

ShadeTree® Vinyl Basic Pergola supported by a freestanding support structure.

The Basic Pergola



Dear Customer:

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

Here is 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.

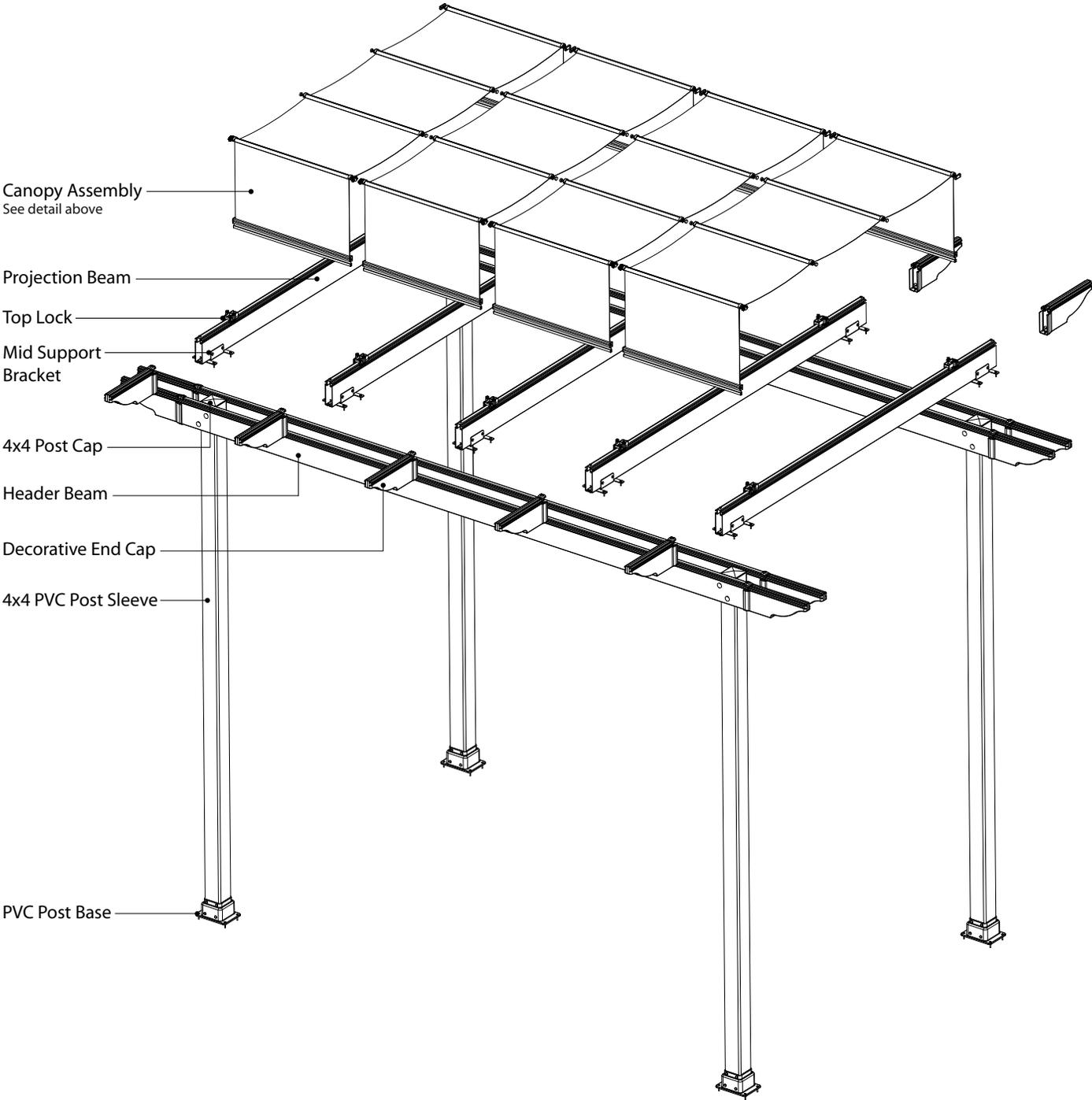
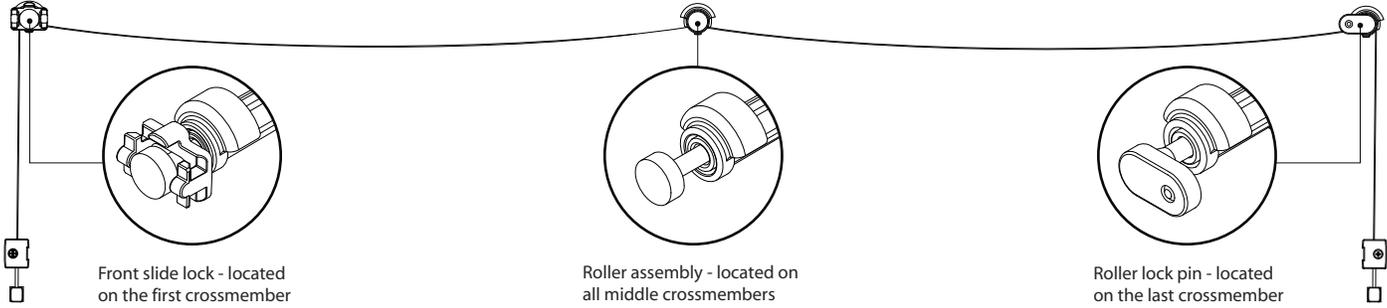
Sincerely,

