



Freestanding Canopy Assembly Guide

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Introduction

How it Works

All ShadeFX systems utilize the patented single-track drive system. Fabric panels of the canopy assembly are extended or retracted as the lead carrier and wing travel along the drive beam.

The Importance of Proper Assembly

Proper assembly will prolong the life of your ShadeFX Retractable Freestanding Canopy. Inadequate assembly may result in avoidable and expedited wear on the system's components. The assembly instructions outlined in this guide are intended to assist with the successful deployment of your Freestanding Canopy.

It is recommended that a complete review of the assembly guide be conducted prior to assembly. If there are questions regarding assembly that are not addressed in the guide, please contact ShadeFX before continuing.

Proper Handling

Proper care must be taken when handling the product during assembly as contact with hard, sharp or abrasive surfaces could result in deformation, scratches or rips in the fabric and components of the system.

It is important to handle your canopy assembly with care, especially when attaching the canopy onto the structure. It is recommended to work in a group of at least two people.

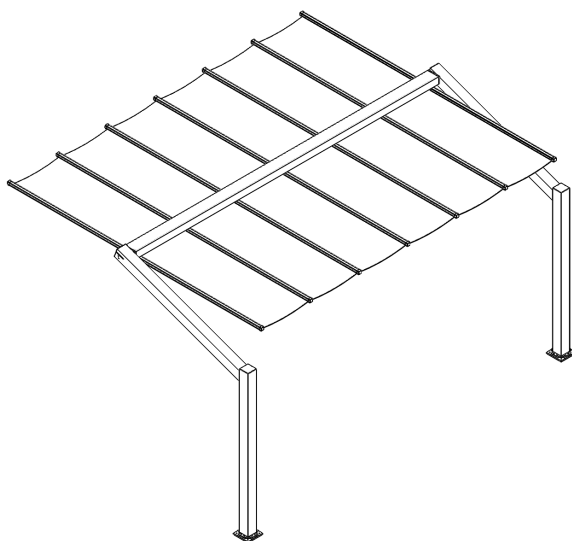
Questions

ShadeFX Retractable Freestanding Canopies are a unique product with limited comparable offerings. Whether you are an experienced contractor or homeowner assembling the system for the first time, questions may arise.

ShadeFX Canopies: (855) 509-5509

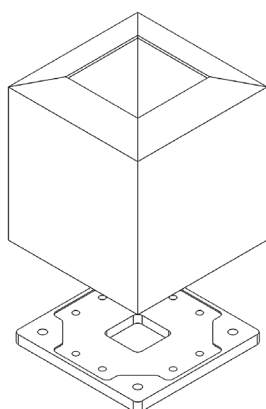
System Components

Each ShadeFX Freestanding Canopy will include a base assembly, structure assembly, track assembly and a canopy assembly. The final product will resemble the following image.

