

THOMAS M. McCASH  
ATTORNEY AT LAW

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October 1, 2025

City of Dublin, Ohio  
Planning Division  
Board of Zoning Appeals  
5200 Emerald Parkway  
Dublin, Ohio 43017

RE: Application for Area Variance  
Address: 9376 Nicholson Way, Dublin, Ohio 43017

Dear Staff,

I represent David and Beryll Hopkins in regard to the pergola installed at the rear of their property. The Hopkins purchased this pergola from Share Tree Cool Living, LLC and believed that the supplier and installer would have applied for a building permit for its installation if required. They were informed by the installer that a permit was not required and relied on his "expert" opinion.

The Hopkins applied for their HOA approval, which was granted, even though it apparently violated their deed restrictions. They have subsequently indicated that they would follow the city's direction as to any approvals.

Shortly after its installation, the Hopkins received a Notice of Non-Compliance from Zoning Inspector Brian Martin indicating that there was no permit applied for the exterior improvements. The immediately submitted for a building permit on July 2, 2021 which was denied indicating that the pergola, which was being considered a structure, was not allowed to encroach into the open rear yard space of the property.

This pergola is placed above an existing concrete patio which is permitted to encroach into the rear yard by 5 feet per DCC 153.071(B)(1)(c). The pergola extends by its overhang 1 foot further for a total of 6 feet into the rear yard. DCC 153.071(B)(1)(b) permits eaves, cornices, window sills and belt courses to project into the required yard by up to two feet so with that exception, the pergola would encroach 5 feet into the required yard.

This pergola is visibly and physically open, having 50 percent of its vertical surface area open to light and air, on all sides and does not have a roof. It has open trellis structure above that is also more than 50% open relative to permanent elements and is provided with retractable awnings between the trellis elements.

The Hopkins would request that they be granted a variance to the provisions of DCC 153.071(B)(1) as it relates to the pergola as it was not their intention to violate the zoning code or building code and believed they were complying with all requirements. The HOA approved the project prior to its actual installation notwithstanding that it was encroaching into the rear yard. Had they denied the approval due to the encroachment, the pergola would not have been

installed as it presently exists. The Contractor further exacerbated the situation by not applying for building permits which would have at least given notice of the Zoning Code requirements.

The Hopkins property has an eastern facing rear yard that abuts City of Dublin dedicated parkland. The location of the pergola allows a shade system during the morning and afternoon hours at their existing patio and does not visually detract from the views and vistas of the adjacent properties or the city parkland.

1. This site is unique in its configuration compared to most of the other lots in the subdivision that would have a larger available area for the construction of the pergola. Additionally given the additional open space created by the City of Dublin Parkland at the rear of the property, there is no adverse effects on another parcel that would typically be abutting the rear property line.
2. The pergola is 20 feet from the rear property line which does not impact adjacent property owners. The adjacent neighbors home sits 5 feet closer to the rear property line than the Hopkins.
3. The pergola installation, while purchased by the Hopkins, was performed by the supplier who failed to secure permits. Additionally, the HOA who would have had the opportunity to flag the concern at the time of the application, failed to do so.
4. Given the designated City Parkland behind the Hopkins parcel, the technical paper lines of setbacks does not impact visually the community or any neighbors to the rear of their property as the Parkland area provides a further visual buffer. The granting of the variance will not cause a substantial adverse effect to the property or any improvements in the vicinity or MATERIALLY impair the intent and purposes of the Dublin Zoning Code. The Hopkins propose as a condition that no vertical retractable shades will be installed on the pergola as a commitment that the openness of the element remains paramount.
5. The granting of the variance would not grant on the Hopkins any special privileges that other property owners are currently enjoying in the neighborhood and community. The adjacent property owner to the south has a patio and a retractable awning that is 16 feet from the rear property line and therefore sits closer to the rear property line than the Hopkins pergola. That neighbor was issued a permit for a 6' patio at the rear of their home that sits 26 feet from the rear property line which would be in compliance with DCC 153.071(B)(1)(c). That neighbors application indicates a request for a 10' deep patio, the applicant being Councilman John Reiner. While the approval was for a 6' deep patio, it's clear that a 10' deep patio was installed, with retractable awning, and the city has not enforced the same zoning code provisions against that property owner. If the patio was installed at 6' with the 26' building distance from the rear property line, it would generally align with the location of the Hopkins pergola. Clearly, their patio and awning is at least 4 feet further into the rear setback.
6. No governmental services are impacted by the granting of this variance.
7. The only method of eliminating the practical difficulty would be for the City to dedicate approximately 6 feet of the parkland at the rear of the parcel to the Hopkins, we don't believe that would be considered by the City. It should be noted that the adjacent property owner has attempted to acquire part of this parkland by moving the white stakes back approximately 5-6 feet from his actual rear property line, which I'm sure was to cause confusion in the city's enforcement regarding the patio.

Sincerely,

A handwritten signature in black ink, appearing to read 'Thomas M. McCash', with a stylized, flowing script.

Thomas M. McCash

Find address or place



60ft 40.153376 -83.174681 Degrees











Submitted  
7/2/16  
3 photos of pergola

The pergola  
extends ~1ft  
beyond existing  
patio.

PROVIDE RADON MITIGATION SYSTEM  
PER DUBLIN REQUIREMENTS

SITEPLAN DRAWN PER APPROVED SUBDIVISION PLAT BY  
EMHRT, ENGINEERS & SURVEYORS DATED JANUARY, 2005

FINAL DRIVEWAY DESIGN T.B.D. PER LANDSCAPE DESIGN/CONTRACTOR

SITE UTILITIES SHOWN ARE PER APPROVED DEVELOPMENT  
ENGINEERING PLANS AND ASSUMED CORRECT

SLOPE GRADING AWAY FROM HOUSE MIN. 6" FALL IN FIRST 10' RUN  
SOIL STOCKPILES TO REMAIN ON THIS LOT

PROVIDE EROSION CONTROL (SILT FENCE OR EQUIV)  
AROUND CONSTRUCTION AREAS & NEAREST PROP LINES

BUILDER TO MAINTAIN EROSION PROTECTION THROUGHOUT BUILDING PROCESS, &  
FIELD MODIFICATIONS MAY BE NECESSARY TO LOCATIONS SHOWN AS CONDITIONS REQUIRE

SITE PLAN & ELEVATIONS ARE SUBJECT TO REVIEW BY DEVELOPER &  
BUILDING DEPT'S AND MAY REQUIRE ALTERATIONS FOR PERMIT APPROVALS

GRADE CONTOUR LINES ARE BASED ON DEVELOPER'S  
ENGINEERING & ORIGINAL SITE ELEVATIONS AS PROVIDED

NOTE: LANDSCAPE CONTRACTOR TO PROVIDE APPROVED  
STREET TREES PER CITY OF DUBLIN REQUIREMENTS, TO BE  
LOCATED PER SUBDIVISION & CITY SPECIFICATIONS, AND TO  
HAVE TREE PROTECTION FENCING INSTALLED AS NECESSARY

IF REQUIRED, MAILBOX & LIGHT POST TO BE  
LOCATED PER SUBDIVISION OR JURISDICTION

# **FLOOD HAZARD ZONE "X"**

ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY F.I.R.A. MAP  
COMMUNITY PANEL #39049C0018K FROM 6/12/2008 THE BUILDING LOCATION  
WILL BE COMPLETELY OUTSIDE OF THE FLOODPLAIN

# **BENCHMARKS:**

B.M. #3 - ROAD SPIKE SET IN-TOUCH SIDE OF 18" DIA TREE, APPROX 1750'  
EAST SIDE OF HYLAND-CROY ROAD AND APPROX 15' NORTH SIDE OF SECTION LINE  
ELEV = 1002.32'

BASIS OF BEARINGS: TRANSFERRED FROM A FIELD TRAVERSE ORIGINATING FROM & TYPING TO  
FRANKLIN CO. GEODETIC SURVEY CONTROL MONUMENTS, INCLUDING A.M.EAL & FOS 6648  
HAVING A CALCULATED BEARING OF N 15 DEG, 07 MIN, 53 SEC WEST (BASED ON O.S.P.C.S. SOUTH ZONE MAGNET) 7086

PLAT BOOK # PAGE 315, A, B, C,  
MAP # 157-01-04-002.000

# **TONING & SETBACK INFO (COTTAGE LOT):**

MIN SIDYARDS = 6FT EACH SIDE  
MIN REAR YARD = 15/25 FT

APPROX SILT FENCE LOCATION (FIELD YERHY)

Revised 12/6/16  
per Dublin plan review

SIDEWALK & TREELAWN CROSS-SLOPE TO BE 3/16" PER FT  
12" SIDEWALK EASEMENT NOTED  
VARIOUS SPOT GRADE ELEV'S ADDED  
ESTIMATED SILT FENCE LOCATIONS SHOWN  
BSAT WINDOW WELLS (N.W.) SHOWN

# **SITE PLAN** SCALE: 1" = 20'-0"

16-25152  
ENGINEERING COMPLIANCE  
City of Dublin  
APPROVED AS NOTED  
06/12/28/14

TOTAL IMPERVIOUS SURFACE AREA = 3,854 SQFT \*  
TOTAL LOT AREA = 7,500 SQFT  
% COVERAGE (ALLOWABLE IS <70%) = 51.4%

DRIVEWAY SURFACE AREA IN FRONT YARD = 240 SQFT  
TOTAL FRONT YARD AREA (TO BUILDING LINE) = 1,200 SQFT  
% COVERAGE (ALLOWABLE IS <35%) = 20%

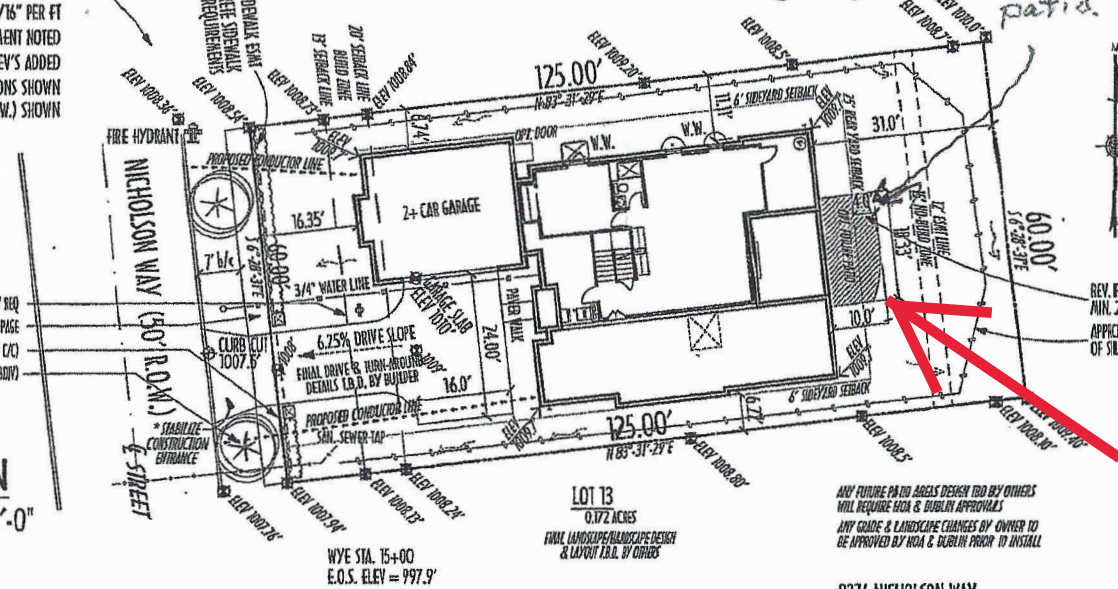
TOTAL LINEAR FT CURB CUT(S) = 16 LF  
TOTAL LINEAR FT CURB = 60.0 LF  
% CUT (ALLOWABLE IS <40%) = 27%