Colin LeVeque, President
ShadeTree® Cool Living, LLC

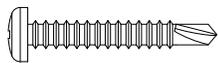
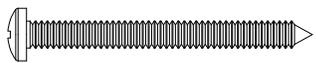
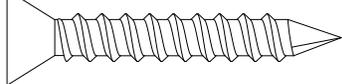
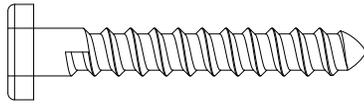
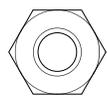
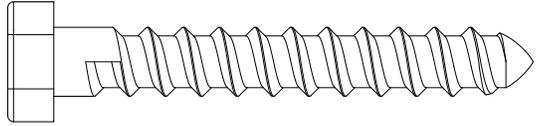
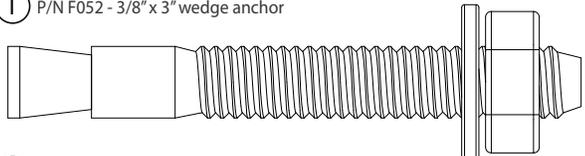


ShadeTree®

Retractable Patio & Deck Canopies



Fasteners & Hardware *pictures below to scale*

- A** P/N F025 - 1" tapping screw 
- B** P/N F022 - 1-1/2" aluminum screw 
- C** P/N F010 - 1-1/4" wood screw 
- D** P/N F044 - 1-3/4" concrete screw 
- E** P/N F001 - 2-3/4" bolt 
- F** P/N F050 - 1/4" x 1-3/4" hex head lag bolt 
- G** P/N F002 - nut 
- H** P/N F053 - 3/8" x 2-1/2" hex head lag bolt 
- I** P/N F052 - 3/8" x 3" wedge anchor 
- J** P/N F009 - 1/8" allen wrench 
- K** P/N F051 - 3/4" PVC hole plug 
- L** P/N C021 - screw cap 
- M** P/N C022 - screw cap washer 

Note: All A & B screws should be assembled with a screw cap (L) and washer (M) as shown on right.



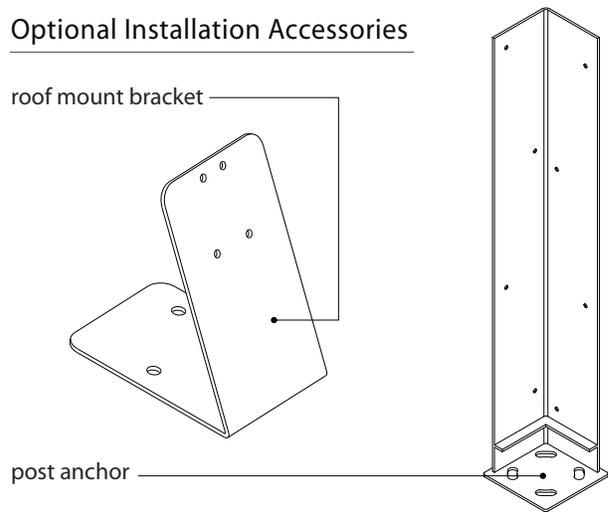
Tools Required

- phillips screwdriver
- hand drill
- power drill
- phillips head bit
- carpenter's square
- pencil
- bubble-type level
- tape measure
- tape
- 8' ladder
- circular saw
- hand saw
- post-hole digger (optional)
- ratchet
- deep socket (3 sizes)
 - 1/4"
 - 3/16"
 - 3/8"
- quick grip clamps
- drill bits (5 sizes)
 - 9/64"
 - 1/4"
 - 3/16"
 - 3/4"
 - 3/8" masonry bit *for concrete mounting only*

CAD - YOUR CUSTOM PROVIDED BLUEPRINT

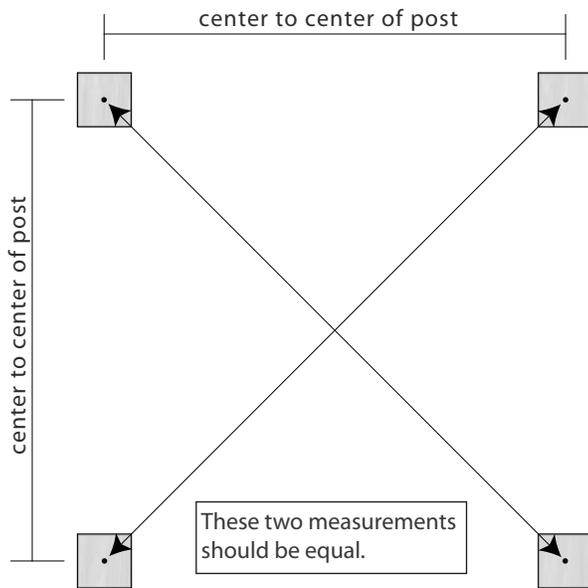
Each ShadeTree Pergola will ship with a custom designed CAD drawing showing all dimensions necessary for installation. Please refer to this CAD drawing for all steps in these instructions. If a CAD did not come with your ShadeTree system, please call customer service before proceeding with installation.

Optional Installation Accessories



Step 1 - Determine post locations

- (A) Use custom designed CAD drawing to determine center to center post dimensions. Use these dimensions to mark where posts will be positioned.
- (B) Be sure to measure diagonally from center mark to center mark as shown in figure below to assure that the structure will be square.