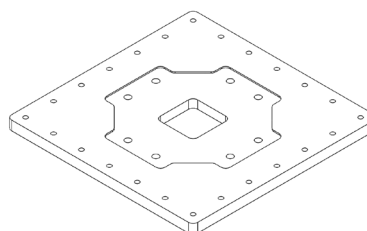


Base Assemblies

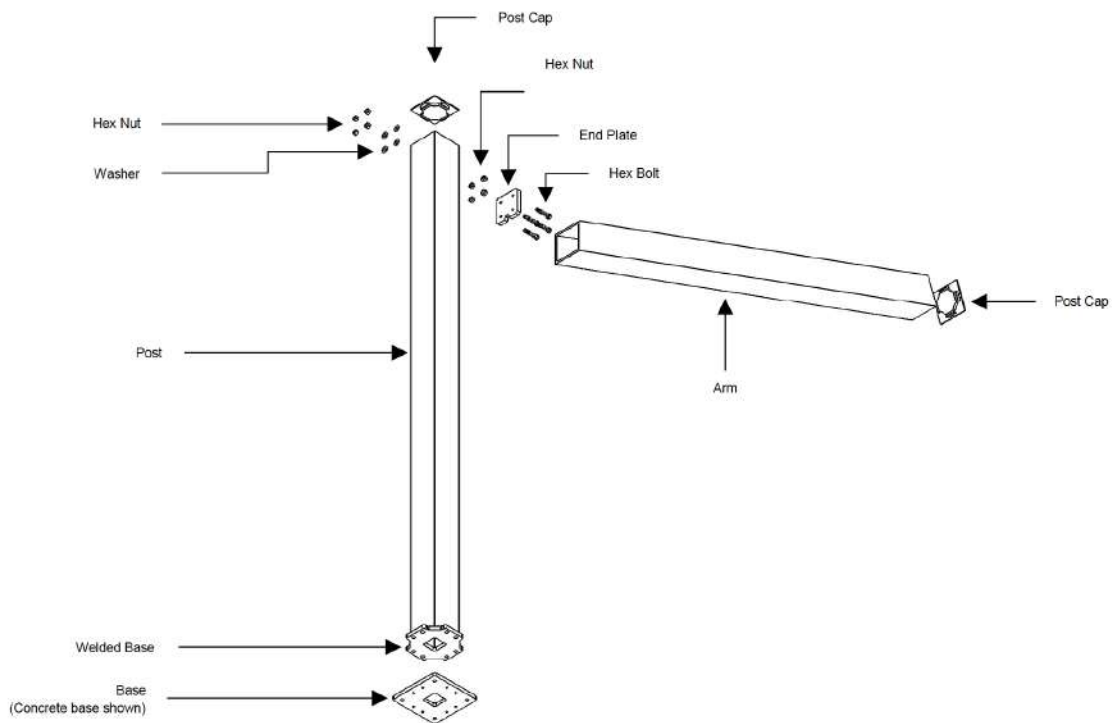
Concrete Base



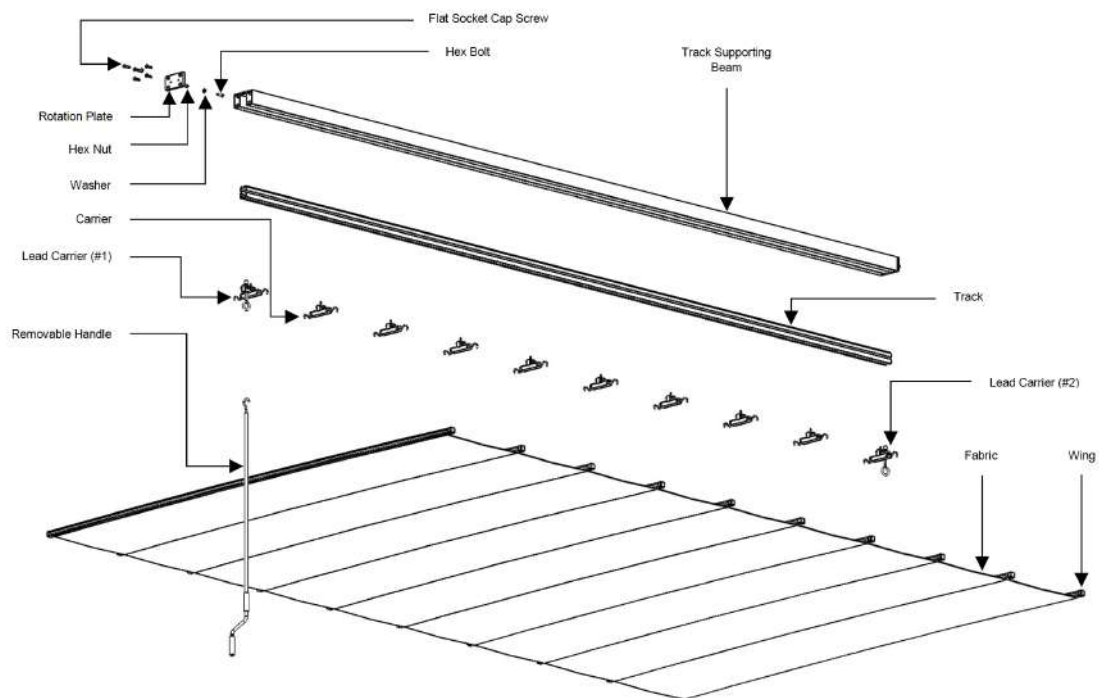
Wood Base



Structure Assembly



Track and Canopy Assemblies



Recommended Tools

The tools listed below are recommended to facilitate an efficient and effective assembly. Certain tools may be substituted.

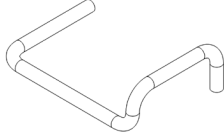
- Stepladder (x2)
- Tape or laser measure
- Level
- Pencil, marker (for base plate location marking)
- 9/16" Wrench
- 7/32" Socket Head Bit or Allen Key
- Rubber Mallet
- Chalk or string line
- If Wood Base Option: Drill and #2 Robertson (Square) drive
- If Concrete Base Option: Concrete drill, 9/16" socket drive, and 5/16" concrete drill bit

Hardware

Hardware is dependent on the number of units and base option selected. Hardware is categorized into four groupings: general hardware, base assembly hardware, structure assembly hardware and track assembly hardware.

General Hardware

A Removable Canopy Handle to extend and retract the canopy is included with each order. Gravity Clips ("G-Clips") are also included with every canopy to attach the canopy assembly to the track assembly. The number of G-Clips is dependent on track length. Quantities listed below are on a **per canopy basis**.

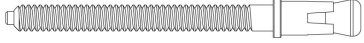
Item	Quantity Per Canopy	Drawing
Removable Canopy Handle*	x1	
Gravity Clip ("G-Clip")	x10 (8' Track Length) x12 (10' Track Length) x16 (12' Track Length) x18 (14' Track Length) x20 (16' Track Length)	

*Only one handle will be provided per order

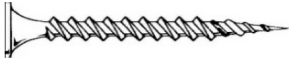
Base Assembly Hardware

Base assembly hardware is dependent on the type of base selected and number of canopies purchased. Quantities listed below are on a per canopy basis.

Concrete Base Hardware

Item	Quantity Per Canopy	Drawing
3/4" x 8" Concrete Anchor	x8	
3/4" - 10 Hex Nut	x24	
3/4" Washer	x24	

Wood Base Hardware

Item	Quantity Per Canopy	Drawing
#10-8 x 4" Wood Screw	x48	

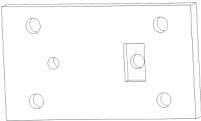
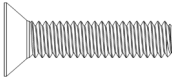
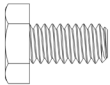
Structure Assembly Hardware

Structure assembly hardware quantity is dependent on the number of canopies purchased. Quantities listed below are on a per canopy basis.

Item	Quantity Per Canopy	Drawing
3/8" Washer	x8	
3/8"-16 Hex Nut	x8	

Track Assembly Hardware

Track assembly hardware quantity is dependent on the number of units purchased. Quantities listed below are on a per canopy basis.

