior. The mesh is available in several weights and is specified according to the anticipated level of exposure to potentially damaging impact.

The heaviest and strongest — Panzer 20 Mesh — is intended for use at all ground floor locations and high-traffic areas such as balconies. Hurricane-prone regions may have building codes that require assemblies reinforced with Panzer Mesh. Panzer 20 is also the required mesh in Dryvit's Outsulation HDCl system, which comes with a 20-year puncture resistance warranty. Consult Dryvit's Engineering Department or your local Dryvit representative for more information on these circumstances.

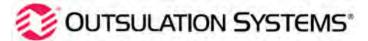
#### **DRYVIT REINFORCING MESH OPTIONS:**

**Standard™ Mesh**: Recommended for normal-wear applications on the second story and above

Corner Mesh: Used to reinforce corners and recommended on all ground-floor applications

Intermediate™ Mesh: Recommended for medium-level traffic and impact requirements on the second story and above

Panzer® 20 Mesh: Recommended for all high-traffic areas



Dryvit has been the world leader in insulated exterior cladding system technology since 1969.

Texture and color are essential components of a building's character. Choosing these is a journey and this color chart is intended as the starting point. Each of the Dryvit integrally colored coatings or finishes can be manufactured in virtually any color you specify. A range of our most popular textures is shown below. If you don't see the texture or color you like, call your local Dryvit distributor. Most have state of the art, custom color matching equipment on site and they will be pleased to work with you to achieve the exact look you desire. For more information and the name of your nearest Dryvit distributor, call toll free at 1-800-556-7752 or click here.



#### back to top

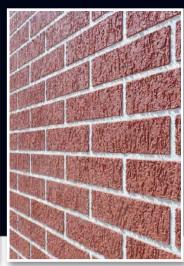
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#### **PROJECT HIGHLIGHTS:**

## MATERIAL SAVINGS

Outsulation Plus MD (using 4 inches of EPS) allowed the construction team to achieve the performance R-values required of the exterior wall, and eliminate the use of cavity insulation entirely. Substituting the 1.5-pound per square foot Outsulation Plus MD system for the 40-plus pounds per square foot masonry reduced the amount of concrete and structural steel needed to support the weight of the wall, and overall, 1.4 million pounds of materials — 96 percent of the original cladding weight — were eliminated from use!

## LABOR SAVINGS

All components of the Outsulation Plus MD System were installed by a single trained subcontractor, simplifying the construction schedule.

#### CONSTRUCTION TIME SAVINGS

Using less structural material and a single contractor for the Outsulation Plus MD system reduced overall construction time by 15 weeks, which saved money and enabled the owner to move into his building ahead of schedule.

## SINGLE WARRANTY

Outsulation systems are engineered, tested and fully-warranted by Dryvit, whereas a brick wall is composed of a variety of materials supplied by different manufacturers.

## LEED CERTIFICATION

The Outsulation Plus MD system contributed to earning maximum EA category credits and LEED Gold certification.

## **ENERGY SAVINGS**

Measured against the modeled performance of an identical structure built to meet local building and energy codes, this building was predicted to have an energy savings of 34.8 percent and an energy cost reduction of 42.8 percent annually. After one full year, the actual energy cost reduction was 52.6 percent — more than the modeled expectation!

By choosing Dryvit's Outsulation Plus MD system, the design and construction team were able to meet the owner's aesthetic and performance goals ahead of time, and under budget. With numerous challenges to overcome and ambitious goals to meet, Outsulation by Dryvit delivered measurable results above and beyond expectation, and will continue to do so for the lifetime of the building.

#### **BUILDING ENERGY CODES ARE CHANGING.**

The international movement to improve energy performance and lower environmental impact is dramatically affecting the way buildings must be designed and built, particularly with the requirements for air barriers and continuous insulation. Outsulation by Dryvit is a tested and proven solution to this challenge.

Best of all, with Outsulation systems, performance and aesthetics aren't mutually exclusive. The wide variety of finishes, textures and colors can make nearly any architectural vision a reality.

The benefits of Outsulation have been realized in hundreds of thousands of projects around the world, and the systems provide a single-source, seamless and sustainable cladding solution for buildings of any shape, size and type.

Simply put, Outsulation systems provide everything you need from a building code perspective, and everything you want from a performance and aesthetic standpoint.

Visit dryvit.com or call 800-556-7752 to learn more about Outsulation by Dryvit.



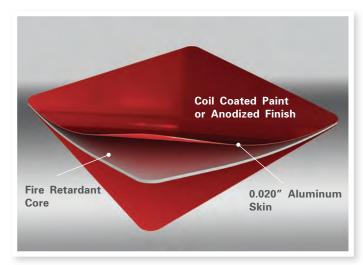
Dryvit Systems, Inc. One Energy Way West Warwick, RI 02893 401-822-4100 dryvit.com

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#### **ALUCOBOND® Plus**

As the original "aluminum composite material," ALUCOBOND® Plus has been developed exclusively to allow architects and designers to meet the fire performance requirements of today's building standards while using ACM as the material of choice. Consisting of two sheets of smooth .020" aluminum thermobonded to a solid, fire retardant core, ALUCOBOND Plus is one component of the assembly that meets the requirements of fire classifications while offering the proven product properties such as flatness, form-ability, durability and ease of fabrication.

The versatile characteristics of ALUCOBOND® Plus provide for a plethora of applications such as exterior and interior cladding, column covers, canopies, soffits and even signage, allowing architects to offer inspiring, creative, and innovative designs while meeting the standards of sustainable planning.