\* INCLUDES HOUSE, GARAGE, PORCHES, DRIVE, & ALL SIDEWALKS (ANY AREA OF LOT COVERED W/ IMPERVIOUS MATERIAL)

"IMPERVIOUS AREA" BREAKDOWN:  
TOTAL HOUSE FOOTPRINT (INCLUDING ALL PORCHES, GARAGE) = 2,646 sqft  
FUTURE/OPT PATIO AREA = 135 sqft  
TOTAL WALKS & SIDEWALK AREAS = 208 sqft  
TOTAL DRIVEWAY AREA (GARAGE TO CURB) = 865 sqft  
TOTAL IMPERVIOUS AREA = 3,854 sqft

ADJACENT PROPERTY TO NORTH:  
FINISH GRADE ELEV. = 1010.5'  
FIRST FLR. ELEV. = 1012.5'

Revised 12/20/16  
HOUSE MOVED 3FT FND



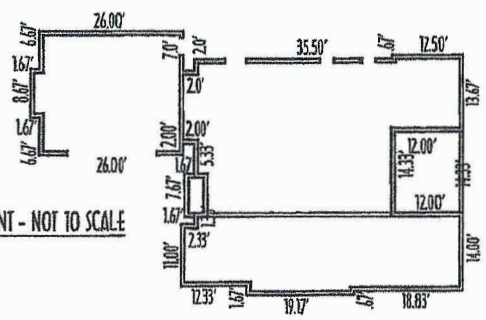
REV. PATIO ENCLOSES INTO  
MIN. 25' REAR YARD BY 4FT  
APPROX. LOCATION  
OF SILT FENCE

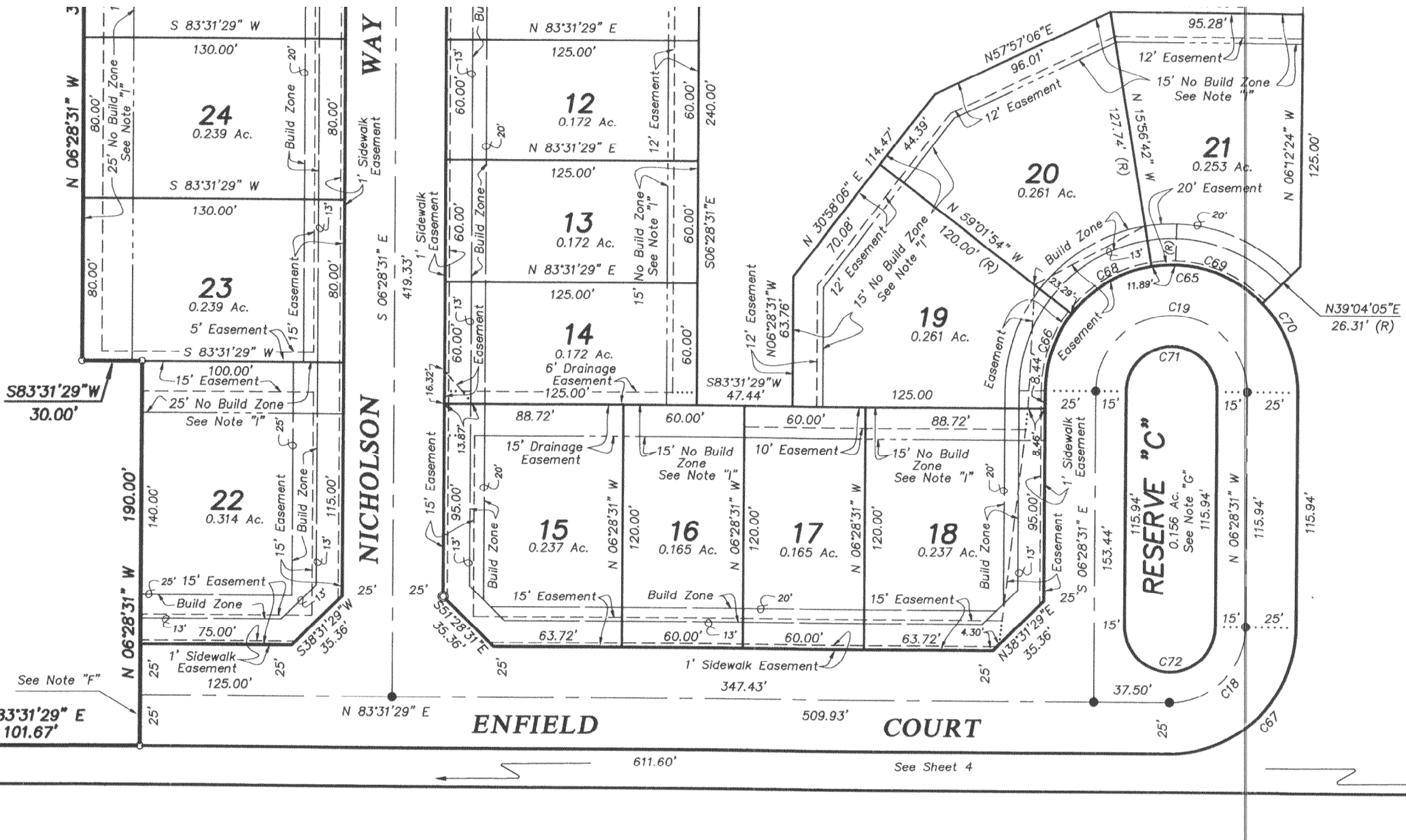
Pergola 19'-9" w x  
11'-10" d (from  
house) see  
pergola dwgs

9376 NICHOLSON WAY  
LOT 13 - SEC 1  
TARTAN RIDGE SUBDIV  
PARCEL #4  
CITY OF DUBLIN  
UNION COUNTY, OH

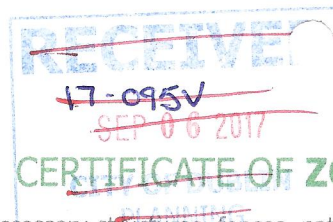
ADJACENT PROPERTY TO SOUTH:  
FINISH GRADE ELEV. = 1009.3'  
FIRST FLR. ELEV. = 1011.3'

# **BLDG FOOTPRINT - NOT TO SCALE**









Planning | 2017

Application # 17-02750

## CERTIFICATE OF ZONING PLAN APPROVAL

A Certificate of Zoning Plan Approval (CZPA) is required for accessory structures, fences, patios, walls, temporary signs, model homes, outdoor sales, and for all commercial projects.

**FILE COPY****I. APPLICATION REQUIREMENTS**☒ **APPLICATION FEE (\$70 RESIDENTIAL, \$145 COMMERCIAL, \$90 TEMPORARY SIGN)**☒ **SCALED SITE PLAN**

One (1) copy, indicating all current structures, property lines, setbacks, and easements in addition to all proposed structures and site improvements. All proposed work should be dimensioned and labeled. Additional documentation may be required. Partial or incomplete applications and drawings cannot be processed and will be returned to the applicant. Typically, site plans come from the surveyor and are enclosed with the closing papers. (Not required for temporary signs).

**II. PROPOSAL:** Please describe the proposal (patio, fence, temp. sign, etc.)

Wanting to put a patio slab 10'x18' in small area at rear of home. Wanting to put many arborvitae's to provide privacy area. Plot and Pictures of area attached.

**III. PROPERTY & APPLICANT INFORMATION**

Address of Subject Property OR Parcel ID: 9368 Nicholson Way lot #14	
Property Owner: Ross & Linda Metcalf	Phone Number: 614-504-6396
Subdivision/Business Name: Tartan Ridge	Lot Number: 14
Applicant/Authorized Representative: Ross Metcalf	
Address of Applicant/Authorized Representative: Municipal Village (near Snaper) John Reimer (Oakland Park Jersey)	
Applicant's Phone Number: 614-774-9215 (cell)	Applicant's Email: metcalf.ross@yahoo.com

**IV. APPLICANT'S STATEMENT OF ACKNOWLEDGEMENT:** This section is NOT required for temporary signs.

I, <u>Ross Metcalf</u> , the owner and applicant, hereby authorize _____ to act as my representative and agent in matters pertaining to the processing and approval of this application including modifying the project, and I agree to be bound by all representations and agreements made by the Authorized Representative.	
Property Owner Signature: <u>Ross Metcalf</u>	Date: 07/27/2017
Authorized Representative Signature: _____	Date: _____

**FOR CITY USE ONLY**

Resubmission? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Date Issued/Issued By: M. KETTLER 11/8/17
<input type="checkbox"/> Approved <input checked="" type="checkbox"/> Approved as Noted <input type="checkbox"/> Disapproved as Noted	Notes: 6'x20' Patio

This Certificate of Zoning Plan Approval is issued for, and in reference to the property and use described above, and as approved by the City Administrator or designee, or the City Council, Board of Zoning Appeals, Planning & Zoning Commission, or the Architectural Review Board as appropriate.

For questions or more information, please contact Planning at 614.410.4600 | [www.dublinohioUSA.gov](http://www.dublinohioUSA.gov)



EVERYTHING GROWS HERE.