Item	Quantity Per Canopy	Drawing
Rotation Plate	x2 (Assembly completed by ShadeFX)	
3/8"-16 x 1-1/2" Flat Socket Cap Screw	x8 (Assembly completed by ShadeFX)	
3/8"-16 x 1-1/2" Hex Bolt	x4	
3/8"-16 Hex Nut	x2	
3/8" Washer	x4	

Assembly

The following instructions are intended to assist with the assembly of the Retractable Freestanding Canopy. Please contact ShadeFX if you require clarification of any of the steps listed below.

The assembly of the Freestanding Canopy consists of three major steps:

- 1. Locating, Securing and Leveling the Base**
- 2. Assembling the Structure**
- 3. Attaching the Canopy**

The steps of **Locating, Securing and Leveling the Base** will vary depending on the base type selected (Concrete/Wood). **Assembling the Structure and Attaching the Canopy** remain constant across both base options.

Step 1: Locating, Securing and Leveling the Base

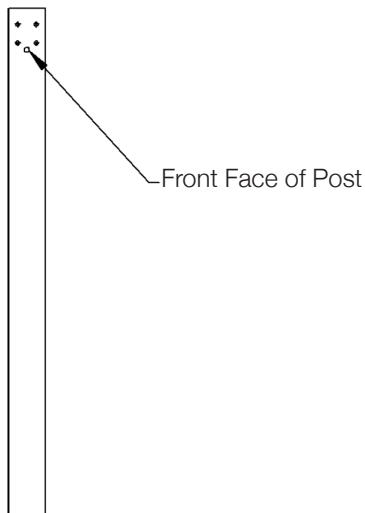
In Step 1 you will locate & align the bases to each other and level & secure the bases to the mounting surface.

Concrete Base / Wood Base

Concrete and wood bases follow the same set of steps. If wood base is selected, the deck must be reinforced at base locations to ensure all screws are engaged in structural wood. Contact ShadeFX if deck reinforcement recommendations are needed.

Locating and Aligning the Bases

- i. Ensure the front face of the post is facing forward.



- ii. Determine the required distance between the bases for CONCRETE mounting by subtracting 2-3/4" from the total track supporting beam length (track supporting beam + rotation plate).

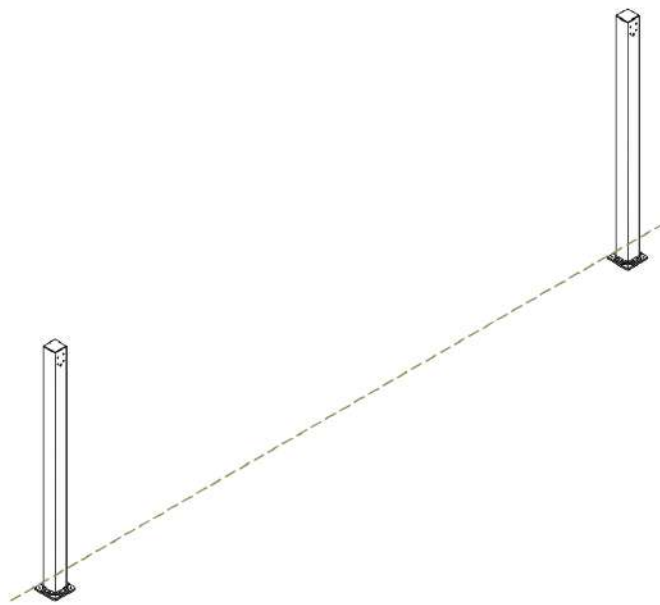
Ex: for a 16' track the required distance between bases is 189-1/4" (i.e. 192"-2-3/4")

Determine the required distance between the bases for WOOD mounting by subtracting 5-3/4" from the total track supporting beam length (track supporting beam + rotation plate).

Ex: for a 16' track the required distance between wood bases is 186-1/4" (i.e. 192"-5-3/4")

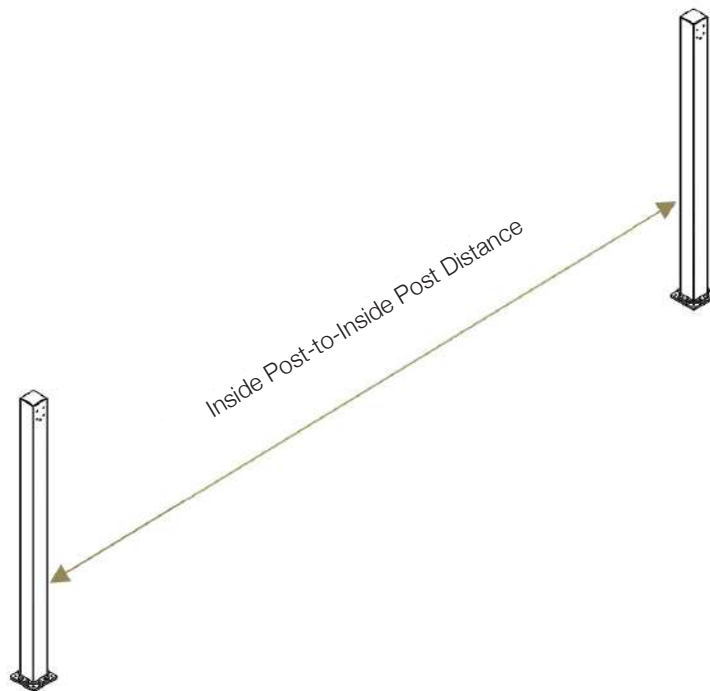


Ensure the back (or front) of the bases are co-linear by dropping a chalk line.