ALUCOBOND® Plus is available in all of our current finishes and custom colors.

#### PRODUCT DESCRIPTION

#### Material Composition

- Aluminum interior and exterior facings in 0.020" nominal thickness to ensure flatness
- > Proprietary fire-resistant core available in 4mm nominal thickness only

#### Sheet Widths

- > Standard coil coated widths include 50" and 62"
- > Standard anodized widths include 62"
- Custom width 40"

#### Sheet Lengths

- > Standard lengths include 146" and 196"
- Custom lengths for coil coating up to a maximum of 360"
- Custom lengths for anodized up to a maximum of 216"

#### Minimum Bending Radius

The minimum bending radius of Alucobond Plus without routing the interior skin is 15 times the thickness of the material

#### **FIRE TESTING**

#### Wall Assembly Fire Performance Tests

- NFPA 285: Passed
- CAN/ULC-S134: Passed

#### **TECHNICAL SUMMARY**

#### Temperature Resistance

- > Withstands environmental temperature changes from -55°F to +175°F
- Coefficient of linear expansion is governed by the aluminum sheet

#### **Technical Properties**

Nominal Thicknes	s: <b>4mm</b>
Nominal Weight:	1.56 lb/ft <sup>2</sup>
Moment of Inertia	a: .000212 in <sup>4</sup> /in
> Section Modulus:	.00275 in³/in
Rigidity:	2143 lb-in <sup>2</sup> /in

#### Sustainability Design

- LEED 3
- > LEED v4
  - LCA Industry Standard
  - EPD Industry Standard



#### **Accepted Code Evaluation Reports**

- > 1. ICC-ES
- › 2. Florida Product Approval
- 3. City of Los Angeles
- › 4. Miami-Dade County NOA

#### **MANUFACTURING**

#### Manufacturing Location

ALUCOBOND Plus is currentlymanufactured in Benton, Kentucky USA

To download PDF or AutoCAD details and specifications, visit our website at www.alucobondusa.com.

Information contained herein, or related to, is intended for use at one's own discretion. Such information is believed to be reliable, but 3A Composites shall have no responsibility or liability for results obtained or damages resulting from such use. 3A Composites USA, Inc. does not make any warranties, expressed or implied.