WOOD-FRAME SINGLE FAMILY CONSTRUCTION

1.5/5

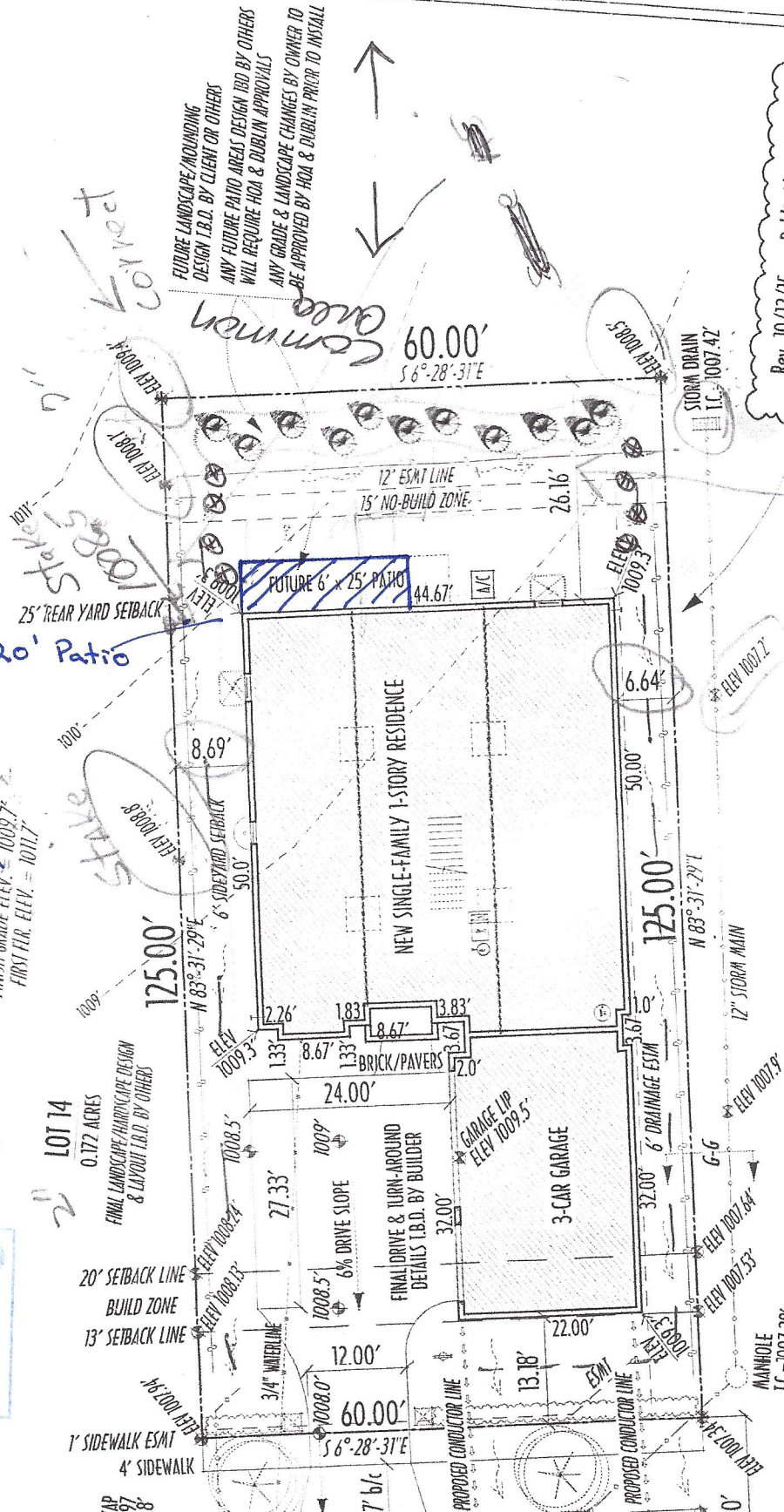
Rev. 10/12/15 per Dublin Plan Review  
RELOCATED EGRESS WINDOW WELL LOCATION

ADJACENT PROPERTY TO SOUTH:  
FINISH GRADE ELEV. = 1008.7'  
FIRST FLR. ELEV. = 1010.7'

\*Patio is permitted  
to encroach 5'  
into 25' required  
rear yard  
setback

**FILE COPY**

17-095V  
SEP 06 2017



AN  
20'-0"

15/11/17



**FILE COPY**

**5800 Shier Rings Road \* Dublin, OH 43016**

**RECEIPT DETAIL:**

Receipt Date: 7/31/2017  
Receipt No.: 44706  
Cashier: DUBLINAD\kettmt  
Job ID: 17-62750-CERT - Paver Patio - 180 sq. ft.  
License Information:  
Payment Type: CERTIFICATE OF ZONING COMPLIANCE - RESIDENTIAL  
Transaction Amount: \$70.00  
Comments:



**RECEIPT TOTALS:**

Cash:	\$0.00	
Check:	\$70.00	
Credit Card:	\$0.00	
Other:		
Tax Amount:	\$0.00	
<b>TOTAL:</b>		<b>\$70.00</b>

**TENDER SUMMARY:** Check # 2594 \$70.00 Metcalf, Ross & Linda

**THANK YOU FOR YOUR PAYMENT**





# Onyx Realty

Property Manager

**Oct. 21, 2020**

Davis & Beryll Hopkins  
9376 Nicholson Way  
Dublin, OH 43017

**SUBJECT: ARCHITECTURAL REVIEW APPROVAL**

Dear Homeowner:

One of the benefits of living in an association is that there are a recorded set of deed restrictions. Deed restrictions are rules for homeowners to live by that help maintain the integrity, pride and desirability of the neighborhood.

The association has architectural standards noted in the deed restrictions that give the association and its board of directors the ability to approve or deny modifications being made to the exterior of the homes.

You recently submitted a Request for Architectural Review for modifications being made to your property. **The board is hereby approving your request as summarized below:**

**Description: Install pergola on existing patio.**

The application was approved based on the details submitted. Please ensure that all modifications are consistent with the application.

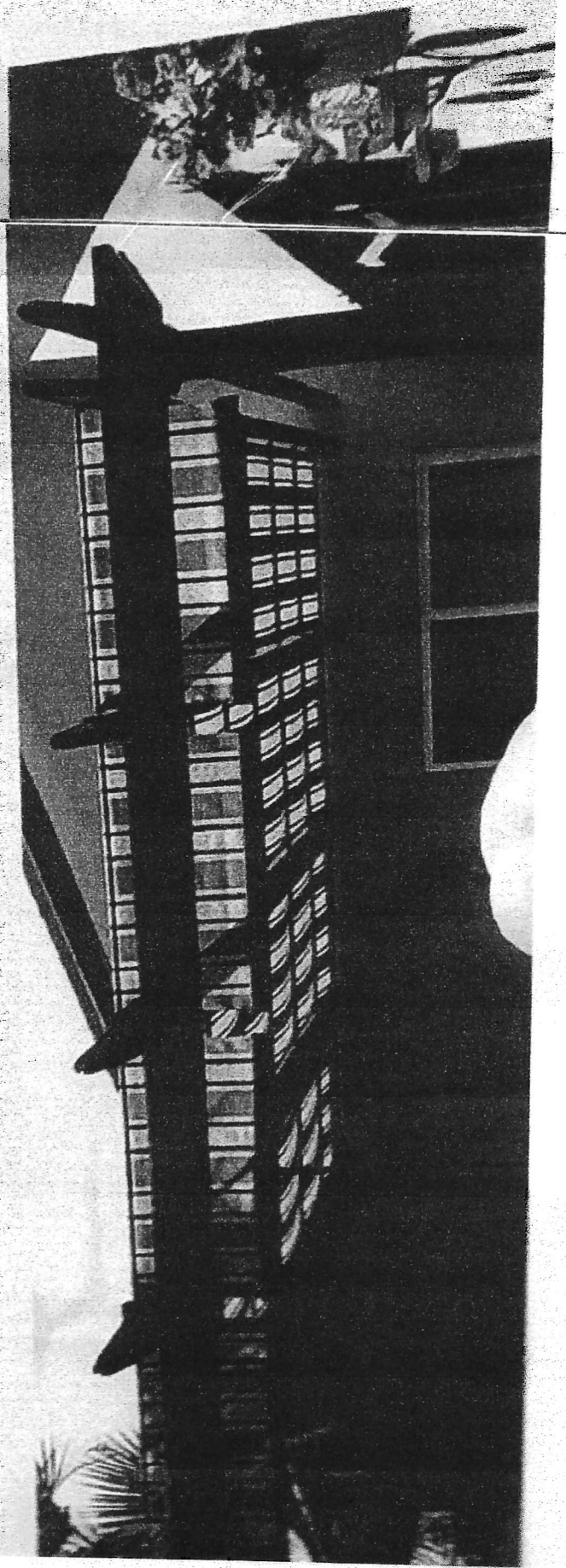
The Association neither assumes responsibility or liability for your compliance, nor waives its rights to hereafter enforce compliance with the Association's governing documents. Please review the entire set of Deed Restrictions and remain in full compliance.

Please make sure to remember that it is the responsibility of each homeowner to call before they dig (811 or 1-800-362-2764) and to check with local zoning to make sure improvements are properly permitted. If you have any questions or concerns about the above matter, please do not hesitate to contact me.

Sincerely,

**AJ Davis**  
**Onyx Realty**  
**614-915-7119**  
**ajdrealestate@gmail.com**

# NEW! The ShadeTree® ALUMINUM PERGOLA



APPROXIMATE LOCATION (FIELD NUMBER)

SCALE: 1" = 20'-0"

The perigale extends ~1st beyond existing patia.

SCALE: 1" = 20'-0"

APPROVED AS NOTED  
020 12/28/14

1

INTERNATIONAL JOURNAL OF LINGUISTICS 30 (1966) 11

100

23

$\frac{d}{dt} \left( \frac{\partial L}{\partial \dot{x}} \right) = \frac{\partial L}{\partial x}$



# ShadeTree® Canopy Systems Assembly Instructions

## ShadeTree® Aluminum Pergola

an aluminum structure **attached to a house.**

## The Aluminum Pergola



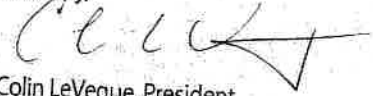
Dear Customer:

Thank you for purchasing our **ShadeTree® Canopy System**. We trust these assembly instructions will be satisfactory for your installation. If you have any questions, please feel free to call 1-800-894-3801.

And here's a special offer we'd like to make to you: Send us a photo of your new ShadeTree® installation and we will send you **\$50** if we use your photo in our advertising materials. Before and after pictures will receive an additional \$50. A deck or patio that is nicely furnished helps us communicate to prospective customers how nice a ShadeTree® patio can be.

We hope you enjoy your new ShadeTree® patio canopies.

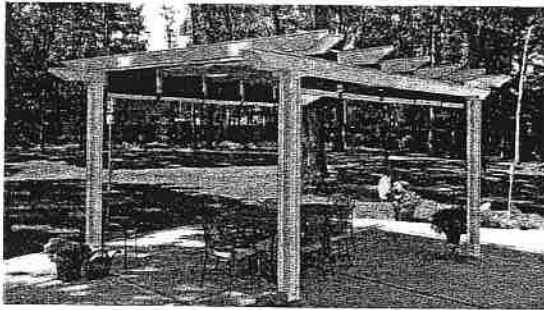
Sincerely,

  
Colin LeVeque, President  
ShadeTree Systems, LLC.