- iii. Once the bases are aligned the distance between the inside of the posts should equal the total track supporting beam length (track supporting beam + rotation plate) + 1/4".

Ex: for a 16' track the inside to inside post distance should be 192-1/4" (i.e. 192" + 1/4")



- iv. Using a marker or pencil, mark the hole locations through the base plate onto the surface below.

- v. Pre-drill holes on marked locations:

Concrete: Provided the footings are all level, use concrete drill and 5/16" concrete drill bit to drill 4" deep holes and remove excess dust.

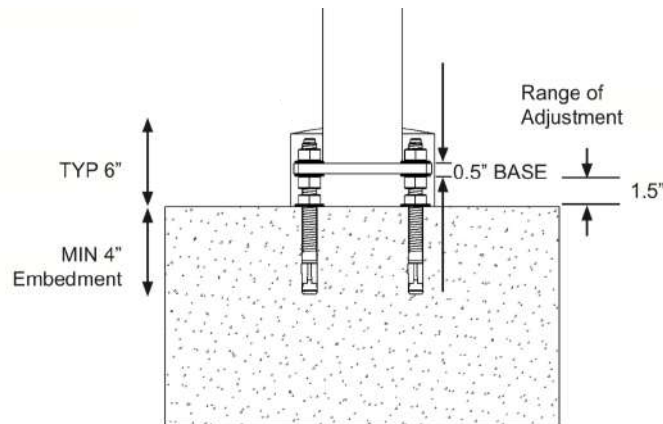
Wood: use regular drill and #2 Robertson (Square) drive

- vi. Mount base plate/post assembly to the surface using the pre-drilled holes and the provided fasteners.

Concrete: See Typ Concrete Anchor drawing below for reference. Thread first 3/4" nut and washer on to anchor and then secure anchor into pre-drilled hole using a high torque drill and a 7/16" socket bit.

If the fasteners are too difficult for the drill to tighten, use a socket wrench and the 7/16" socket bit to tighten the fasteners manually. Use a 1" wrench or alternative to tighten the first nut to required torque of 110 lb ft.

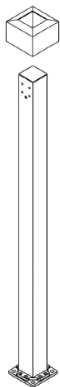
Thread second nut on to the anchor. This will be one of two levelling nuts per anchor. The second levelling nut will be threaded on after the post has been placed into position. Level the structure and tighten all nuts securely.



Wood: use a regular drill and #2 Robertson (square) bit

- vii. **For Concrete Base only:**

Slide the post skirts over the posts so that they cover the base plates.

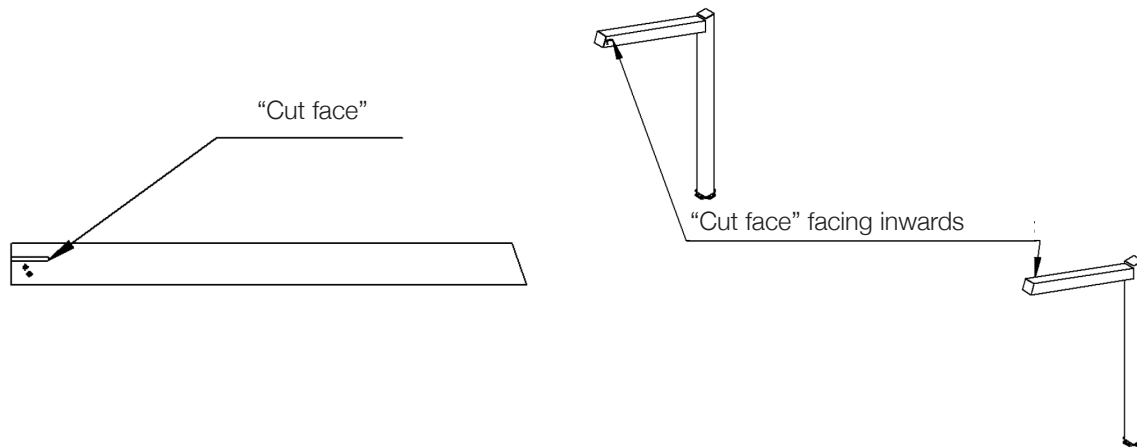


Step 2: Assembling the Structure

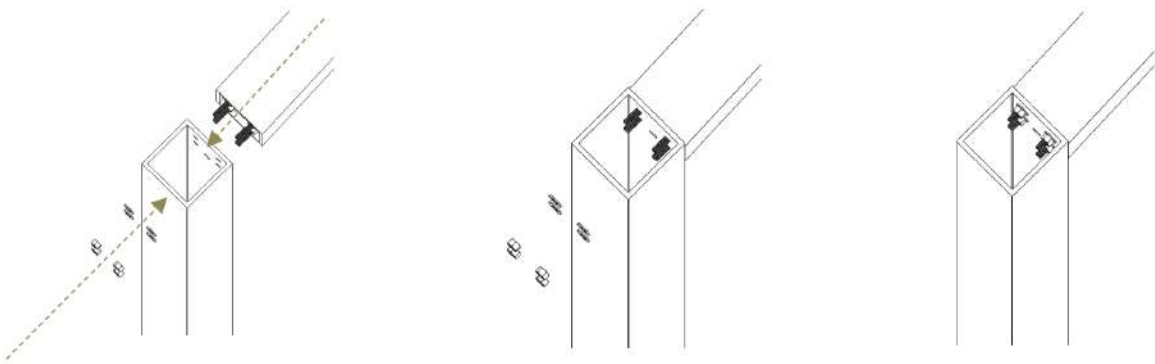
In Step 2, you will assemble the structure that supports the canopy by attaching the arm to the post and mounting the track supporting beam to the posts. Step 2 is constant across all three base options.