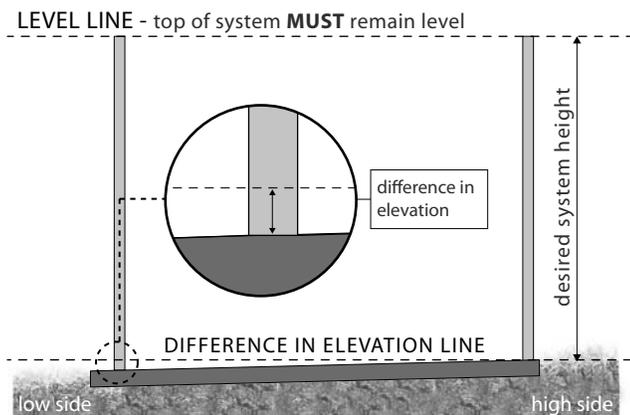


Step 2 - Preparing the surface

* Skip to step 5 if you are setting wood posts in concrete. *

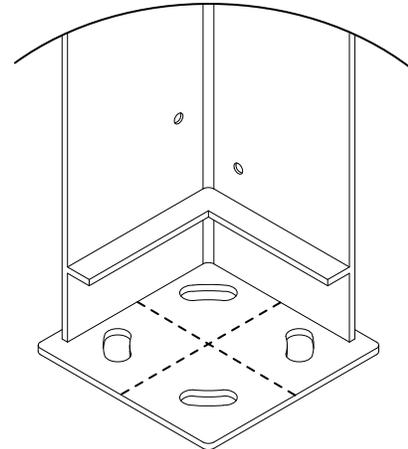
- (A) Determine the difference in elevation as shown in the figure below.
- (B) At this point you can determine a high and low side to the system as well as a desired system height. This information will be useful later in the installation process.

NOTE - Most patios have a slight slope to shed water.



Step 3 - Pre-drill mounting holes

- (A) Before drilling into the surface, be sure that the post anchor is aligned properly with the center lines of the posts as shown in the figure below.

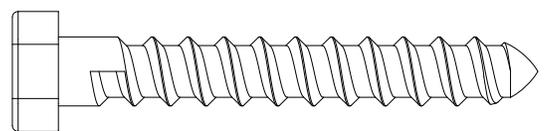


- (B) **If attaching to a wood surface**, use the post anchor as a template and pre-drill holes using a 1/4" drill bit.

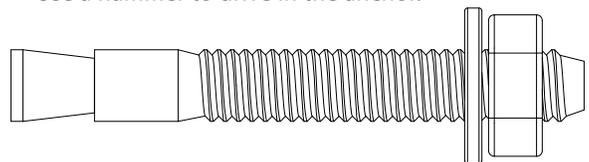
If attaching to a concrete surface, use the post anchor as a template and pre-drill holes using the supplied 3/8" masonry bit.

Step 4 - Mount post anchors

- (A) Before mounting post anchors to surface, shim each anchor accordingly using washers (not included) to ensure each anchor is running vertically straight. Check plumb using a bubble type level. (Washers must be exterior grade)
- (B) **If attaching to a wood surface**, use fastener (H) to secure the surface mounting bracket to the surface.



If attaching to a concrete surface, use fastener (I) to secure the surface mounting bracket to the surface. Use a hammer to drive in the anchor.



NOTE - Instructions from this point on refer to page 3 for all fastener types and details.

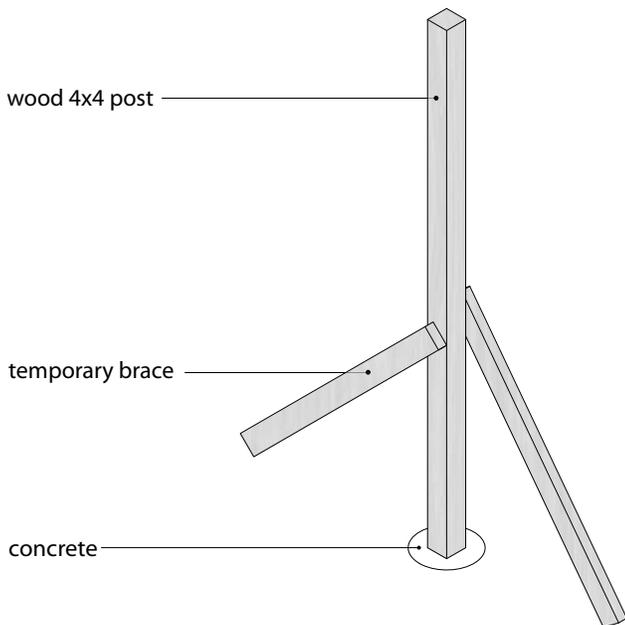
Step 5 - Preparing 4x4 wood posts

- (A) Use the desired height from step 2 to determine how tall your posts need to be. If you are setting posts into concrete, make sure your posts are 3' taller than your desired height.
- (B) Make sure your posts are not over 3-1/2" thick as this will make it very difficult to slide the PVC post sleeve over the wood 4x4 post. - **If your lumber is over 3-1/2" thick, we recommend that you shave 1/8" off of the width with a circular saw. Repeat this, if necessary, to all posts over 3-1/2" thick.**

Step 6 - Setting 4x4 wood posts in concrete

* Skip to step 7 if you are using post anchors. *

- (A) Dig holes, based on center marks determined in step 1, to a depth of 3'.
- (B) Insert posts into holes, and fill with concrete. (Mix concrete according to manufacturer specifications)
- (C) Check that posts are plumb and stabilize with temporary bracing as shown below.



- (D) Let concrete set and cut posts down to desired height. **Make sure that the posts are level across the top before cutting.** Refer to the diagram on page 4, step 2 for more information.