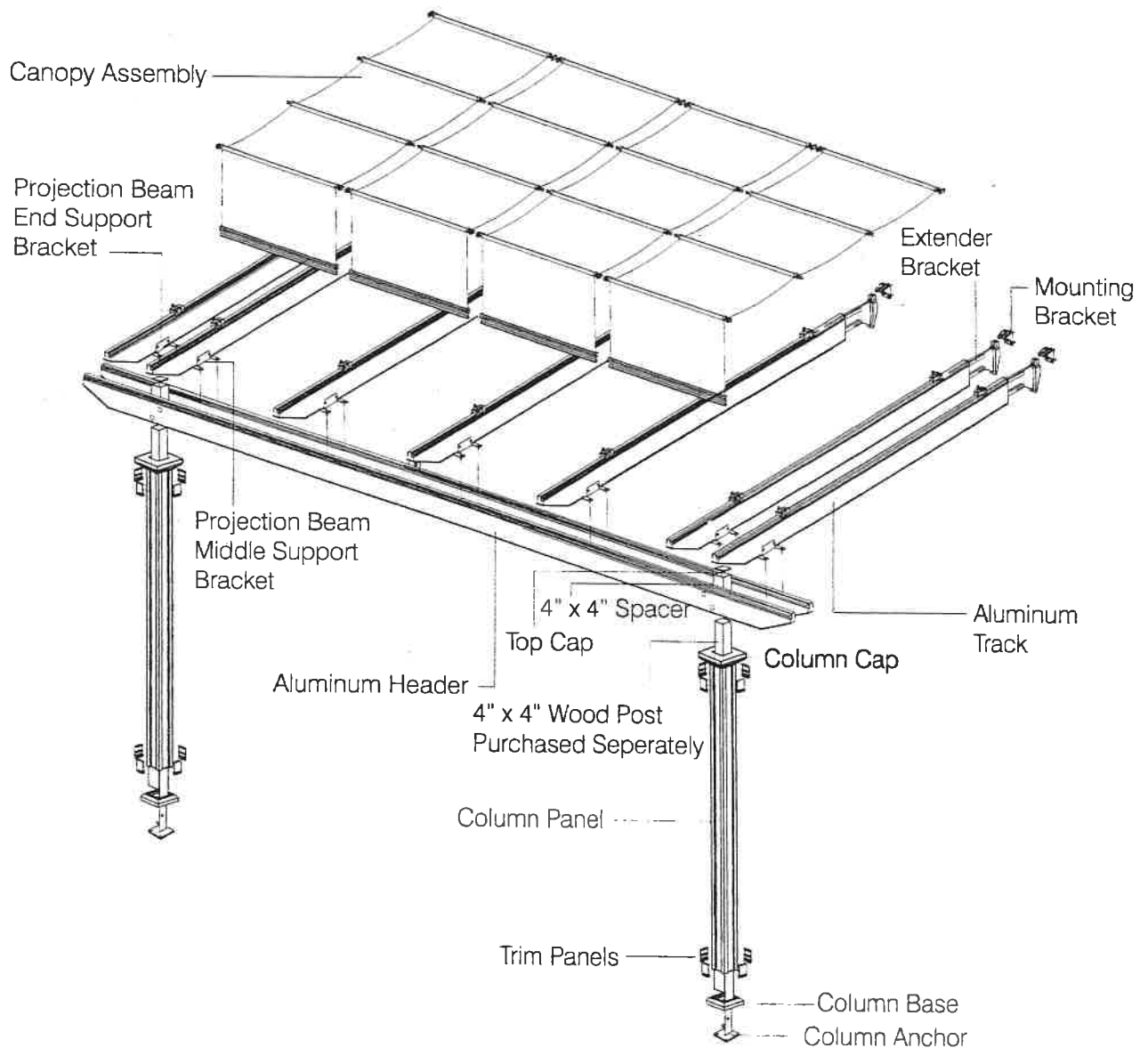
  
**ShadeTree®**  
Retractable Patio & Deck Canopies

## The Aluminum Pergola

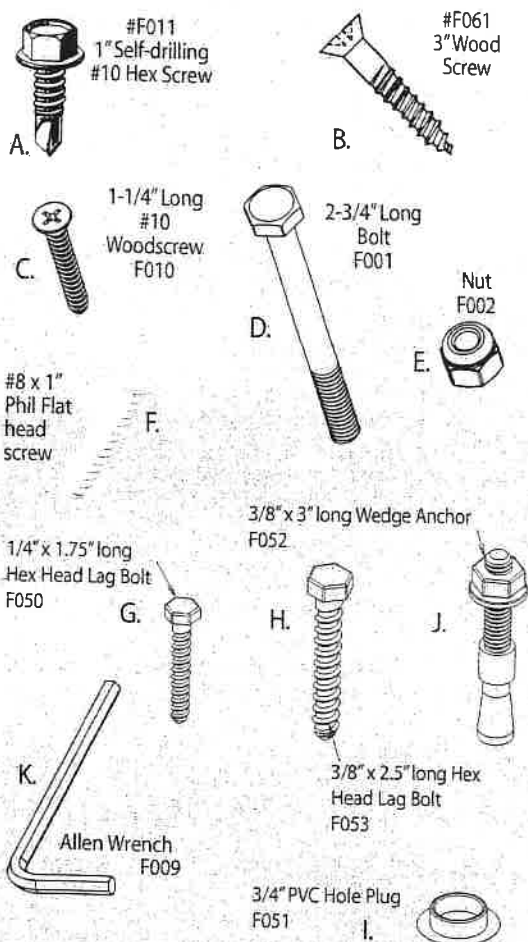
ShadeTree Canopy Systems - 2011



Complete pergola-style shade system with overhead canopies and aluminum beams and vertical support system, to be attached to house.



## Fasteners &amp; Hardware Provided:



*If driving screws with a drill or power screwdriver, set the torque to a low setting to avoid stripping screw heads.*

## Tools required:

1. Phillips screwdriver
2. Hand drill
3. Power Drill
4. Phillips-Head Bit
5. Carpenter's Square
6. Pencil
7. Bubble-Type Level
8. Tape Measure
10. 8' Ladder
11. Circular Saw
12. hand saw
13. Post-Hole Digger (optional)
14. Ratchet
15. Deep Socket - 3 sizes  
- 7/16"  
- 3/8"
16. "Quick Grip" Clamps
17. Drill Bits 9/64" and 7/16"
19. 3/8" masonry bit for concrete mounting
20. Rubber Mallet

Note: If driving screws with a drill or power screwdriver, set the torque to a low setting to avoid stripping screw heads.

## CAD - YOUR PROVIDED CUSTOM BLUEPRINT :

Each ShadeTree Pergola will ship with a custom-designed CAD drawing showing all of the dimensions necessary for installation. Please refer to this CAD for all steps in these instructions. If a CAD did not come with your ShadeTree system, please call customer service before proceeding with installation.

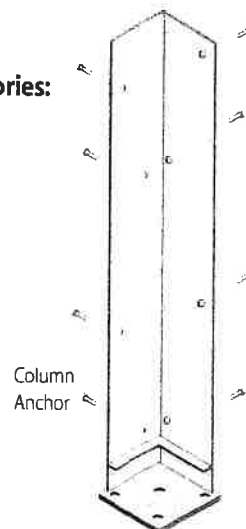
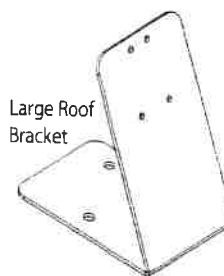
## Other Materials Required:

You will also need 4" x 4" wooden posts for added strength inside aluminum columns. Pre-selection of pressure-treated wood is very important. Any warped or oversized lumber will not fit inside the aluminum columns. If sinking posts into the ground, treated lumber is required.

If mounting on a deck, patio, the surface must be connected to solid anchor points. If not, the posts must be sunk into the ground. If you wish to cement the posts 3' into the ground, 12' posts are needed.

**NOTE:** You'll find a second pair of hands (to hold parts as the unit goes up) to be very helpful in erecting your system.

## Optional installation accessories:





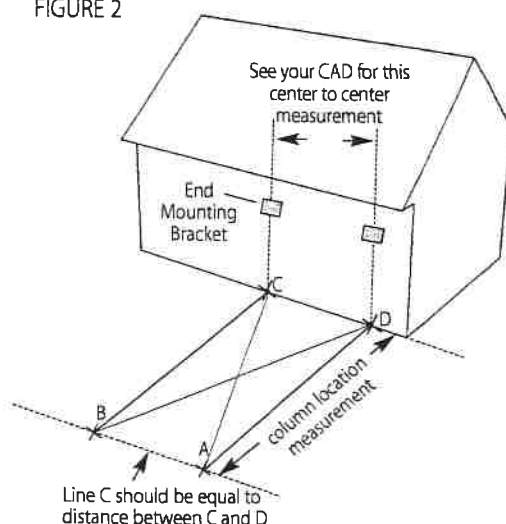
## ShadeTree Canopy Systems: A New Approach to Urban Forestry

### Step 2 Determine location of Columns

Measure out from the house to the desired location of your first *Column* (A). Measure out from the house a second time to the location of your second *Column* (B). Be sure that points A & B are on a line (C) that is parallel with the wall to which the *End Mounting Brackets* are to be attached.

To ensure that your system will be square, measure the distance from point B to point D. Then measure the distance from point A to point C. Move points A and B right or left to get B to D and A to C equal.

FIGURE 2



If there is no "fall" in your deck or patio surface (in most cases, there is some fall so rain will drain away from the house), you can place the *End Mounting Bracket* as high as 11' 1-1/8" from the patio surface at the house (A). However, if there is fall from your house (A) to the place where the columns are to be placed (C), it is necessary to adjust the height of the *End Mounting Brackets* to accommodate for this difference in surface levels.

To determine the “fall” from your house to the surface on which the columns will be anchored (C), extend a string level from base of house (A) to the center line of *Column* (B) and measure the distance (fall) from level line at (B) to mounting surface (C). See the CAD drawing that came with the system to determine distance from house and center of *Column* (B).

Subtract the "fall" dimension from 11' 1-1/8" to determine the maximum height (based on maximum height of the columns) at which the top of the mounting bracket can be installed. Mark this position temporarily on the house.

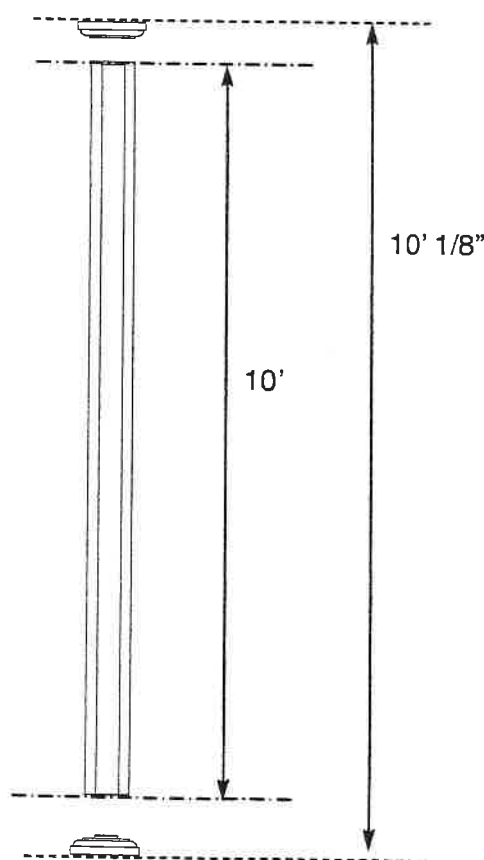
## Step 3 - Preparing the surface

If you do not have a level surface (most patios have a slight slope to shed water), you may need to cut the columns that are to be placed on the high side of the mounting surface. You should first establish the difference in elevation (you can use a level and tape measure if necessary). Next measure up, from the bottom of the column, the difference in elevation, and place a mark on the column. **(You should only cut the column from the bottom).** It is important that your ShadeTree structure be built so the beams and headers are level. A deck or patio is an ideal surface. Another option is to set 4x4s into 3' deep hole and encase in concrete.

## Mounting higher than the maximum mounting point.

If it is desirable to mount higher on the house than the 11' 1-1/8" shown in Fig. 5A, you can do this by building post support "pillars" of brick, stone or other material. This can be an attractive way to achieve a higher positioning of the mounting brackets and thus a higher overall pergola system.