Attaching the Arms to the Post

- i. The cut faces (see below) should be facing each other when installed on posts. Ensure the arms are angled upwards when installing.

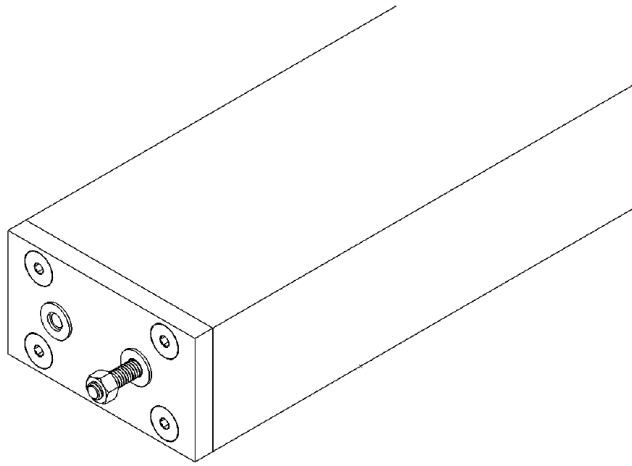


Secure arms in place by installing washers (x4 per arm) and 3/8"-16 hex nuts (x4 per arm) from inside the posts.



Mounting the Track Supporting Beam to the Posts

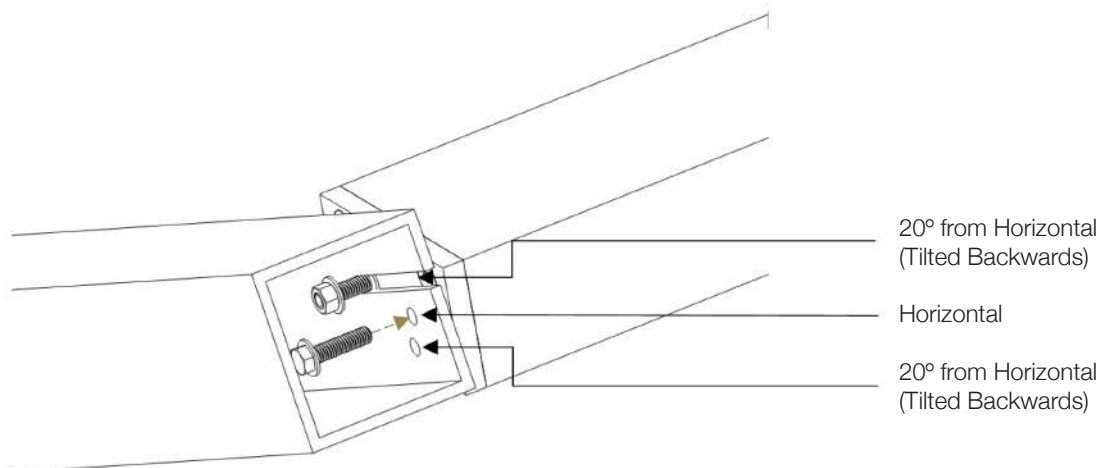
- ii. Add a 3/8" washer and loosely thread a 3/16" nut until the nut is just on the protruding thread. Repeat on the other end of the track supporting beam.



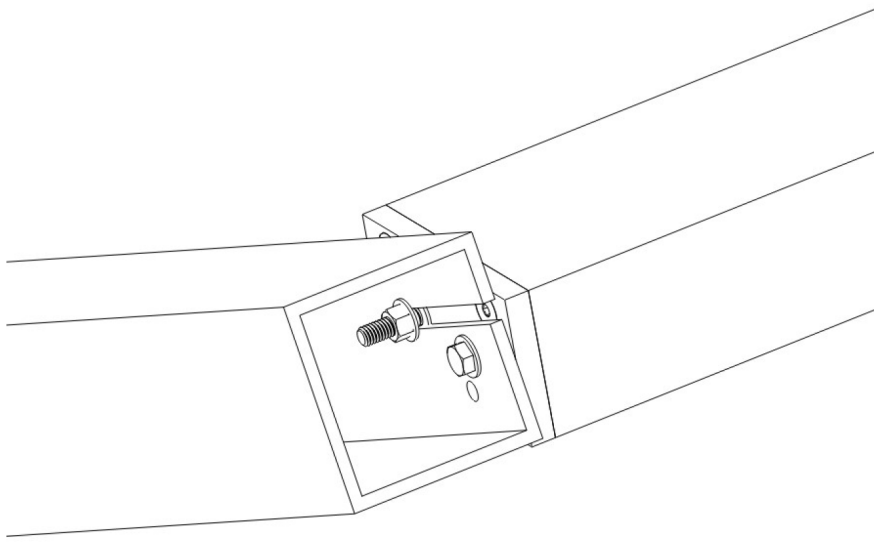
- iii. With two ladders set up in front of each arm, two laborers are to simultaneously raise the track supporting beam to align the protruding threads with the slot in the arms. Slide the protruding thread into the arm slots such that the **existing threads (with nuts) protruding from the plates are inserted first.** Refer to the image below for insertion direction.