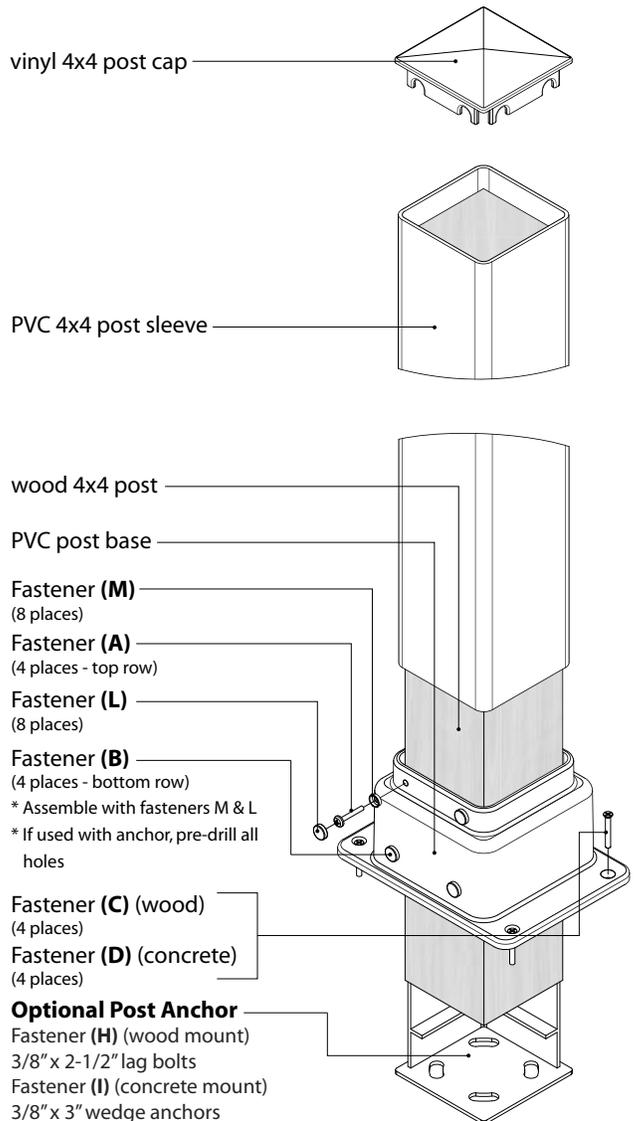
Step 7 - Attaching 4x4 posts to anchors

* Skip to step 8 if your posts are set in concrete*

- (A) Place 4x4 post onto anchor and pre-drill for fastener (F) using a 3/16" drill bit.
- (B) Install fastener (F) in all 4 holes through the post anchor into the 4x4 wood posts.

Step 8 - Prepare and assemble vinyl posts

- (A) Cut PVC post sleeve down to fit 4x4 wood posts. The PVC post sleeve **MUST** be cut 1" longer than the wood posts in order to allow clearance for the vinyl 4x4 post cap to snap on as shown in the figure below.
- (B) Slide PVC post base and sleeve over the wood 4x4 post and post anchor if applicable then assemble as shown in the figure below.



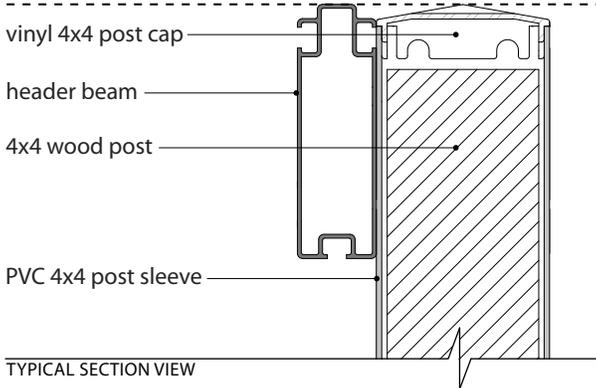
Step 9 - Seal posts

- (A) After vinyl post assemblies are complete, put a bead of silicone sealant (not supplied) around the joint between the vinyl 4x4 post cap and vinyl post sleeve.

Step 10 - Position first header beam

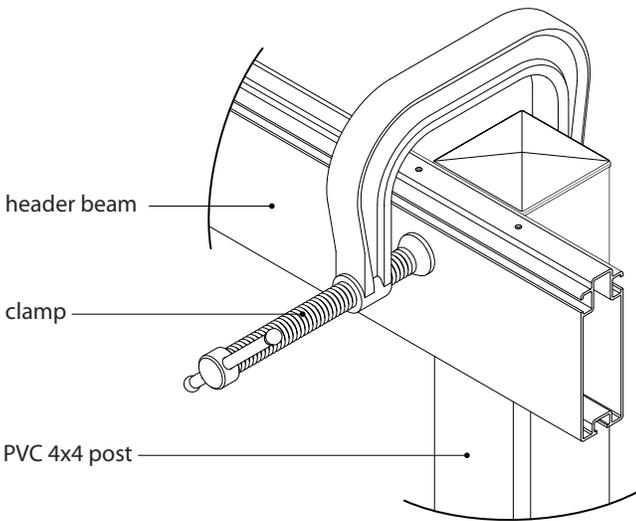
- (A) Place first pre-cut header beam into position according to the figure below.

LEVEL LINE - top of header beam must be flush with vinyl 4x4 post cap.



- (B) Once the header is positioned clamp into place as shown below.

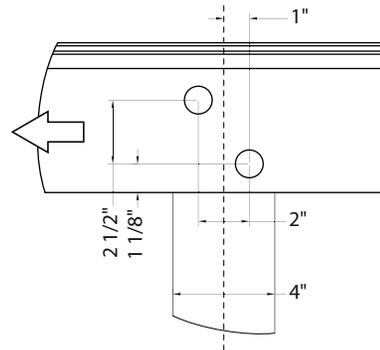
NOTE: If using a metal C clamp, make sure you use a wood block as a shim between the clamp and header beam to prevent damage.