FIGURE 3



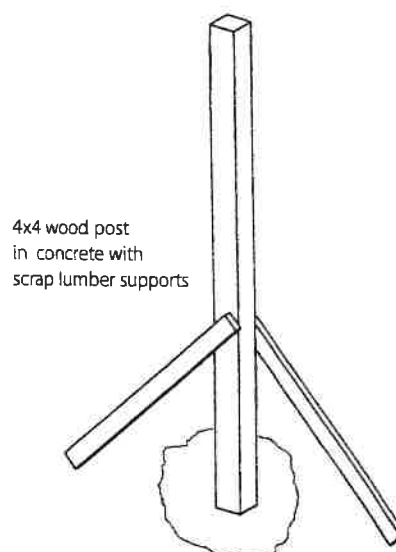
## Step 4 - Internal Post assembly (set or surface-mounting)

## Step 4 - Option A: Wood posts set in concrete:

### Dig holes and secure posts

You will need 12' or longer 4x4 posts when setting posts into concrete. We recommend that you use pressure treated lumber for this application. Once you have determined the post locations, you can begin digging the holes. You should dig the holes to a depth of 3 feet. Mix concrete according to manufacturer's instructions and pour into holes. Check that wood posts are plumb and extend at least 11' 1-1/8" above ground level. Stabilize the posts temporarily by attaching scrap lumber into the posts as illustrated in Figure 4A.

FIGURE 4A



# The Aluminum Pergola

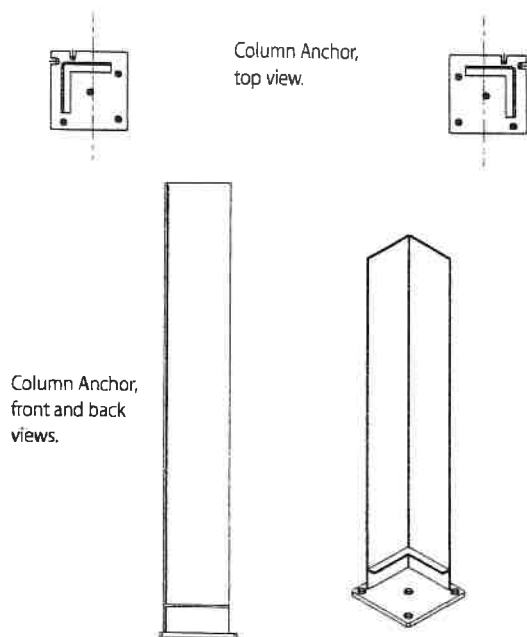
ShadeTree Canopy Systems

## Step 4 Option B – Surface-Mounting using Column Anchors

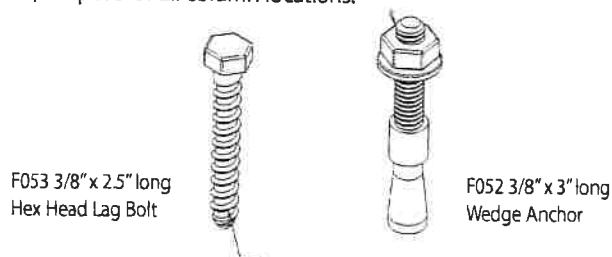
### 4B1 Pre-drill mounting holes

Before drilling holes into the surface, be sure that the *Column Anchor* alignment notches are aligned with the centerlines of the other anchors. Fig.4B1.

FIGURE 4B1



**If attaching to a wood surface** Use the *Column Anchor* as a template and pre-drill for the 3/8" x 2 1/2" lag bolts that will secure the *Column Anchor* to your surface (using a 7/16" drill bit). Repeat for all column locations.



**If attaching the posts to concrete.** Use the *Column Anchor* as a template and pre-drill for the wedge anchors with a 3/8" masonry bit, and use the provided 3/8" x 3" long wedge anchors. After pre-drilling the holes, use a hammer to drive in the wedge anchors. Repeat for all column locations.

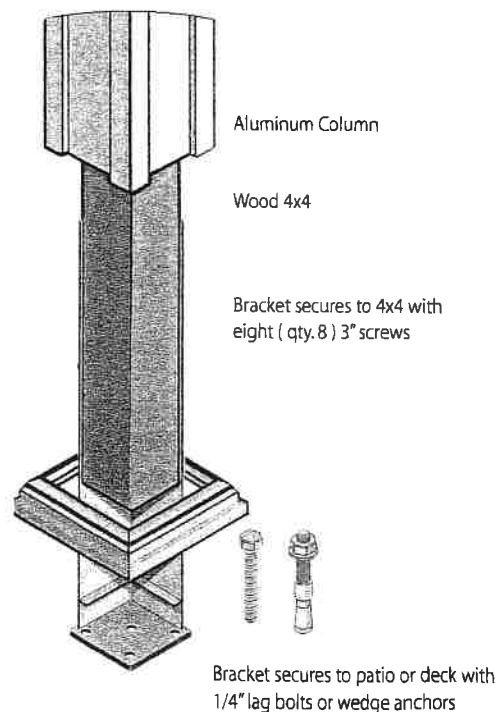
### 4B2 Attach bracket assembly to surface

Attach *Column Anchor* to the mounting surface using center line marks. Make sure *Column Anchors* are level, and then tighten.

### 4B3 Attach wood post to Column Anchor

With Anchor in vertical position on the ground, attach each wood 4x4 post onto the *Column Anchor*. Pre-drill for the (C) F061 3" wood screw using a 9/64" drill bit. Install the 8 screws through the steel support into the 4x4 wood posts.

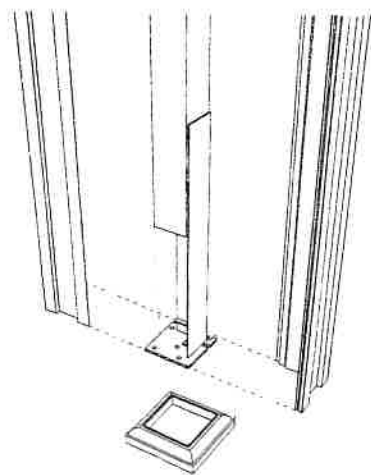
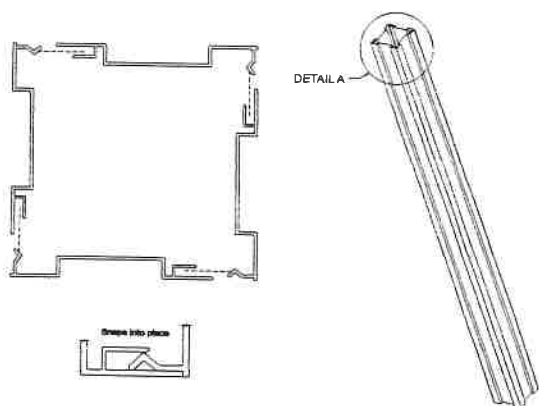
FIGURE 4B3 Base Mounting Detail



**Step 5 Assemble the Columns**

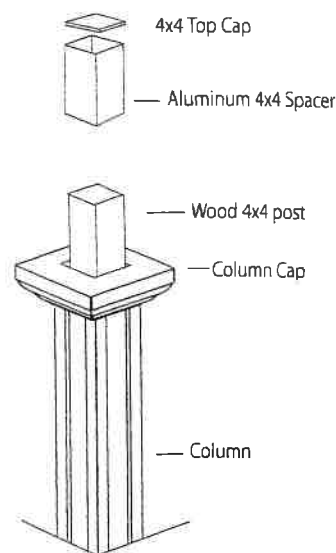
Each Pergola Aluminum Column consists of four panels that simply snap together. Lay down a panel on a clean smooth surface with the channel and ridge side facing up. Position a second panel over the ridge of the first panel. Using a rubber mallet, gently hammer the edge of the second panel so the ridge of the first locks into the channel of the second. Slide the bottom of the two assembled panels into position in the column base.

Repeat the process above with the third and fourth panel. Then stand upright the second set of assembled panels and put around the post but do not insert into base yet. Slide the bottom of the second set of assembled panels into position in the column base. Starting from the bottom of the column, snap together the first and second sets of assembled panels. OR, build the entire column on the ground and then slide over the 4x4.

**Step 6 Assemble Column Cap**

After erecting the posts and Columns, place the Column Cap on top of the Column (Fig.5G).

FIGURE : 5G

**Step 7 Cut excess wood post**

Mark on the wood 4x4 post 5.875" from the top surface of the Column Cap. This is the point at which you need to cut off the excess portion of the wood post. You can use a hand saw or saw zaw to cut the top of the wood post. After the top of the wood post is cut off, slide the 4x4 Spacer over the top of the wood post, and rest it on top of the Column Cap.

**Step 8 Seal the Column Cap**

Once you have fully assembled the Column Cap, put a bead-line of silicon sealant (not provided) around the joint between the 4x4 Spacer and the Column Cap. Repeat steps 4 through 8 for remaining columns.

**Step 9 Attach End Mounting Brackets**

Using the CAD drawing for your project, mark the center location for each End Mounting Bracket on the house, as shown in figure 8A. One End Mounting Bracket is needed for every projection beam.



# The Aluminum Pergola

ShadeTree Canopy Systems

Mount the *End Mounting Brackets* on each center mark, using the center notch as a guide (FIG. 8A). The brackets should be mounted so that the the slanting edge of the bracket is to the top (as in illustration). Be sure to mount the brackets level with each other. Use a 9/64" drill bit to drill pilot holes. The Bracket can be used as its own template for marking pilot holes.

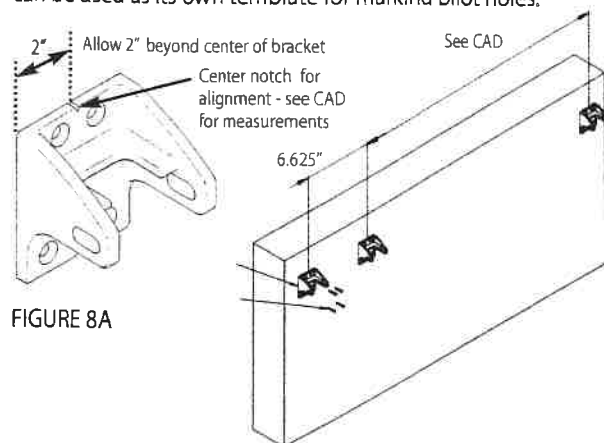


FIGURE 8A

## WHEN MOUNTING TO HOUSE, BRACKETS MUST BE ATTACHED TO WELL-SECURED WOOD, BRICK OR STONE.

- If mounting to a house with wood siding, or to wood trim, use the 1-1/4" #10 wood screws with the painted heads (screw c).
- If mounting to a masonry wall (brick or stone) concrete fastening screws must be used. Consult your hardware store for the best fastener for your situation.
- If attaching to stucco, aluminum, or vinyl siding, the screws must make contact with wood. On two story houses, this can usually be done in the area of the second floor joists. When no wood can be found to carry the canopy load, you must attach a 1" x 4" board to the home (see illustration below) ... horizontally at the height desired for the canopy. The board can then be secured by screws into each stud. On aluminum or vinyl siding, tighten the bottom screws only enough to hold board snugly. Over-tightening can compress the siding. The board can be painted or stained to match the siding.