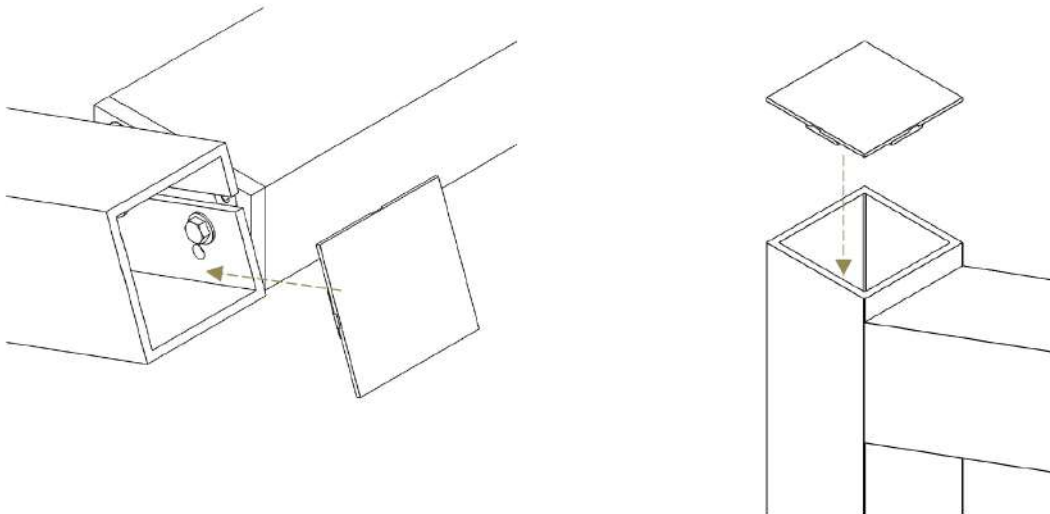
- iv. Set desired track angle (flat orientation shown below). This orientation can be changed at any time (see 'Post Assembly'). Insert 3/8"-16 x 1-1/2" hex bolt with 3/8" washer into the plate hole when the appropriate hole in the post is aligned. Repeat on other end of the track supporting beam.



- v. Ensure both the bolt inserted in Step 2-iv as well as the nut fastened onto the protruding thread in Step 2-ii are tightened fully on both ends of the track supporting beam.



- vi. Press post caps into top of arms and top of posts. Use a rubber mallet if required.

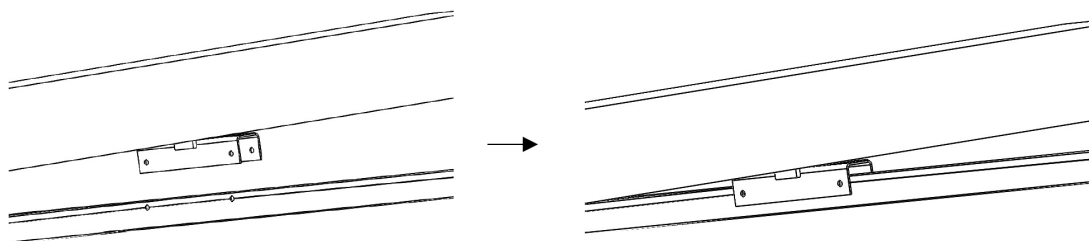
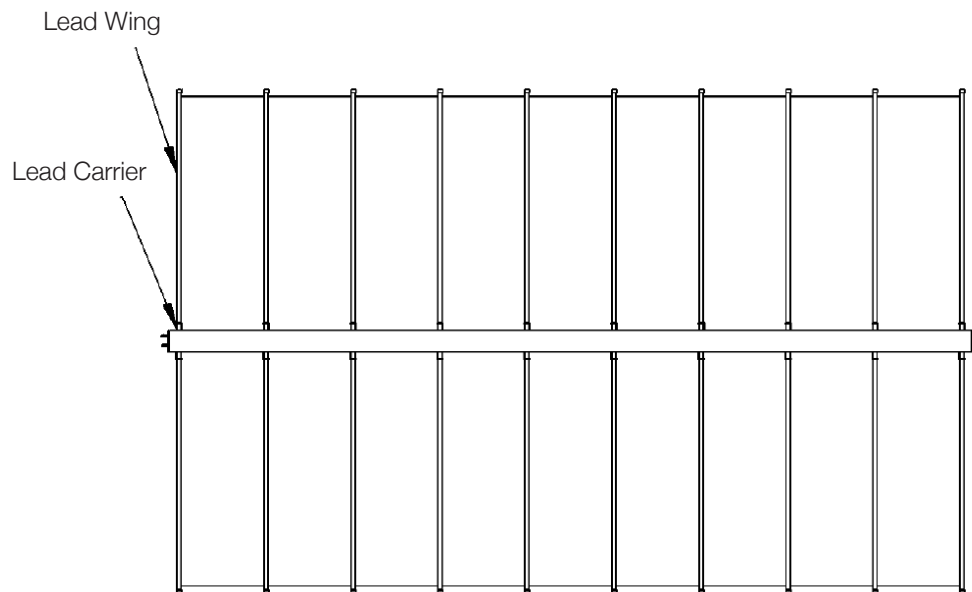


Step 3: Attaching the Canopy

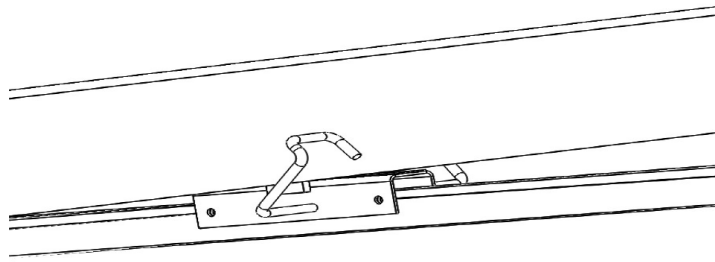
In Step 3, you will connect your canopy to the structure. Each wing is to be inserted into a carrier assembly and secured using gravity clips (G-clips) (x2). Start with a lead carrier (has a protruding eye bolt) for the first wing, then all of the normal carriers, then end with the other lead carrier for the last wing.