#### **ENGINEERING PROPERTIES FOR ALUCOBOND® PLUS MATERIAL**

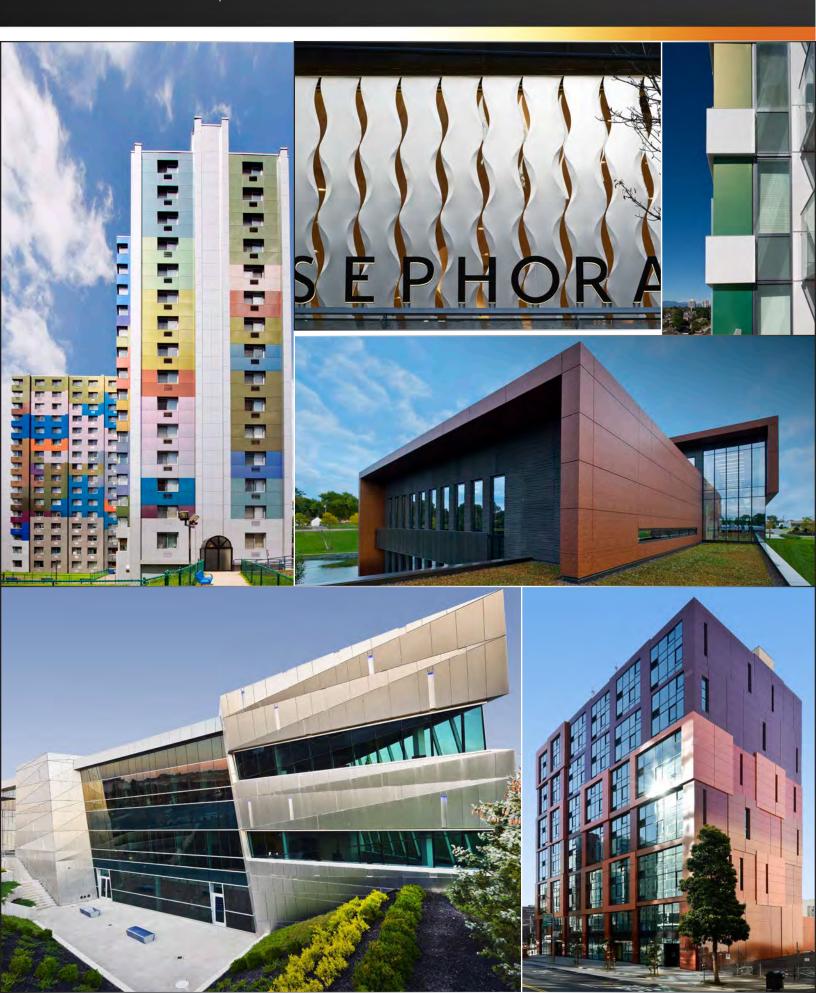
Standard Test Method*	Description	Category	4mm
ASTM D-635	Rate of Burning	Fire Performance Properties	CLASSIFIED CC1
ASTM D-1929	Ignition Temperature-Self	Fire Performance Properties	783°F
ASTM D-1929	Ignition Temperature-Flash	Fire Performance Properties	784°F
ASTM E-84	Surface Burning Characteristics (Flame Spread Index)	Fire Performance Properties	0
ASTM E-84	Surface Burning Characteristics (Smoke Development Index)	Fire Performance Properties	0
CAN/ULC-S102	Surface Burning Characteristics (Flame Spread Index)	Fire Performance Properties	5
CAN/ULC-S102	Surface Burning Characteristics (Smoke Development Index)	Fire Performance Properties	0
ASTM C-365	Flatwise Compression Strength (Ultimate)	Mechanical Properties	9291 psi
ASTM C-393	Core Shear Properties (Perpendicular) Ultimate Facing Bending Stress	Mechanical Properties	24,720 psi
ASTM C-393	Core Shear Properties (Parallel) Ultimate Facing Bending Stress	Mechanical Properties	22,732 psi
ASTM D-790	Flexural Modulus (Perpendicular)	Mechanical Properties	1891 ksi
ASTM D-790	Ultimate Flexural (Perpendicular)	Mechanical Properties	18,573 psi
ASTM D-790	Flexural Modulus (Parallel)	Mechanical Properties	1815 ksi
ASTM D-790	Ultimate Flexural (Parallel)	Mechanical Properties	17,703 psi
ASTM D-790	Yield Flexural Stress (Perpendicular)	Mechanical Properties	6667 psi
ASTM D-790	Yield Flexural Stress (Parallel)	Mechanical Properties	6930 psi
ASTM D-638	Modulus of Elasticity (Perpendicular)	Mechanical Properties	2930 ksi
ASTM D-638	Tensile Stength (Perpendicular)	Mechanical Properties	7750 psi
ASTM D-638	Tensile Yield at .2% Offset (Perpendicular)	Mechanical Properties	6570 psi
ASTM D-638	Elongation (Perpendicular)	Mechanical Properties	14.2%
ASTM D-732	Punching Shear (Maximum Shear Load)	Mechanical Properties	2198 lbs
ASTM D-732	Punching Shear (Shear Strength)	Mechanical Properties	4615 psi
ASTM C-518	Thermal Conductivity	Thermal Properties	U=6.5 Btu/hr ft <sup>2</sup> °F
ASTM C-518	Thermal Resistance	Thermal Properties	R=0.16
ASTM C-518	Thermal Conductance	Thermal Properties	6.25
ASTM D-648	Deflection Temperature - Perpendicular	Thermal Properties	185°C
ASTM D-648	Deflection Temperature - Parallel	Thermal Properties	189°C
ASTM C-273	Shear Test in Flatwise Plane (Ultimate Core Shear Strength)	Bond Integrity Properties	765 psi
ASTM C-297	Tensile Bond Strength Test in Flatwise Plane (Ultimate)	Bond Integrity Properties	1016 psi
ASTM D-1781	Bond Integrity	Bond Integrity Properties	123 N mm/mm
ASTM E-90	Sound Transmission (STC)	Acoustical Properties	30
ASTM E-90	Sound Transmission (OITC)	Acoustical Properties	24
ASTM C-272	Water Absorption	Physical Properties	0.003%
ASTM D-696	Coefficient of Linear Thermal Expansion	Physical Properties	1.11x10 <sup>-5</sup> in/in °F

<sup>\*</sup>The ASTM (American Society for Testing and Materials) Standard Test Method defines the way a test is performed and the precision of the result. The result of the test is then used to assess compliance with a Standard Specification.6

800.626.3365 www.alucobondusa.com



## **ALUCOBOND**° | CLEANING GUIDE



## **ALUCOBOND**° | CLEANING GUIDE

#### Key Notes For Cleaning of ALUCOBOND® Sheets:

- ALUCOBOND sheets should be cleaned on a regular basis. The timing of this cleaning is highly dependant on the location of the building and the amount of dirt and pollution on that area. A general rule is to clean the panels when the windows are cleaned.
- Cleaning should be done on a shaded side of the building or ideally, on a mild, cloudy day.
- Perform a spot test in an inconspicuous area to evaluate cleaning effectiveness before proceeding with full scale cleaning of the building.
- FEVE Clean finish sheets must be rinsed immediately after washing. Failure to follow this procedure may cause damage to the gloss of the panel.
- Do not mechanically abrade a painted finish when trying to clean a sheet. Do not use wire brushes, steel wool, sandpaper, rubbing compound, cleaning compound, abrasives or other similar cleaning tools.
- Follow all local environmental laws when handling and disposing of cleaning solutions.



## Cleaning of The naturAL Reflect Mirror and Anodized ALUCOBOND® Sheets:

Wash the Natural Reflect Mirror surface by hand using a lamb's wool mitt or soft cloth and neutral 6 - 8 PH cleaner and water. Follow with a thorough clear water rinse and dry immediately with a soft cloth. Follow the manufacturer's instructions and safety precautions for cleaning agents used.

Residues can be removed using a 1:1 mixture of isopropyl alcohol and water with a fiber-free soft cotton cloth. Rinse off and dry immediately with a fiber-free cloth.

### Cleaning of The FEVE Clear Finishes ALUCOBOND® Brushed Sheets:

Prepare a 1:3 to 1:10 mix of Mirachem 500 Liquid, that is one part Mirachem 500 to three to ten parts water.

Wash the FEVE Clear surface by hand using a lamb's wool mitt or soft cloth, and the Mirachem 500 water solution, applying medium pressure. Rinse off immediately.

Cleaning should be done on a shaded side of the building or ideally, on a cloudy or mild day.