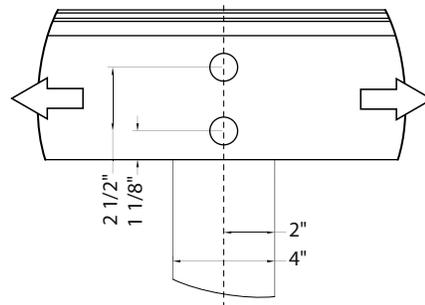
NOTE: Horizontal (left / right) position of the header depends on the system and must be determined on site.

Step 11 - Pre-drill header

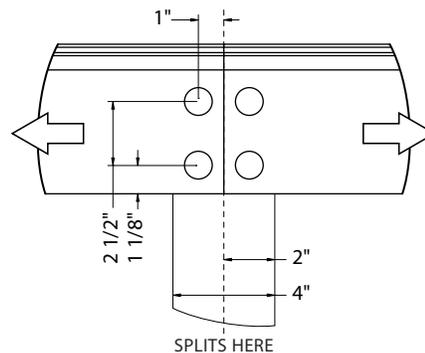
- (A) Once clamped into place, use the figures below to mark hole locations. Center post templates may not apply if your system only calls for 4 corner posts.
- (B) After holes are marked, use a 1/4" drill bit to start a pilot hole. This hole must go through both sides of the header and through the 4x4 post.
- (C) Use a 3/4" bit to drill to pre-drill for lag bolts. **Do not drill all the way through the header - only drill the outer layer of vinyl and aluminum.**



Corner post - header only continues in one direction.



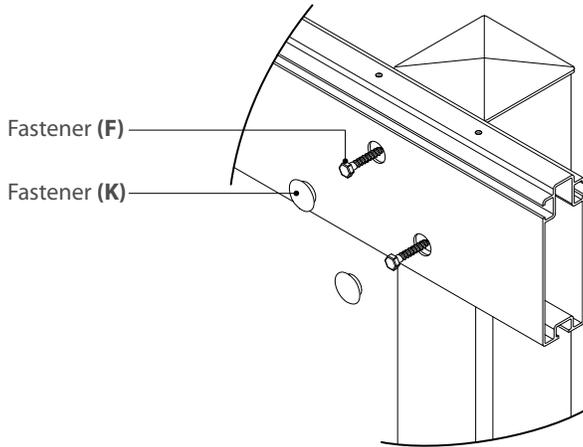
Center Post - header continues in both directions and is not split at the center post.



Center Post (split) - header continues in both directions and is split at the center post.

Step 12 - Secure header

- Ⓐ Use Fastener (F) to secure the header to the 4x4 wood post and snap fastener (K) into header beam to cover lag bolt holes as shown in figure below.

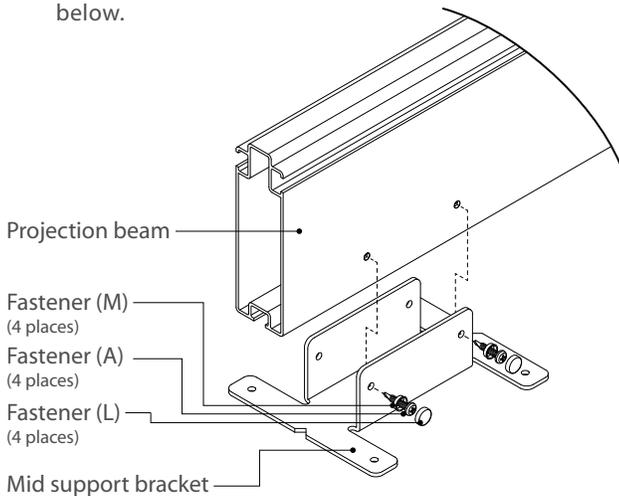


Step 13 - Assemble all headers

- Ⓐ Repeat steps 10 - 12 for all remaining headers.

Step 14 - Prepare projection beams

- Ⓐ Secure the mid support brackets to the projection beams in the pre-drilled holes as shown in the figure below.

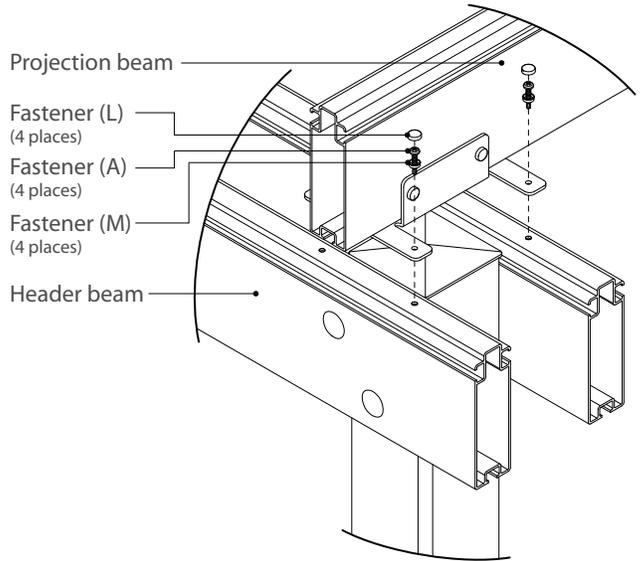


NOTE: If your system calls for **end support brackets** as shown on the right, make sure you note that these are meant for the left and right most projection beams and the feet of the bracket should face inward towards the next projection beam

Step 15 - Attach projection beams

- Ⓐ Attach projection beams, with brackets already attached, to the headers on the pre-drilled holes as shown in the figure below.