Note: Do not dispose of the packaging bag as it can be used for winter storage of the canopy.

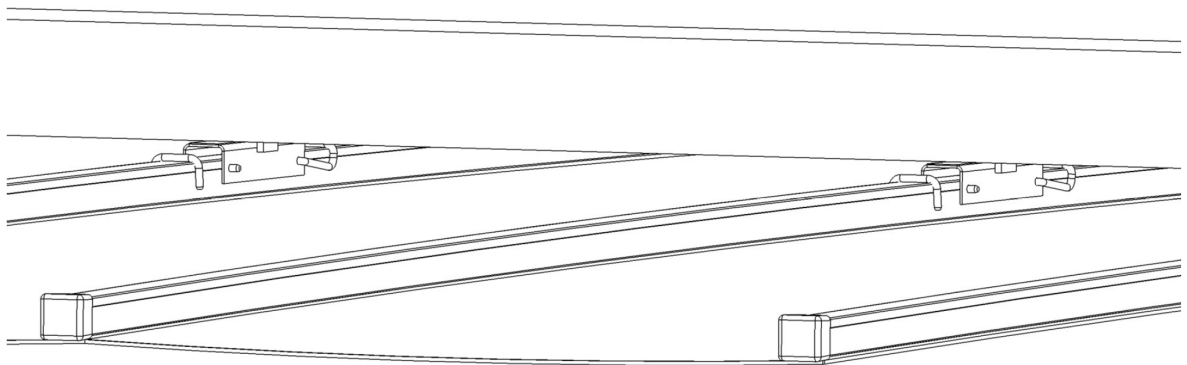
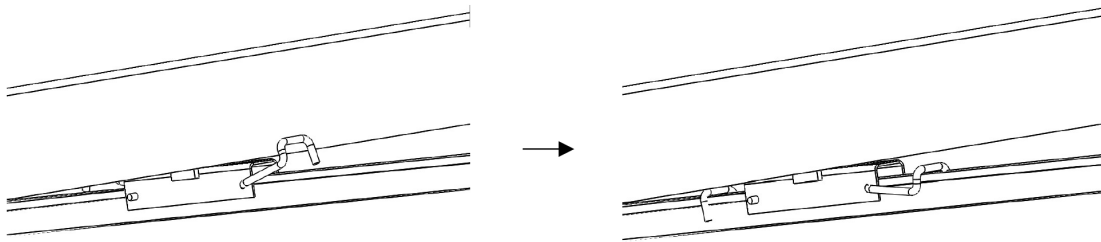
- i. Raise wing into carrier assembly. Align holes in wing with holes in carrier assembly.



- ii. Once holes are aligned, insert G-clips.
- iii. Rotate G-clips downward until they lock into position.

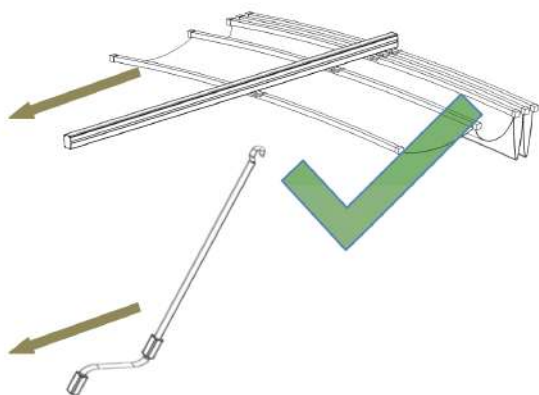


Notice the direction of the G-clips on each side of the drive beam are different.

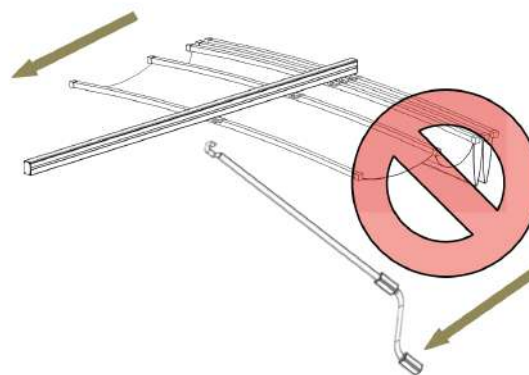


Operation of Manual Canopy

Opening/Closing your Canopy

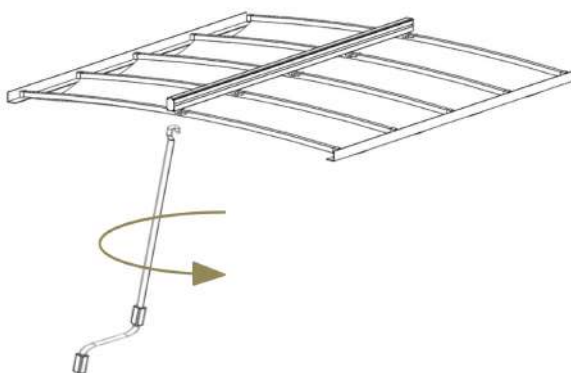


Always pull handle when extending or retracting your canopy.