#### Cleaning of PVDF Paint Finish ALUCOBOND® Sheets:

A 5% solution (one part detergent to 20 parts water) of commonly used commercial and industrial detergents, such as Tide, will not have any deleterious effect on a PVDF finish. These solutions should be followed by an adequate rinse of water. Use cloth, sponges, or a soft bristle brush for application. Cleaning should be done on a shaded side of the building or ideally, on a mild or cloudy day.

\*Always test cleaning materials and procedures on a small inconspicuous area prior to use on a larger scale.

Supplier: The Mirachem Corporation 4645 W. McDowell Rd., Phoenix, AZ 85035 800-847-3527 / 602-272-6066 cservice@mirachem.com

For further maintenance and cleaning tips ask for Tech Talk #89 from: 3A Composites USA, Inc.



3A Composites USA
P.O. Box 507 • 208 W 5th Street • Benton, KY 42025-0507
800-382-6445 • 270-527-4200 • Fax 270-527-1552
www.AlucobondUSA.com

#### Classic



**PVDF** or **Polyvinylidene Fluoride Finish** systems are the industry standard for metal architectural coatings. The **SRI** or **Solar Reflectance Index** with cool paint technology is a measure of a finish's ability to reject solar heat, as shown by a small temperature rise. It is defined so that a standard black (reflectance 0.05, emittance 0.90) is zero and a standard white (reflectance 0.80, emittance 0.90) is 100. SRI values are subject to change based on paint supplier and availability. **Please contact Customer Service for the most accurate listings as well as stocking of naturAL series and Spectra colors.** 

**OCEAN** 

CUPRAL

SAKURA

ZINC

RUSTED METAL

#### **FINISH SYSTEMS**

ALUCOBOND® Plus Systems are created utilizing a color and a Classic PVDF (Polyvinylidene Fluoride) finish system. When requesting a color, we will provide you with the resin type, the number of coats, the color name and the gloss range level. ALUCOBOND® Plus Natural colors amplify the natural beauty and character of many natural elements to enhance the design of your architectural project while maintaining the durability and lightweight properties of aluminum. ALUCOBOND® Plus Spectra colors use high-quality fluorocarbon paint systems applied in a continuous coil-coated process to create a color-shifting surface. Depending on the pigment type and viewing angle, different wave-lengths of light are reflected, resulting in an ever-changing color gradient with iridescent highlights. Now, your entryways, columns, and facades can make a bold statement without upsetting your budget.

#### WARRANTIES

For warranty information please contact your ALUCOBOND representative.

#### **PHYSICAL PROPERTIES**

#### **ALUCOBOND Composition**

- Aluminum interior and exterior facings in 0.020" nominal thickness to ensure flatness
- > Proprietary fire-retardant (Plus) core available in 4mm nominal thickness

#### **Sheet Widths**

- > Standard coil coated widths include 50" and 62"
- > Standard anodized widths include 62"
- > Custom width 40"

#### **Sheet Lengths**

- > Standard lengths include 146" and 196"
- > Custom lengths for coil coating up to a maximum of 360"
- Custom lengths for anodized up to a maximum of 216"

#### **Minimum Bending Radius**

The minimum bending radius of ALUCOBOND Plus without routing the interior skin is 15 times the thickness of the material

#### Available Finishes

- > PVDF, FEVE
- > Polyester
- > HDP
- › Anodized: Clear, Light Bronze, Medium Bronze, Dark Bronze and Black
- > Monochromatics, Micas and Metallics
- › Natural
- › Spectra

#### **TECHNICAL DATA**

	ALUCOBOND Plus
Thickness	4mm Plus
Nominal Weight (lbs/sq.ft)	1.56
Coefficient of Expansion x10 <sup>-5</sup> (in./in.°F)	1.11
Temperature Resistance	-55° to 175° F (-48° to 80°C)
Minimum Peel Strength	115 N mm/mm

#### **Tests and Building Codes**

Guided by the most comprehensive technical support team in the industry, ALUCOBOND maintains constant and rigorous code compliance. From conceptual vision to finished project, the ALUCOBOND sales and service professionals will guide you through the process.

#### North American Building Code Acceptance

ALUCOBOND Plus are accepted by many code regulatory bodies including:

- ) IBC
- Miami-Dade County, Florida
- National Building Code of Canada
- > State of Florida
- City of Los Angeles, California

#### **ALUCOBOND Code Tests**

ALUCOBOND has been tested in accordance with the following standards:

- > ASTM E 84 Surface burning characteristics
- > ASTM D1929 Ignition properties
- > ASTM D1781 Peel strength
- > NFPA 285 Intermediate scale multi-story (ALUCOBOND Plus only)
- > CAN/ULC-S134 (ALUCOBOND Plus only)

#### **CUSTOM COLOR**

Don't see what you are looking for? Let your imagination be our guide! The palette of coil-coated colors can be endless. Our color matching experts will work to match your color. Custom colors are available but require a 1,000 sqft. minimum order and are subject to set-up charges. Exact matches are sometimes not possible. Matching a color created by a spray method, particularly a metallic, may not match with a color created on a roll coated method.

To ensure that we identify your color correctly, we require either:

A hand sample of at least 1" x 1", **or** a Pantone® color reference, which can be noted as a number with a "C" for coated or "U" for uncoated. Example: Pantone 220C, **or** a PPG paint code reference.

Send the color sample to:

#### Alucobond Custom Color Match Department 208 West Fifth Street Benton, KY 42025

Please provide your name, company name, address, phone number and email address, as well as the project name, project location, type of finish and gloss. We will update the progress of your custom color request via email.