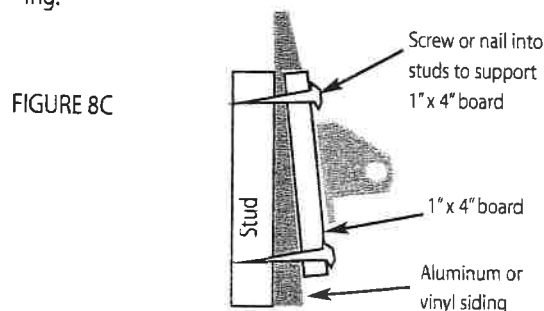
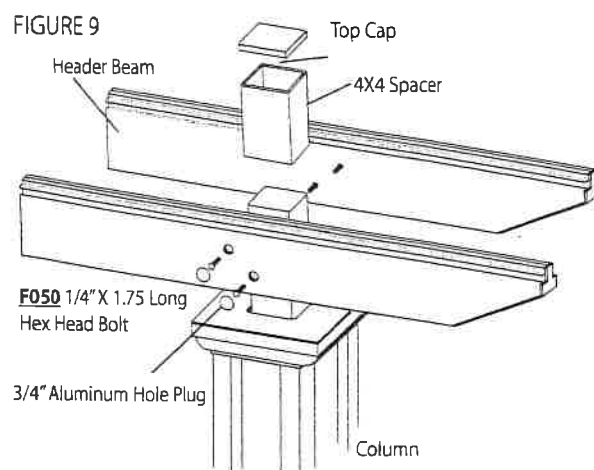


FIGURE 8C

## Step 10 Position Headers

Place the pre-cut *Headers* according to Figure 9. Place the *Headers* on top of the *Column Caps*. Clamp the *Headers* to the wood post.



## Step 11 Assemble Headers

Insert and tighten the *Lag Bolts (F050)* at each end of the *Header* using your ratchet and 7/16 deep socket. Check to make sure the *Lags* are completely tightened, but be careful not to over tighten. Repeat steps 9 and 10 for remaining headers.

## Step 12 Cover Holes

Snap 3/4" *Aluminum Hole Plugs* into *Header Beams* to cover holes.

## Step 13 Assemble Projection Beams

Secure the *Extender* and *End* and *Mid-Brackets* to the *Projection Beams* in the pre-drilled holes. The *Projection Beam End Brackets* (one-sided brackets) are to support the left-most and right-most *Projection Beams (Outside Projection Beams)* and the feet of the *Bracket* should face inward toward the next *Projection Beam*. Secure with screw type *F011*.

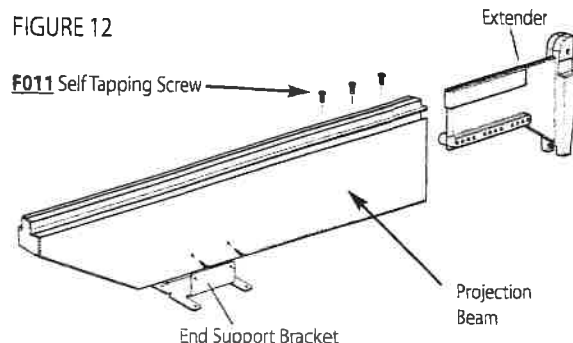
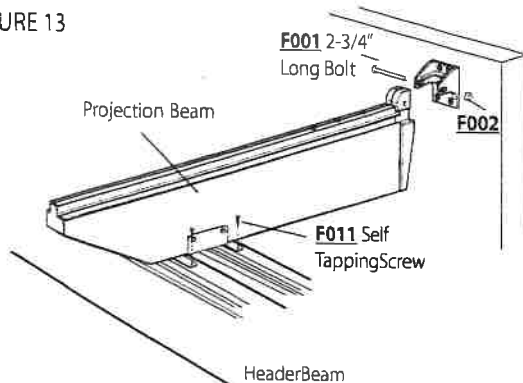


FIGURE 12

## Step 14 Attach Projection Beams

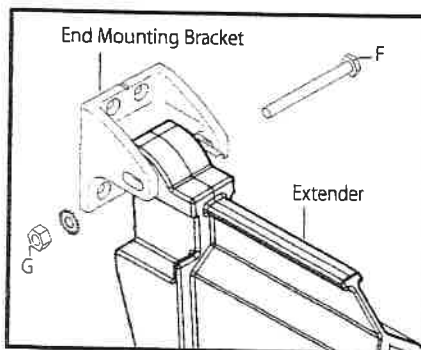
Attach *Projection Beams*, with brackets already assembled, to the *Headers* on the pre-drilled holes. The first *Projection Beam* to attach is either the left or right outermost beam. The provided CAD drawing will give you the center-to-center measurements for positioning the remaining *Projection Beams*.

FIGURE 13



## Step 15 Attach Extenders

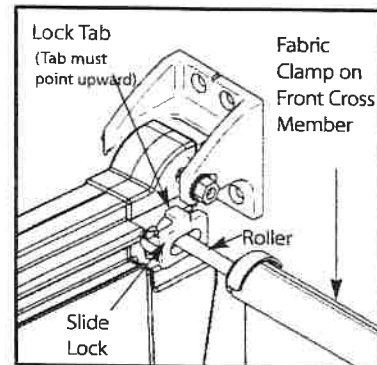
Attach an *Extender* to each of the *End Mounting Brackets* on the house using the 2-3/4" bolts (F), and nuts (G) provided. Be sure the top of the *Extender* is up (as shown.) Loosely hand-tighten the nuts.



## Step 16 Installing the Canopies

You can now insert the *Canopies*, starting at the end of the beams with the extenders. Insert the *Rollers* at the ends of each *Cross Member*; insert all *Cross Members*, ensuring that the back *Cross Member* is inserted last. The front *Cross Member* is the one that has a *Slide Lock* on each end. **When inserting, ensure that the Lock Tab is pointing up as shown here (Fig 9A).** Be sure that the *Canopy* is oriented so that the *Fabric Clamp* (*Top Cross Member*) is facing up as shown, while the aluminum *Cross Member* is oriented down. Continue inserting the remaining *Rollers* until the entire *Canopy* is up. Install remaining *Canopy* using the same procedure.

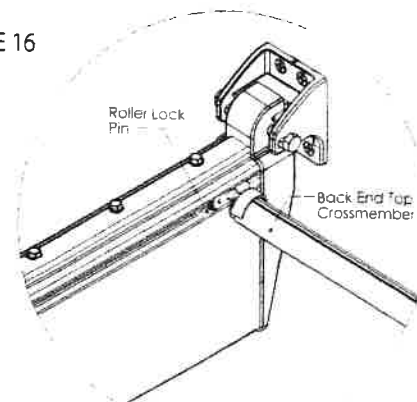
FIGURE 15



## Step 17 Locking the end of the Canopy

A *Roller Lock Pin* is provided to hold the *Cross Member* nearest the house in a fixed position. It will arrive already inserted in the *Canopies* in the last *Cross Member*. Once in place, it can be secured with set screws. The *Locking Pin* will hold the last *Cross Member* firmly in place. Repeat on each track. (On masonry or stucco houses, you must leave a few inches between the *Canopy* and the house to prevent scuffing of the canvas during windy weather).

FIGURE 16



## The Aluminum Pergola

ShadeTree Canopy Systems

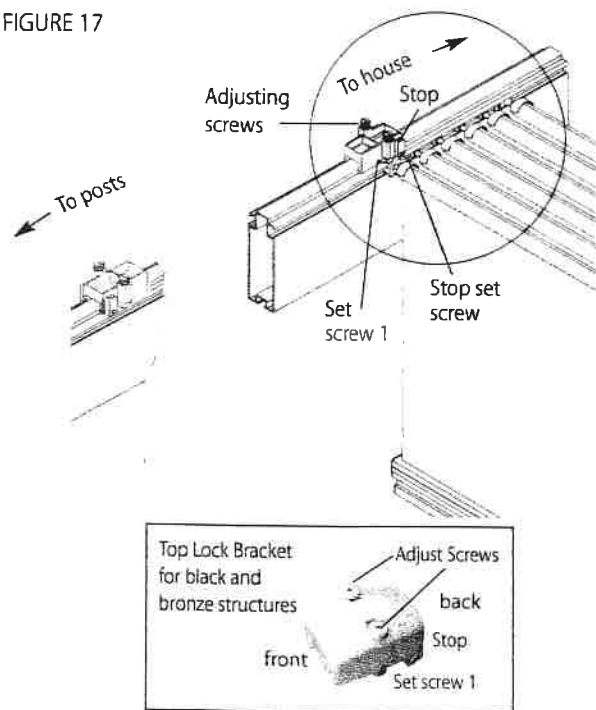
### Step 18 Installing the Top Lock Brackets

Pull each *Canopy* section out to the position where you want it to end. Place a *Top Lock Bracket* on the top of the track in the orientation shown in Fig. 17. Tighten set screw 1 on both sides of the *Top Lock Brackets* with the Allen wrench provided (I) ... making sure that the *Top Lock Brackets* are completely pushed down on the track before tightening.

Test the snap-in *Top Lock Bracket* and tighten or loosen the *Adjusting Screws* as required for the desired tension. The recommended tension setting procedure is to turn the *Adjust Screw* clockwise until it stops, and then back the *Adjust Screw* out six full revolutions. Repeat this step on each *Lock Mechanism*.

Pull each *Canopy* back to the fully retracted position. Place another *Top Lock Bracket* on each track at this point, in the orientation shown in Fig. 10A. Tighten the set screws.

FIGURE 17



**NOTE:** The *Locking System* is designed to release the *Canopies* in high winds to protect the canopies. The adjusting screws can be used to adjust the tension. Do not over-tighten, as this could increase the chance for canopy damage in high winds.

### Step 19 Adjusting the Handle height (optional)

Each *Canopy* has the *Handle* overhang approximately 18" from the tracks. This *Drop Handle* is for opening and closing the *Canopies*. However, if you must have less than an 18" overhang, follow the instructions below for shortening the *Handle* height.

1. Remove all screws in the *Handle* and open the *Handle* the entire width.
2. Cut the fabric to the desired length.
3. Carefully close the *Handle* and re-insert the screws provided - do not overtighten.
4. Reinstall the *Top Caps* in the end of the *Handle*.

## Step 20 Shortening Canopy Length (optional)

Lay the canopy on a flat clean surface. The extra fabric length should be removed from the back end of the canopy. This is the end opposite the handle. Remove the *Roller Sleeve* assemblies at both ends of the back canopy *Cross Member*. To do this, first fully extend the *Roller*, then push down on the locking tab and pull *Roller Sleeve* outward (Fig. 19A).



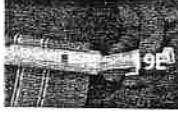
Remove the *Fabric Clamp*. To do this, insert a flat head screw driver between the canopy fabric and the *Fabric Clamp*. Pry upward to release the *Fabric Clamp* (Fig. 19B).



From the back end of the canopy, measure the same distance that was taken off the track length. Make a mark at this distance on both outside edges of the fabric (Fig. 19C).