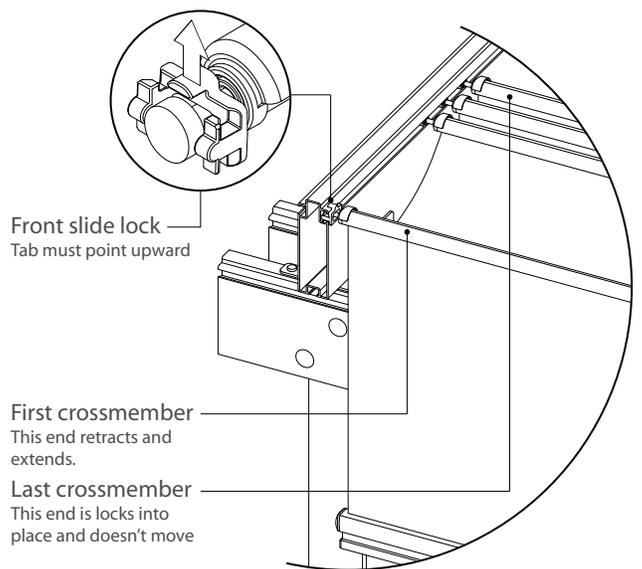
NOTE: The provided CAD drawing will give you the center to center measurements for positioning the remaining projection beams.



Step 16 - Inserting canopies

- Ⓐ Insert the canopies into the end of the projection beams and orient the front slide lock as shown in the figure below.

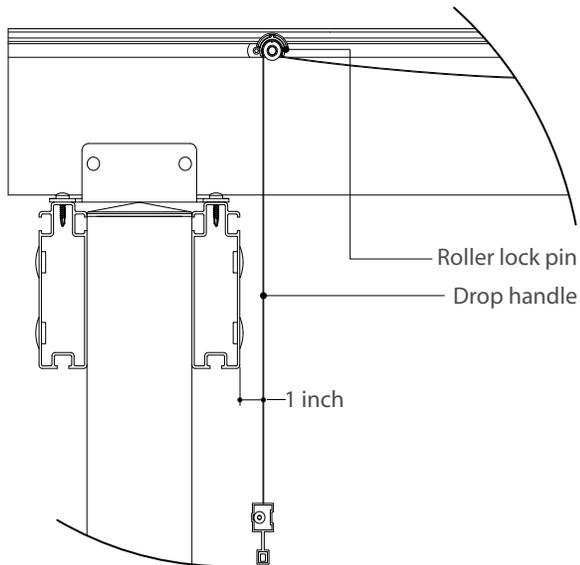
NOTE: Ensure that the vinyl top crossmember is facing up and the aluminum crossmember is facing down.



Note these crossmember types and their functions before installation to ensure your canopy retracts and extends in the correct direction.

Step 17 - Locking canopies into position

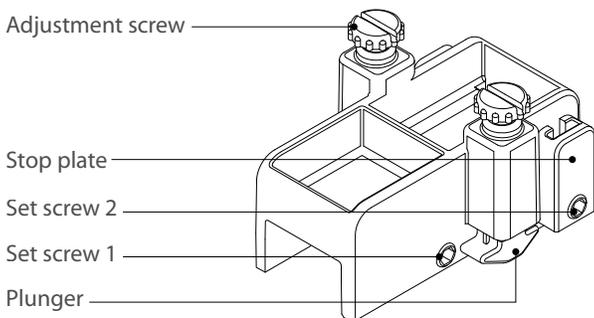
- (A) Once the canopies are inserted, position the last cross-member about 1" away from the inside of the header beam as shown below.
- (B) Once positioned, tighten the set screw on the roller lock pin using the supplied allen wrench (J)



Step 18 - Preparing the top lock brackets

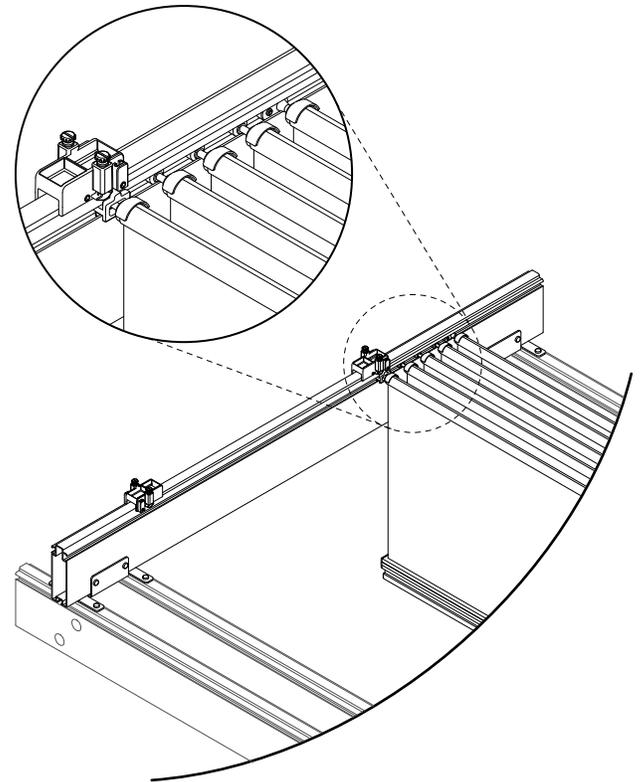
- (A) Before installing the top lock brackets, use the adjusting screw to adjust the tension. The recommended tension setting procedure is to turn the adjustment screw clockwise until it stops, and then back the adjustment screw out six full revolutions. Use the notch in the screw to count each revolution. Repeat this procedure for each top lock bracket.