800.626.3365 www.alucobondusa.com



Dublin Village Building 'A' West Elevation Paint 12/15/2020



#### Pussywillow

Interior / Exterior Location Number: 283-C4





ப	IASCA	CAIACT	VALIE	radian:	
_	ıcasc	361661	voui	region:	

Cincinnati / Dayton / NKY

O Columbus

Midwest

National

RESIDENTIAL (/RESIDENTIAL)

COMMERCIAL (/COMMERCIAL)

#### **PRODUCTS**

Hardscapes & Outdoor Living (/products/hardscapes-outdoor-living)

Tristate Tile (/products/tristate-tile)

RockCast Architectural Stone (/products/architectural-stone)

Moderno Series (/products/rockcast-architectural-stone/moderno-series)

RockCast Modular Veneer Units (/products/rockcast-architectural-stone/rockcast-modular-veneer-units)

RockCast Caliza Stone (/products/rockcast-architectural-stone/rockcast-caliza-stone)

RockCast Custom Accents - Cast Stone (/products/rockcast-architectural-stone/rockcast-custom-accents-cast-stone)

RockCast Structural & Architectural Cast Stone (wet) (/products/rockcast-architectural-stone/rockcast-structural-architectural-cast-stone-wet)

RockCast Lightweight Series (/products/rockcast-architectural-stone/rockcast-lightweight-series)

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Brick (/products/brick)

Thin Veneer (/products/thin-veneer)

CMU (/products/cmu)

Hearth (/products/hearth)

#### Visit the Project Gallery



 $(/resources/project-gallery?term\_node\_tid\_depth=55\&tid\_3=All\&tid=All)$ 

RockCast Thin Architectural Stone



The Fast Track pre-engineered system can help builders achieve LEED objectives. Aluminum channels and clips have at least 25% post-consumer recycled content, and the entire system can be dismantled and re-purposed as a building's uses change.

Options Specification Installation Information Downloads

#### Colors:



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itok=MN1TkQR3)

Brownstone



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 $(https://www.readingrock.com/sites/default/files/styles/colors\_-\_shadowbox/public/04\_charlotte\_tan\_sm.jpg?$ 

itok=F2jfUZO1) Charlotte Tan



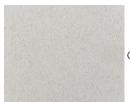
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Clay



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itok=OAXm\_jo3)
Creme Buff



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itok=hJMD57bD) Crystal White



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itok=d33ezthN) Light Gray



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Merlot



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itok=d\_oVnC9F)

Riesling



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itok=UZVpceJQ) Shadow



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37ZeMD) Smokehouse



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itok=kVtWu1Ho) Starbuck



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itok=tCdVv93k) Bur Ridge



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itok=uZovntQY) Commonwealth



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itok=H\_sMMOz4)

Flax



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\_shadowbox/public/2s5a7725\_golden\_sky\_web\_15.jpg?itok=f6obhXxP)
Golden Sky



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itok=\_yJROah2) Lily White



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itok=CTkLTVIr) Old Ohio



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Slate



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\_\_shadowbox/public/2s5a7727\_smoke\_gray\_web\_15.jpg?itok=4GQjODRJ)

Smoke Gray



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itok=IWkhb08J) Wheatstone

#### Shapes:









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itok=\_hKvRoD\_)

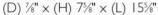
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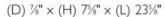
Tie & Clip Support Panel System

**Shapes:**k Stone

Fast Track Stone









(D) %"  $\times$  (H) 11%"  $\times$  (L) 15%"



(D) %" × (H) 115%" × (L) 235%"



CORNER RETURNS

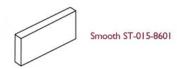
(D) 1/8" × (H) 75/8" × (L) 115/8"



(D) 1/8" × (H) 115%" × (L) 115%"



(D) 11/4" × (H) 75/6" × (L) 155/6"



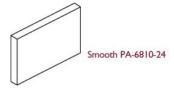
(D) 11/4" × (H) 155/8" × (L) 155/8"



(D) 11/4" × (H) 115/8" × (L) 155/8"



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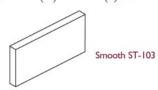
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(D) 11/4" × (H) 115/6" × (L) 235/6"



(D)  $1\frac{1}{4}$ " × (H)  $3\frac{5}{6}$ " × (L)  $23\frac{5}{6}$ "



(D)  $1\frac{1}{4}$ " × (H)  $7\frac{5}{8}$ " × (L)  $15\frac{5}{8}$ "



(D) 11/4" × (H) 75/6" × (L) 235/6"



(D) 11/4" x (H) 115/8" x (L) 235/8"



(D)  $1\frac{3}{4}$ " × (H)  $7\frac{5}{8}$ " × (L)  $23\frac{5}{8}$ "



(D)  $1\frac{3}{4}$ " × (H)  $11\frac{5}{8}$ " × (L)  $23\frac{5}{8}$ "



#### CORNER RETURNS

(D)  $1\frac{3}{4}$ " × (H)  $7\frac{5}{8}$ " × (L)  $15\frac{5}{8}$ "



(D)  $1\frac{3}{4}$ " × (H)  $11\frac{5}{8}$ " × (L)  $15\frac{5}{8}$ "



(D)  $1\frac{3}{4}$ " × (H)  $7\frac{5}{8}$ " × (L)  $19\frac{5}{8}$ "



(D)  $1\frac{3}{4}$ " × (H)  $11\frac{5}{8}$ " × (L)  $19\frac{5}{8}$ "



#### Questions? We're happy to help. Call us at 800.482.6466

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.. .