Place the *Bottom Cross Member* (aluminum) underneath the canopy, centering it on the two marks. Position the *Bottom Cross Member* so the punched square holes at the ends are facing downward. Holding the *Bottom Cross Member* in this position, reassemble the *Fabric Clamp* by snapping the *Fabric Clamp* in place at both ends and pressing down, working toward the center (Fig. 19D).

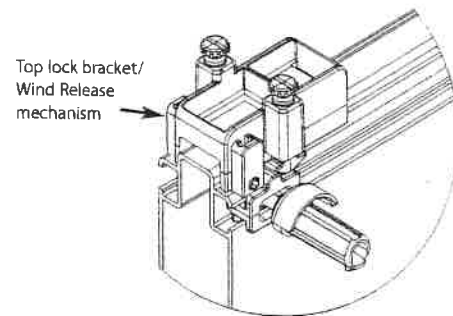


Insert the *Roller Sleeve* assemblies back into the *Bottom Cross Member*, ensuring that the locking tab engages the corresponding punched square hole in the *Bottom Cross Member* (Fig. 19E).

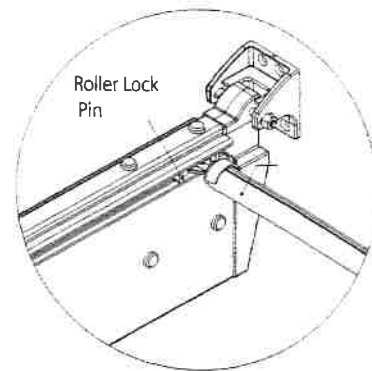
Measure the canopies to ensure the desired length is correct before trimming off excess canopy material. Remove the canopies and place on a flat, clean surface. To remove the excess canopy material, use the edge of the *Fabric Clamp* as a guide when cutting with a sharp utility knife (Fig. 19F).

How to **remove** ShadeTree® Canopies for **end-of season storage**:

1. Remove the **Top Lock Brackets** at the "retracted" end of each track (see step 17.)



2. Remove the **Roller Lock Pin** which holds the last *Cross Member* in a fixed position (see step 18.)



3. Then simply roll the **Cross Members** out of the "retracted" end of the track. The tracks can remain up year-round.
4. If a canopy is dirty and requires washing before storage, simply spread the canopy on a driveway or other flat surface. Use a medium-firm brush or broom to remove dirt particles while the fabric is still dry. If necessary, use a bucket of warm water and a mild soap, such as Ivory Snow to clean the fabric.

Be sure to rinse well by hosing with clear water. Allow to air-dry completely in the sun before rolling canopies up for storage. **(Do not store wet canopies!)**



## The Aluminum Pergola

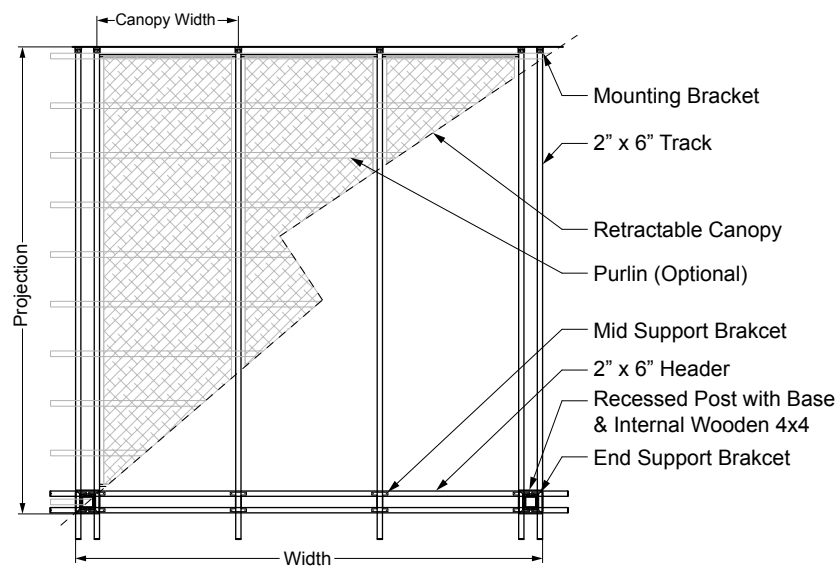
ShadeTree Canopy Systems

### Care and cleaning of your ShadeTree® Canopies

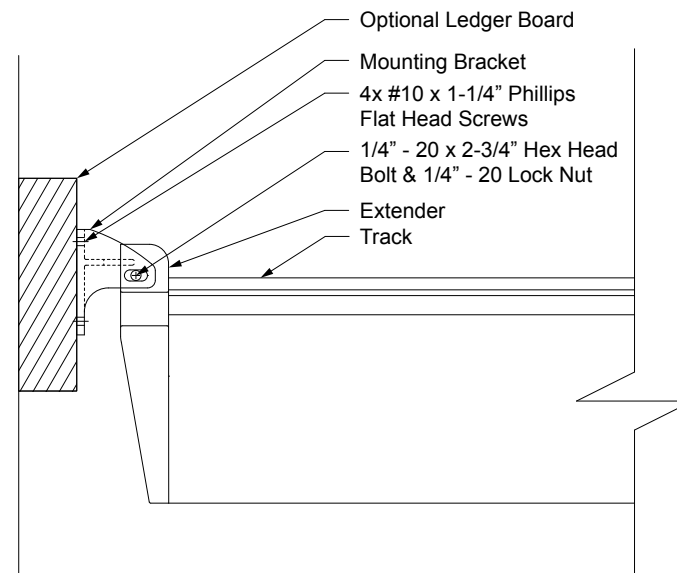
1. **ShadeTree® tracks** should be cleaned regularly to keep debris and dirt from accumulating and interfering with the *Rollers*. Simply use a mild detergent with a small soft brush, such as a toothbrush, and gently wipe or brush along the inside of the tracks. To maintain a smoothly operating system, use the **ShadeTree® EasyRider Track Lubricant** in the *Roller Tracks*. **Note: Do NOT use oil or any wet lubricant, such as WD-40, on the tracks as it would attract more dirt.**
2. **Fabric** should be cleaned regularly before substances such as dirt, roof particles, etc., are allowed to accumulate on and become embedded in the fabric. The fabric can be cleaned without being removed from the *Cross Members*. Simply brush off any loose dirt, roof particles, etc.; hose down and clean with a mild natural soap in lukewarm water (no more than 100° F.) Rinse thoroughly to remove soap. **DO NOT USE DETERGENTS!** For ultimate performance, use **ShadeTree® Canopy Cleaner Mold & Mildew Stain Remover**.
3. For stubborn stains soak the fabric for approximately 20 minutes in a solution of no more than 1/4 cup (2 oz.) natural soap per gallon of water at approximately 100° F. Rinse thoroughly in cold water to remove all of the soap. Note: Excessive soaking in bleach can deteriorate sewing threads. This method of cleaning may remove part of the water repellency and the fabric should receive an application of an air-curing water-repellent treatment, such as **ShadeTree® Canopy Cleaner Mold & Mildew Stain Remover** and **ShadeTree® Water Repellent** or similar products, if water repellency is a factor.
4. When washing or cleaning, **DO NOT SUBJECT TO EXCESSIVE HEAT** as the fabric will shrink. **DO NOT STEAM PRESS OR DRY IN ELECTRIC OR GAS DRYERS**, but allow to air dry.
5. In cases where canopies are taken down & stored, they should be cleaned and allowed to air dry, before being stored in a dry, well ventilated area.

### Here's a chance to earn \$50!

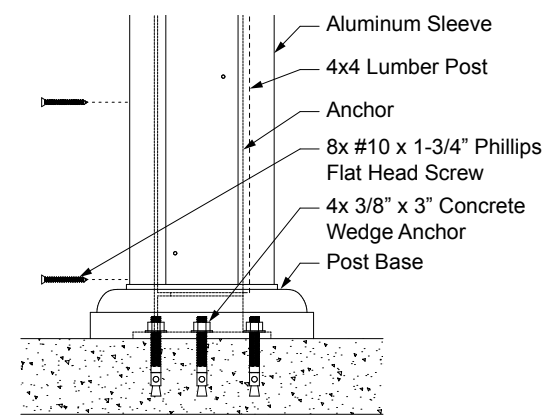
We regularly use pictures in our advertising materials. If you send us reproducible pictures of your new ShadeTree® canopy installation, and we use them in any of our advertising, we will send you \$50. Interesting before-and-after pictures will receive an additional \$50. Of course, attractive landscaping and patio furniture will be a factor in selecting pictures to be used. Architects, builders and installers will receive credit mentions in the advertising.