WARNING: 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 overtighten, as this could increase the chance for canopy damage in high winds.



Step 19 - Installing top lock brackets

- (A) Retract the canopies and position the top lock bracket on top of the track and orient as shown in the figure below



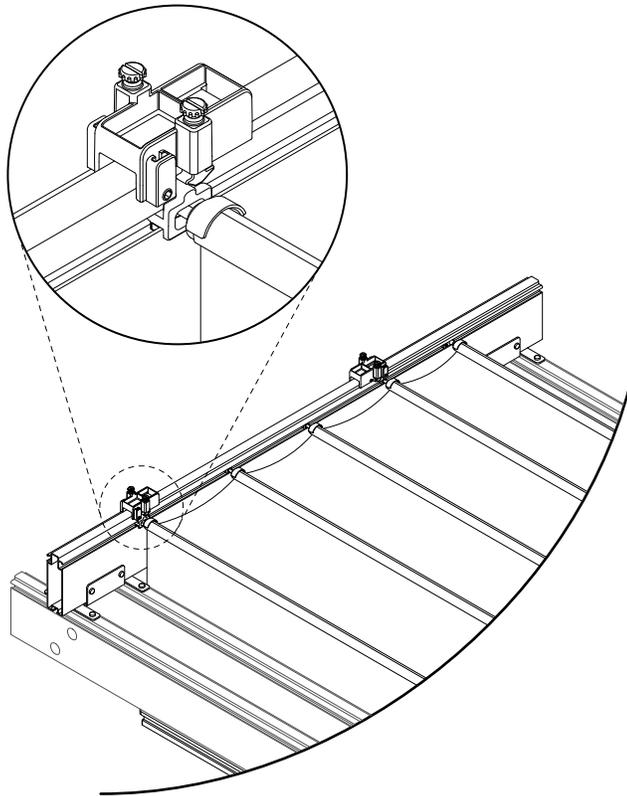
- (B) Once positioned, tighten set screw 1 on both sides of the top lock bracket using the supplied allen wrench (J). Make sure that the top lock brackets are completely pushed down on the track before tightening.
- (C) Tighten set screw 2 on both sides once again making sure that the back end of the top lock is pushed down onto the track before tightening.

STEP 19 CONTINUED ON NEXT PAGE



Step 19 - Installing top lock brackets

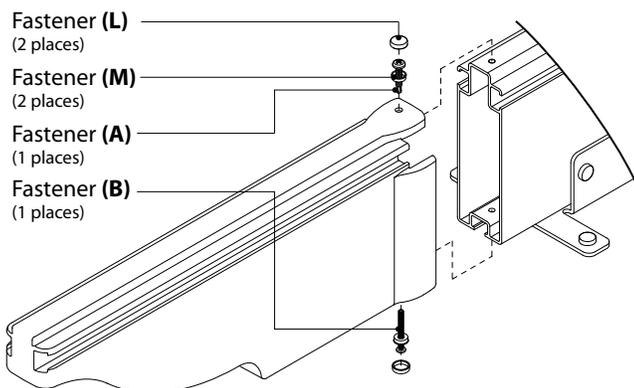
- (D) Extend the canopies and position the top lock bracket on top of the track and orient as shown in the figure below



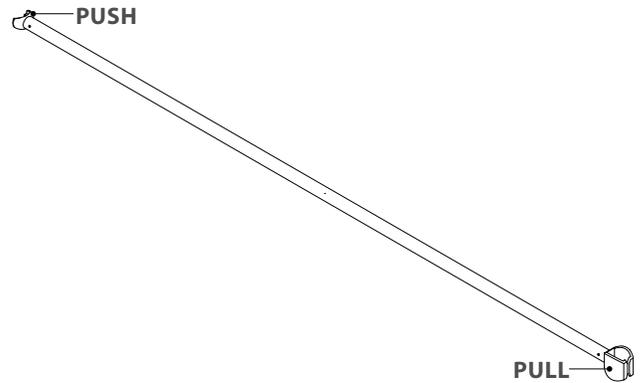
- (E) Repeat stages B and C from Step 19 on page 8 of these instructions.

Step 20 - Installing decorative end caps

- (D) Place decorative ends onto all projection tracks and header beams and secure as shown in the fi



Congratulations on completing installation of your new ShadeTree system. It is now time to get familiar with your skyhook and the push / pull method .



PUSH - This end is used to **push** the crossmember into the top lock bracket locking the canopy into its retracted or extended position as shown below.



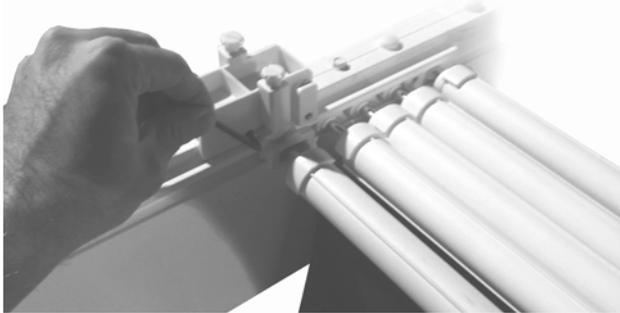
PULL - This end is used to **pull** the canopies back and forth through the projection tracks by grabbing the aluminum handle at the bottom of the drop down handle as shown below.