Dublin Village Building 'A' West Elevation Horizontal Plank Siding 12/15/2020



Current Trends, Competitive Pricing, Attractive Lead Times







# STONEWOOD EXTERIOR DESIGN OFFERING

STONEWOOD STANDARD DESIGNS

Versatile Woodgrains, Solid and Abstract Designs







STAND ALONE IN A WORLD OF COLOR!



PROUDLY MADE IN AMERICA

## TRUE NATURE TREND

Natural wood finishes, earthen textures and unique material characteristics that are showcased rather than corrected.







Harvest Ply 8078-AA

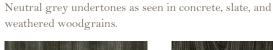


8684-DA Terra Impression



Cask Oak 7695-AA

## MINERALIZE TREND





**Greystone Pine** 





Carbon Oak 6588-AA



Loft Ash 3340-DA

## Industrial Trend

1523-DA



Chalked Oak 5361-AA



Rustic time-worn metals, reclaimed materials, natural stones and sun faded woodgrains.



Bronze Impression



**Granary Pine** 

8875-DA

#### TECHNICAL DATA SHEET

#### STONEWOOD EXTERIOR ARCHITECTURAL PANELS

SOLID PHENOLIC CORE PANELS, MADE IN AMERICA - DIVISION 07-42 SOLID PHENOLIC EXTERIOR WALL CLADDING

#### PRODUCT DESCRIPTION

#### **Benefits**

- Solid phenolic core panels offer strength and durability, plus moisture and weather resistance
- Manufactured in America; Wisconsin-based customer service
- Attaches using a non-proprietary fastener system
- Non-porous surface is easy to clean and graffiti resistant
- Factory or field fabrication
- Simplified long-term maintenance; replace singular panels as required
- 10 year product warranty

#### Sustainable Design Benefits

- Contributes to LEED Credits in multiple categories
- Offered with Forest Stewardship Council® certification
- Manufactured with renewable energy

#### **Design Offering**

 Extensive Design Offering available; wood grains, neutrals, abstract and bold options



#### **Applications**

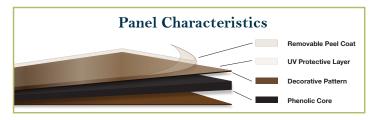
- Exterior wall cladding is suitable for all construction types: commercial, hospitality, mixed-use, municipal, multi-family, healthcare and institutional
- Various shapes and sizes available

#### Codes and Compliances\*

- NFPA 285 passed
- Class A or Class B Fire Rating
- Miami-Dade County NOA (Notice of Acceptance)
- NEMA Test Results
- ASTM D-790
- Weathering Resistance
- General Manufacturing Tolerances

#### PANEL OVERVIEW

Panel Thickness	5/16" (8mm)	3/8" (10mm)	1/2" (13mm)	
Panel Weight 4' X 8'	70 lbs (32 kg)	84 lbs (38 kg)	112 lbs (51 kg)	
Install with Exposed Fastening System	<b>✓</b>	~	×	
Install with Concealed Fastening System	×	<b>✓</b>	~	
Use with Insulation or without Insulation	~	~	~	
Field and Factory Fabrication	<b>~</b>	<b>~</b>	~	
Use with Ventilated Facade System	~	<b>~</b>	~	
Common Fabricated Sizes				
24" x 8'	~	~	~	
11 3/4" X 8'	<b>~</b>	<b>~</b>	<b>~</b>	
7 5/8" X 8'	<b>~</b>	<b>~</b>	~	
5 5/8" X 8'	~	~	~	

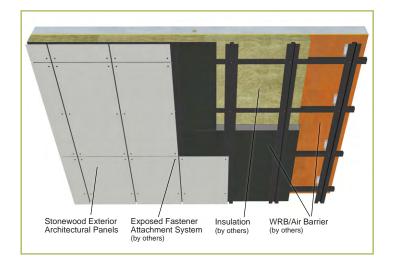


Stonewood is manufactured with a kraft paper core impregnated with phenolic resin, and capped with a decorative pattern that has been impregnated with melamine resin.

## TECHNICAL DATA SHEET STONEWOOD EXTERIOR ARCHITECTURAL PANELS

SOLID PHENOLIC CORE PANELS, MADE IN AMERICA - DIVISION 07-42 SOLID PHENOLIC EXTERIOR WALL CLADDING

#### PRODUCT APPLICATION EXAMPLES





#### INSTALLATION OVERVIEW

#### Storage and Handling

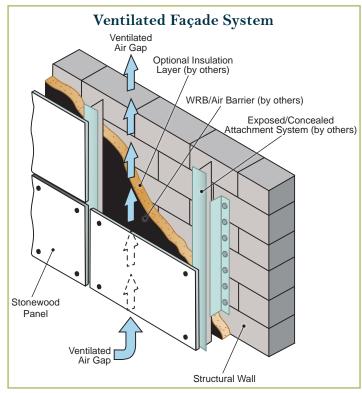
Keep panels in original packaging, store indoors

#### Installation

- Affix panels according to cladding attachment (by others) manufacturer instructions. Fiberesin is not responsible for cladding attachment warranty.
- Panels must be fitted with suitable subframe corrosion resistant fasteners
- Minimum distance of 3/8" (10mm) must be maintained between panels (on all sides), to accommodate hygrothermal movement
- Panels must be supported by the maximum surface area of the sub-frame element
- Maximum spacing between fasteners is 24"
- Minimum of 3 supports, vertical and horizontal, are required except for planks under 20"
- For complete field drilling and factory processing guidelines review Stonewood Technical Guide at Stonewoodpanels.com

#### Cleaning & Repair

- Clean panels with lukewarm water, dishwashing detergent, and soft cloth
- Stubborn stains can be removed with hexane, aliphatic naphtha or kerosene
- Damaged panels must be replaced, panels cannot be repaired



Stonewood Exterior Panels are designed to work as cladding with rain screen design in a ventilated façade system.