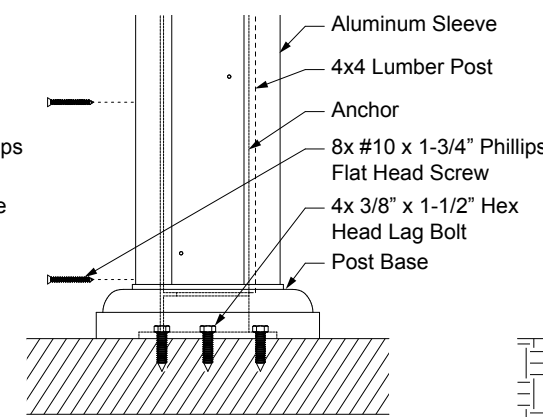
Plan View



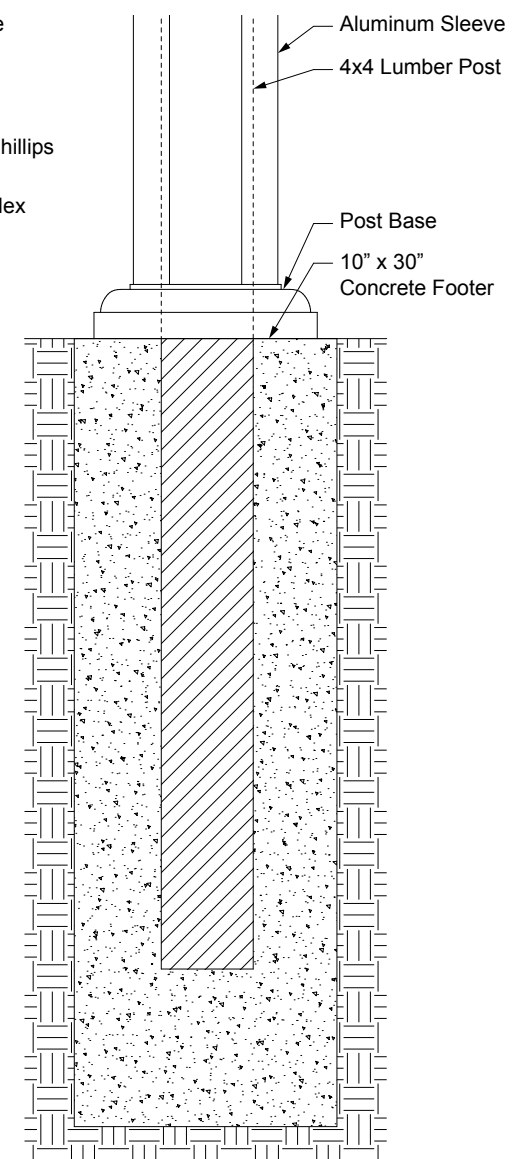
Mounting Bracket Detail



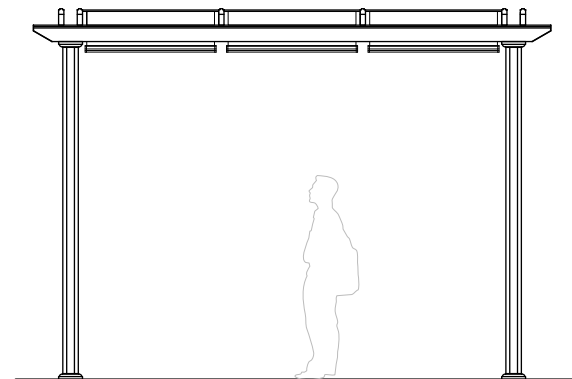
Anchor Attachment Detail - Concrete



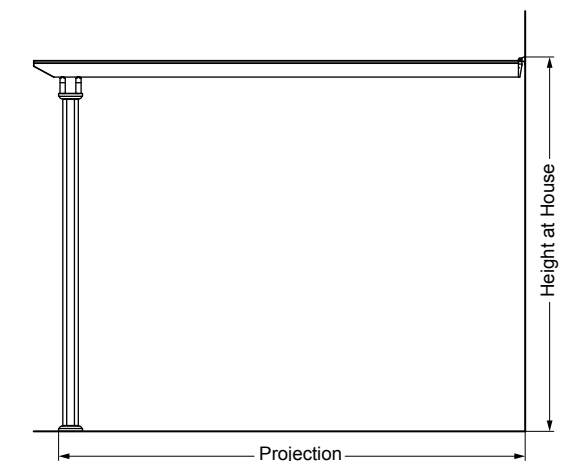
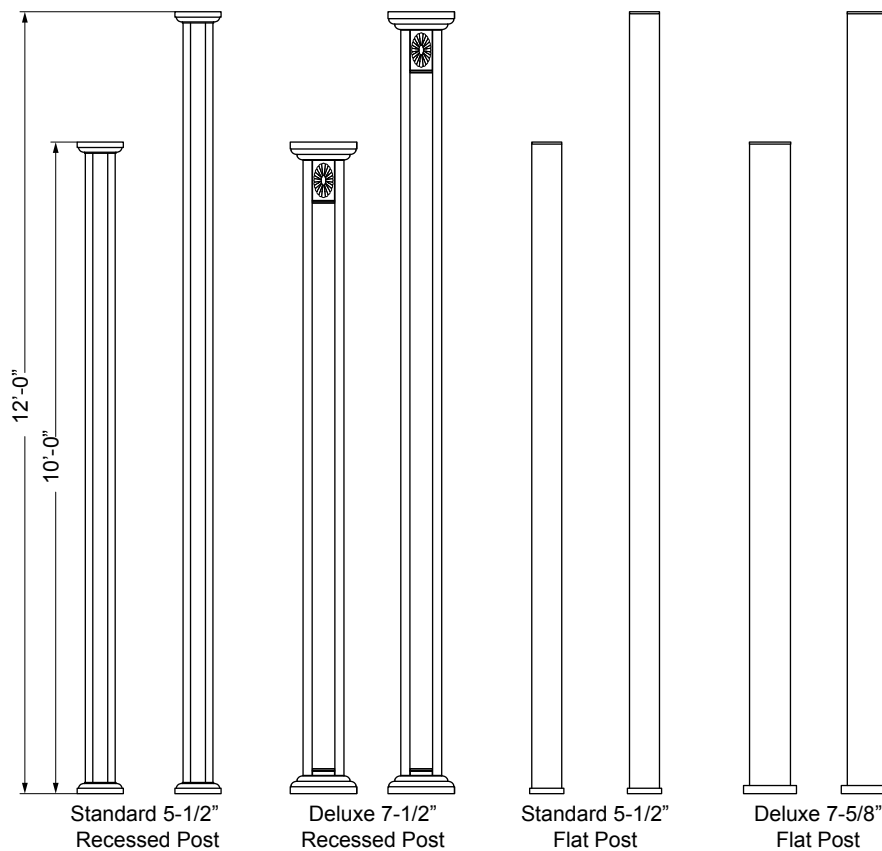
Anchor Attachment Detail - Wood



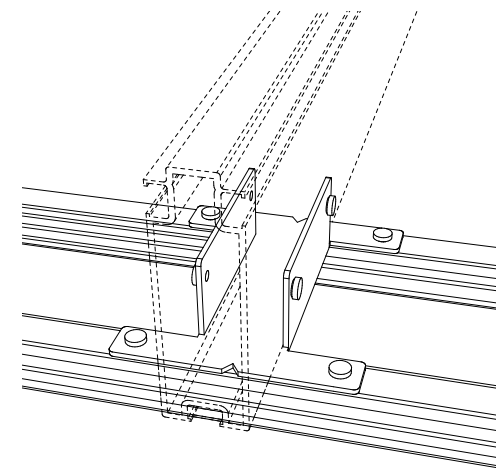
Post Anchoring with Concrete Footer



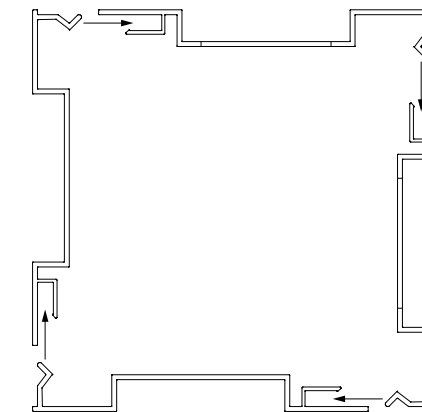
Front Elevation



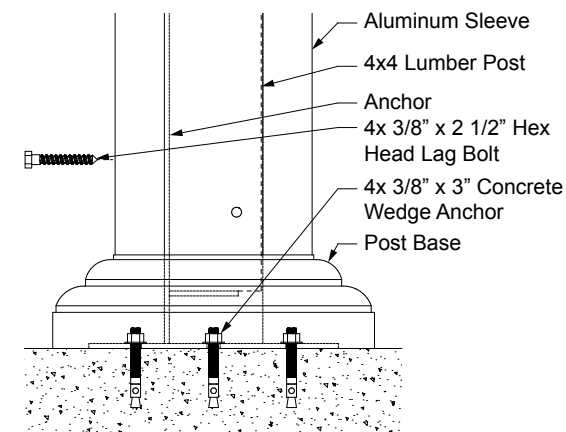
Side Elevation



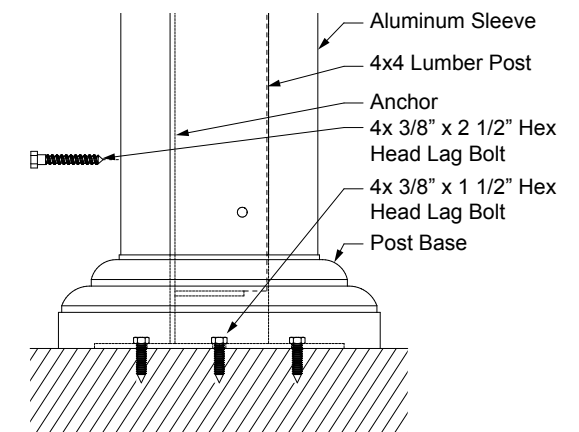
Mid Support Detail



Post Panel Assembly Details



Deluxe Anchor Attachment Detail - Concrete



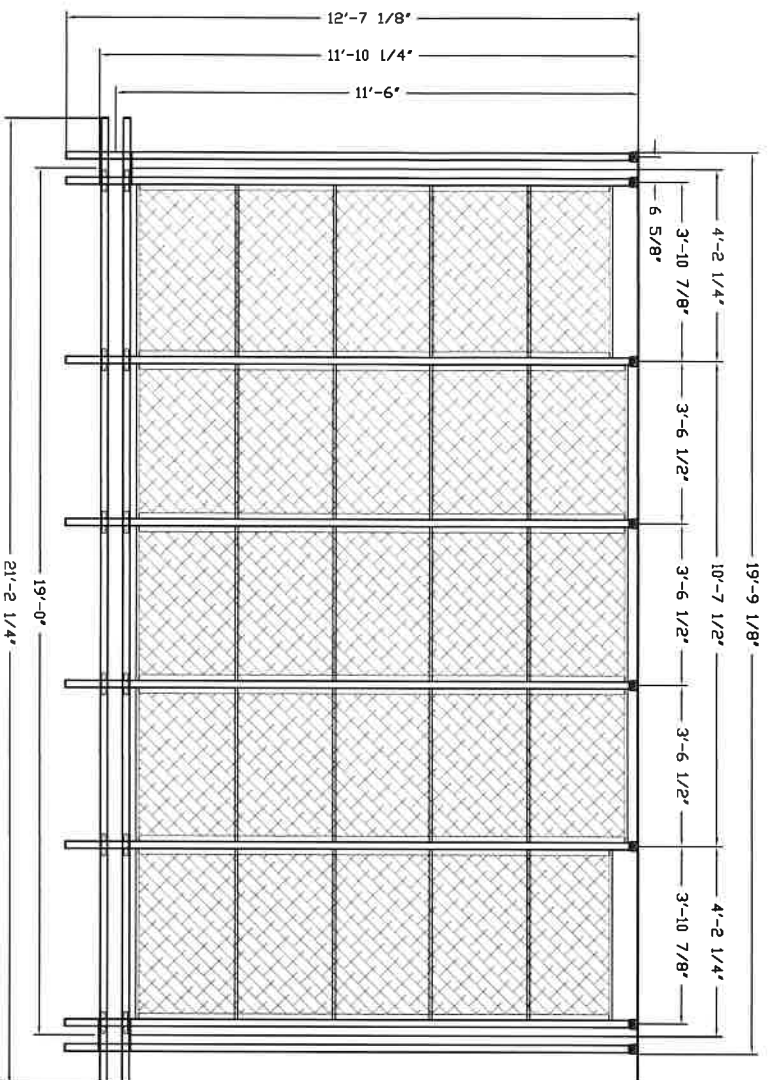
Deluxe Anchor Attachment Detail - Wood



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File:	
Date:	
Record #:	
Drawn by:	

# CAD Details - Aluminum Pergola System (Attached)



### Bill of Materials

Extrusions	Qty	Cut Ln.
Column Kits (12)	2	144
Track A	8	148.875
Header A	2	254.375

Parts		
Mid Support Brackets	6	
End Support Brackets	2	
Mounting Assembly	8	
End Beam Caps	12	
HD Aluminum Top Locks	14	

Canopy	Width		
A	46 7/8	2	127.625
Crossmember Spacing @		6	26.875
B	42 1/2	3	131.375
Crossmember Spacing @		6	27.625
SEE PRODUCTION ORDER FOR SPACING			

Aluminum Pergola (Attached)

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File: Hopkins, Beryl A Pergola 1

Date: 09/11/20

Record #: 371485

Drawn by: GF

## Hopkins Project