NOTE: If you are having trouble pushing or pulling your canopies in and out of the top lock brackets, they may be set too tight. Please refer to Step 18 and adjust as necessary.

How to remove ShadeTree canopies for end of season storage.

- (A) Use supplied allen wrench (J) to remove the top locks at the retracted **position** as shown in the picture below.



- (B) Use supplied allen wrench (J) to loosen the roller lock pin as shown in the picture below.



- (C) Roll the crossmembers out of the track, over the header beams, and carefully through the decorative end caps. The tracks can remain up year-round.
- (D) If a canopy is dirty and requires washing before storage, simply spread the canopy on any flat surface. Use a medium to firm brush or broom to remove dirt particles while the fabric is still dry. If this does not fully clean the canopy, use a bucket of warm water and a mild soap, such as Ivory Snow to clean the fabric.
- (E) Be sure to rinse well by hosing with a clear water. Allow to air-dry completely in the sun before rolling canopies up for storage. **Do not store wet canopies!**

NOTE: It's best to store the canopies in a dry, well ventilated area.

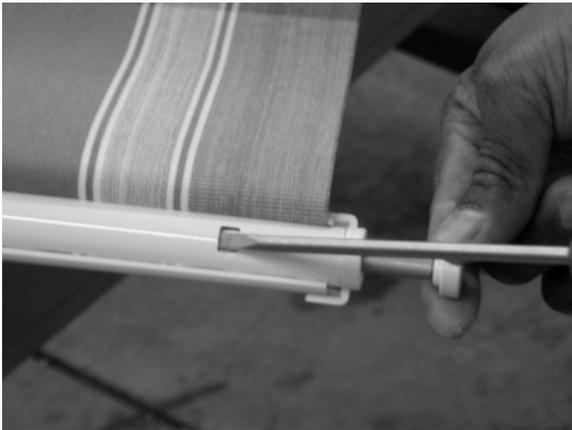
Care and cleaning of your ShadeTree system.

- (A) **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.**
- (B) **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**.
- (C) 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.
- (D) 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.
- (E) 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.

Shortening the canopy length (optional)

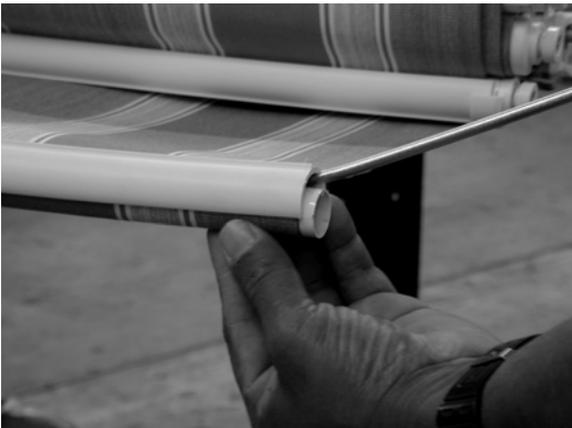
NOTE: If your canopies have rivets holding the cross-member assembly together, these would need to be drilled out with a 9/64" drill bit and re-riveted. If you are not comfortable doing this, please consider sending your canopies into Shadetree to get them shortened.

- (A) Lay the canopy on a flat clean surface. The fabric should be removed from the back end of the canopy. This is the end opposite of the drop down handle.
- (B) Remove the roller sleeve assemblies at both ends of the last crossmember. To do this, first fully extend the roller, then push down on the locking tab and pull the roller sleeve outward as shown in the figure below.



- (C) Now 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 as shown in the figure below.

NOTE: RIVETS NEED TO BE DRILLED OUT BEFORE PRYING THE FABRIC CLAMP LOOSE.



- (D) From the back end of the canopy, measure the desired distance. Make a mark at this distance on both outside edges of the fabric as shown below.



- (E) Place the bottom crossmember (aluminum) underneath the canopy, centering it on the two marks. Position the bottom crossmember so the punched square holes at the ends are facing downward. Holding the bottom crossmember in this position, re-assemble the crossmember assembly by snapping the fabric clamp in place at both ends and pressing down, working toward the center as shown in the figure below.

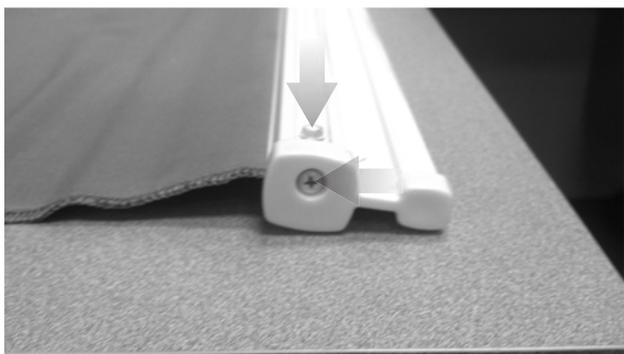


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Shortening the handle length (optional)

Each canopy has a standard 18" drop down handle. This drop down handle is for opening and closing the canopies but it is also important for catching the wind to cause the wind release mechanism to activate. Therefore, we encourage you NOT to shorten it. However, if you must have less than a 18" overhang, follow the instructions below for shortening the handle length.

- (A) Remove the screws in the aluminum handle as shown in the figure below.



- (B) Measure and cut the fabric to the desired length using a straight edge and sharp razor blade as shown in the figure below.



- (C) Re-assemble the aluminum handle and re-insert screws provided. Make sure you set your power drill to a very low setting and do not overtighten the screws.
- (D) Re-install the plastic end caps into each end of the handle.