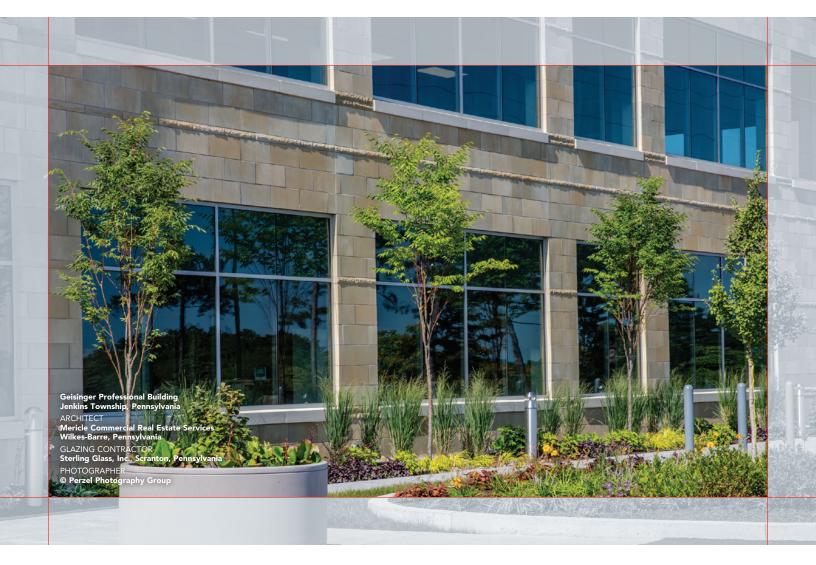
#### TRIFAB® VG (VERSAGLAZE®)

TRIFAB® VG 450, 451 & 451T (THERMAL) FRAMING SYSTEMS & TRIFAB® 451UT (ULTRA THERMAL) FRAMING SYSTEM



Dublin Village Building 'A' West Elevation Storefront 12/15/2020

## Design + Performance Versatility with Unmatched Fabrication Flexibility



Trifab® VersaGlaze® is built on the proven and successful Trifab® platform – with all the versatility its name implies. There are enough framing system choices, fabrication methods, design options and performance levels to please the most discerning building owner, architect and installer. The 4.5" depth Trifab® VersaGlaze® Framing System family is available with non-thermal, thermal and ultra-thermal performance levels. The ultra-thermal Trifab® 451UT Framing System, is designed for the most demanding thermal performance and employs a dual Isolock® thermal break.

#### **AESTHETICS**

Trifab® VersaGlaze® Framing Systems offer designers a choice of front-, center-, back- or multi-plane glass applications. Structural silicone

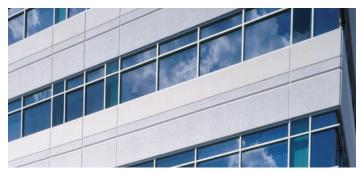
glazing (SSG) and weatherseal glazing options further expand designers' choices, allowing for a greater range of possibilities for specific project requirements and architectural styles. All systems have a 4-1/2" frame depth; Trifab® VersaGlaze® 450 has 1-3/4" sightlines, while Trifab® VersaGlaze® 451/451T and Trifab® 451UT have 2" sightlines.

With seamless incorporation of Kawneer entrances or windows, including GLASSvent® visually frameless ventilators, Trifab® framing can be used on almost any project. These framing systems can also be packaged with Kawneer curtain walls and overhead glazing, thereby providing a full range of proven, and tested, quality products for the owner, architect and installer from a single-source supplier.

#### **ECONOMY**

Trifab® VersaGlaze® 450/451/451T/451UT Framing Systems offer a variety of fabrication choices to suit your project:

- Screw Spline for economical continuous runs utilizing two-piece vertical members that provide the option to pre-assemble units with controlled shop labor costs and smaller field crews for handling and installation. (available for all systems)
- Shear Block for punched openings or continuous runs using tubular moldings with shear block clips that provide tight joints for transporting large pre-assembled multi-lite units. (available for 450/451/451T systems)
- Stick for fast, easy field fabrication. Field measurements and material cuts can be done when metal is on the jobsite. (available for 450/451/451T systems)
- Pre-glazed The combination of screw spline construction with pre-glazing in the shop accelerates installation and reduces field labor time while minimizing disruption to the surrounding area or existing tenants. Making it an exceptional choice for new or retrofit applications, particularly in urban areas or where space is limited. (available for 451/451T/451UT framing)



Brighton Landing
Cambridge, Massachusetts
ARCHITECT
ADD Inc., Cambridge, Massachusetts
GLAZING CONTRACTOR
Ipswich Bay Glass Company,Inc., Rowley, Massachusetts
PHOTOGRAPHER
© Gordon Schenck, Jr.