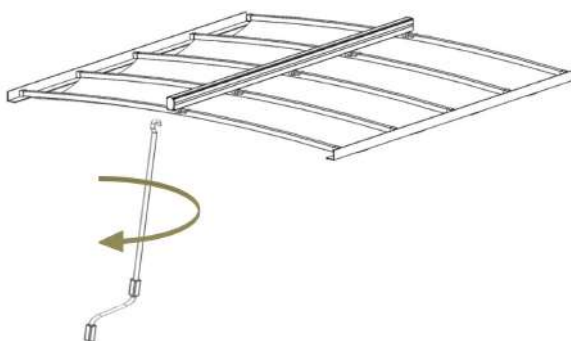
Never push the handle in any direction. Pushing will result in a **bent** handle.

Securing your Canopy



1. Rotate handle counter-clockwise until the lead carrier brake comes into contact with the track.
2. To fully secure your canopy, rotate handle another quarter turn.

Releasing your Canopy



1. Rotate the handle clockwise 5 times to release the canopy and allow proper operation.

Post-installation

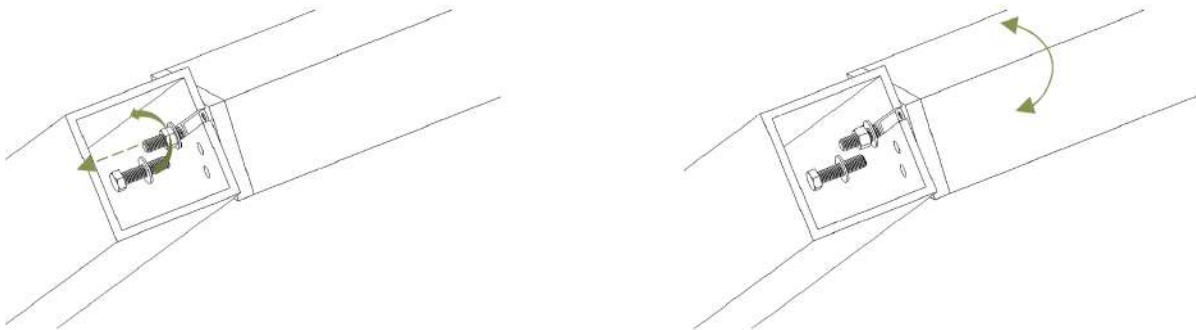
Rotating the Canopy

Changing the canopy orientation requires the removal of the post caps on the arms. This can be done by inserting a flat screwdriver into the small slot in the post cap to pry the cap off.

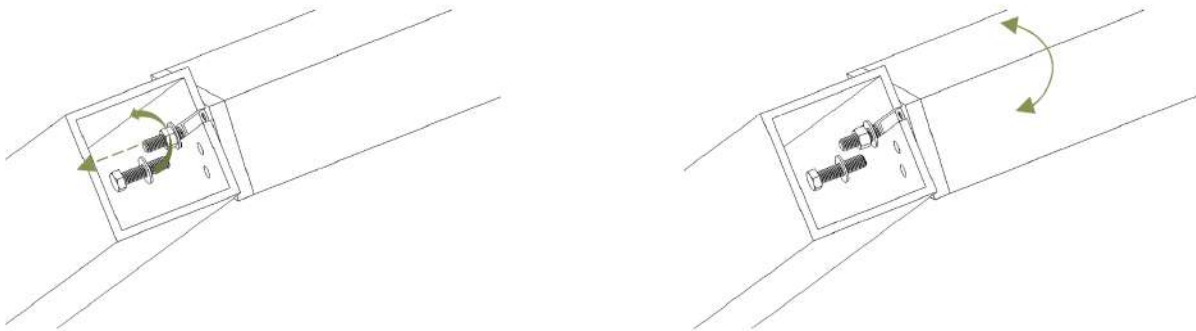
Completely remove the hex bolt while being careful not to drop the washer



Hold the track supporting beam and slowly release the nut on the protruding thread until rotation is possible



*Tighten nut and bolt to secure in place (**Canopy Tilted Forward** position shown above)*



Rotation can be done with the canopy still attached but it is recommended that it be retracted in the middle of the track supporting beam.

The following section is intended to inform the canopy user of preventative actions that should be taken to maintain the longevity of the canopy.

Winter Storage

ShadeFX canopies are not designed to support snow loads. In cold climates, the canopy must be removed and stored for the winter to maintain warranty coverage.

Detach the canopy by removing the G-Clips and store it in a dry, protected location.

Do not operate the system in freezing temperatures. Damage caused by freezing conditions is not covered under warranty.

Before reinstalling, inspect the canopy and track system to ensure they are clean, free of debris, and in proper working order.

Wind

ShadeFX Retractable Freestanding Canopies are built to withstand high winds but should be retracted in winds exceeding 38 mph (61 km/h). When retracting the canopy in windy situations ensure that the fabric folds into the panels correctly and is not blown out of place or bunched up by the wind.

Improper Uses of the Product

Do not hang objects such as light, fans, heaters, lanterns, etc. from any part of the ShadeFX canopy or drive beam.

ShadeFX cannot guarantee the strength of holes if an anchor (wood or concrete) is inserted in a previously used hole.

Lubricants

Do not apply any kind of lubricants inside the drive beam or on the carriers. The system is designed and manufactured to be lubricant-free. If necessary, a degreaser can be used to clean the inside of the drive beam.



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