All systems can be flush glazed from either the inside or outside. The weatherseal option provides an alternative to SSG vertical mullions for Trifab® VersaGlaze® 450/451/451T. This ABS/ASA rigid polymer extrusion allows complete inside glazing and creates a flush glass appearance on the building exterior without the added labor of scaffolding or swing stages. Additionally, high-performance flashing options are engineered to eliminate perimeter sill fasteners and associated blind seals.

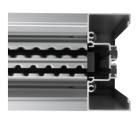
#### FOR THE FINISHING TOUCH

Architectural Class I anodized aluminum and painted finishes in fluoropolymer (AAMA 2605) and solvent-free powder coatings (AAMA 2604) offer a variety of color choices.

#### **PERFORMANCE**

Kawneer's Isolock® thermal break technology creates a composite section, prevents dry shrinkage and is available on Trifab® VersaGlaze® 451T. For even greater thermal performance, a dual Isolock® thermal break is used on Trifab® 451UT.





Trifab® 451UT uses a dual Isolock® thermal break (right) and features a new highperformance sill design, which incorporates a screw-applied end dam (left), ensuring positive engagement and tight joints between the sill flashing and end dam.

U-factor, CRF values and STC ratings for Trifab® framing systems vary depending upon the glass plane application. Project-specific U-factors can be determined for each individual project. (See the Kawneer Architectural Manual or Kawneer.com for additional information.)

Thermal simulations showing temperature variations from exterior/cold side to interior/warm side.



#### **PERFORMANCE TEST STANDARDS**

Air Infiltration	ASTM E283
Water	AAMA 501, ASTM E331
Structural	ASTM E330
Thermal	AAMA 1503
Thermal Break	AAMA 505, AAMA TIR-A8
Acoustical	AAMA 1801, ASTM E1425









SSG





Center Back

Weatherseal

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PERMACOAT™ POWDER COATINGS

# Solvent-Free Finishes That Add High Performance, Durability to Your World



	l e	
*Denotes non-standard color		
BLACK		
BEAGIC		
BOYSENBERRY*	SANDSTONE	HARTFORD GREEN
MILITARY BLUE*	ANTIQUE BRONZE	DOVE GRAY
CHARCOAL	BONE WHITE	CLASSIC BRONZE
DARK GREEN	CLARET RED	DEEP BLUE
LIGHT GREEN*	MIDNIGHT BLUE	INTERSTATE GREEN
BRICK RED	NIGHT HAWK GRAY*	REDWOOD
MEDIUM BLUE	SMOKE GRAY	DARK IVY*
MILK WHITE	LIGHT GRAY	MEDIUM BRONZE
WIEN WHILE	EGIT GRAT	WEDION DUONAGE
ATLANTIC GRAY	SEPIA BROWN*	SEA WOLF
IVORY	JAVA BROWN	SUMMER YELLOW*

As communities throughout the world recognize the need to preserve natural resources, governments have imposed stricter safety controls and increased pressure to reduce emissions such as paint solvents into the atmosphere. Building owners and architects have responded to these environmental concerns while also requiring higher performance, superior durability and more color choices for their projects.

#### **PERFORMANCE THAT MEETS AAMA 2604 REQUIREMENTS**

Kawneer now offers a solution – Permacoat™ Powder Coatings – for new or remodel projects requiring a solvent-free finish that:

- Meets the exacting requirements of AAMA 2604
- Demonstrates outstanding gloss and color retention
- Complies with most environmental regulations
- Provides optimal corrosion resistance
- Exhibits durability, excellent mechanical properties and abrasion resistance
- Competes with solvent-based paints in all respects
- Offers standard and custom finish colors
- Offers higher gloss levels contact your Kawneer sales representative for information
- Offers additional custom shades subject to technical approval

#### PERFORMANCE TABLE

TERI ORMANCE II			
Mechanical AAMA 2604 Performance Reference		Perma Perfori	
Dry Film Hardness	Section 7.3	Pass	Н
Dry Film Adhesion	Section 7.4.1.1	Pass	No film disbondment
Impact Resistance	Section 7.5	Pass	No film disbondment
Abrasion Resistance	Section 7.6	Pass	>20 liters per mil
Chemical Resistance	AAMA 2604 Reference	Perma Perfori	
Muriatic Acid Resistance	Section 7.7.1	Pass	No visual change or blistering
Mortar Resistance	Section 7.7.2	Pass	No visual change or loss of adhesion
Nitric Acid Resistance	Section 7.7.3	Pass	Color change ≤5∆E (Hunter)
Detergent Resistance	Section 7.7.4	Pass	No film removal or blistering
Corrosion Tests AAMA 2604 Reference		Permacoat™ Performance	
Wet Adhesion	Section 7.4.1.2	Pass	No film removal or blistering
Boiling Water Adhesion	Section 7.4.1.3	Pass	No film removal or blistering
Humidity Resistance	Section 7.8.1	Pass	No blisters > "few No. 8" (ASTM D714)
Salt Spray Resistance	Section 7.8.2	Pass	<1.6 mm creep from scribe
Weathering AAMA 2604 5 Years Florida Reference		Perma Perfori	
Color Retention	Section 7.9.1.2	Pass	Color change ≤5∆E (Hunter)
Chalking Resistance	Section 7.9.1.3	Pass	No more than No. 8 rating (ASTM D4214)
Gloss Retention	Section 7.9.1.4	Pass	≥ 30% gloss retention
Erosion Resistance	Section 7.9.1.5	Pass	< 10% Film loss

**Note:** These color samples are as close as possible to actual colors offered within the limitations of printing techniques. Final color specification shall be as per approved color samples.





