



UNDERSIDE PRODUCT GUIDE





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FAST FACTS

DELIVERY LEAD TIME

Allow 3 weeks from receipt of order at ShadeFX™ for kit to ship.

PARAMETERS OF DESIGN

MAX LENGTH = **36 feet per canopy**
MAX WIDTH = **24 feet per canopy**

Standard canopy drop from underside of pergola rafters (joists) when retracted = **19"**

Minimum canopy drop from underside of pergola rafters (joists) when retracted = **10"**

Stabilizers are provided by the contractor, not ShadeFX™.

Each kit includes: **1 - Drive Beam**
1 - Canopy Assembly
1 - Instruction and hardware envelope

THE DIFFERENCE BETWEEN WATERPROOF AND WATER RESISTANT

If the canopy will be relied on to keep things dry underneath for the time of a rain shower, water resistant is suitable. If the canopy is expected to keep things dry underneath during the course of a week or for a whole season, then Sattler waterproof fabric is required. **Waterproof fabrics are not available in patterns, only solid colours.**

PRODUCT CAPABILITIES

ShadeFX™ was designed to be flexible and adaptable to most if not all structures in need of a shade canopy. Therefore it can be installed in the following ways:

- Horizontally parallel to rafters
- Horizontally perpendicular to rafters
- On a slope to shed rain parallel to canopy wings from 1° to 45°
- On a slope to shed rain perpendicular to canopy wings from 1° to 45°

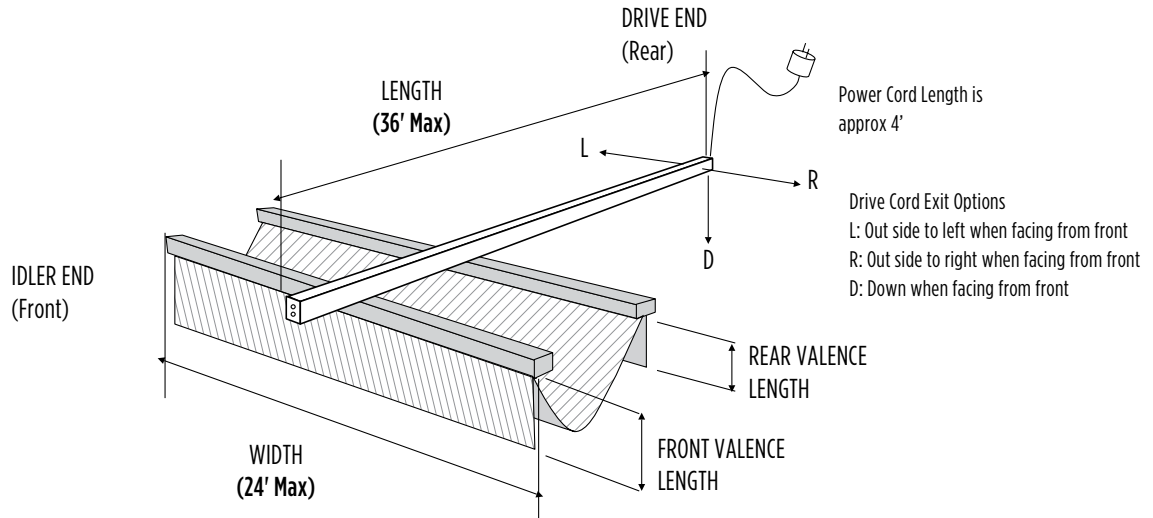
- With a bow in the wings so they fit the arch of a curved pergola frame (like a barrel vault)
- With more than 1 drive so the canopies operate independently

WHY SHADEFX™, WHY NOW?

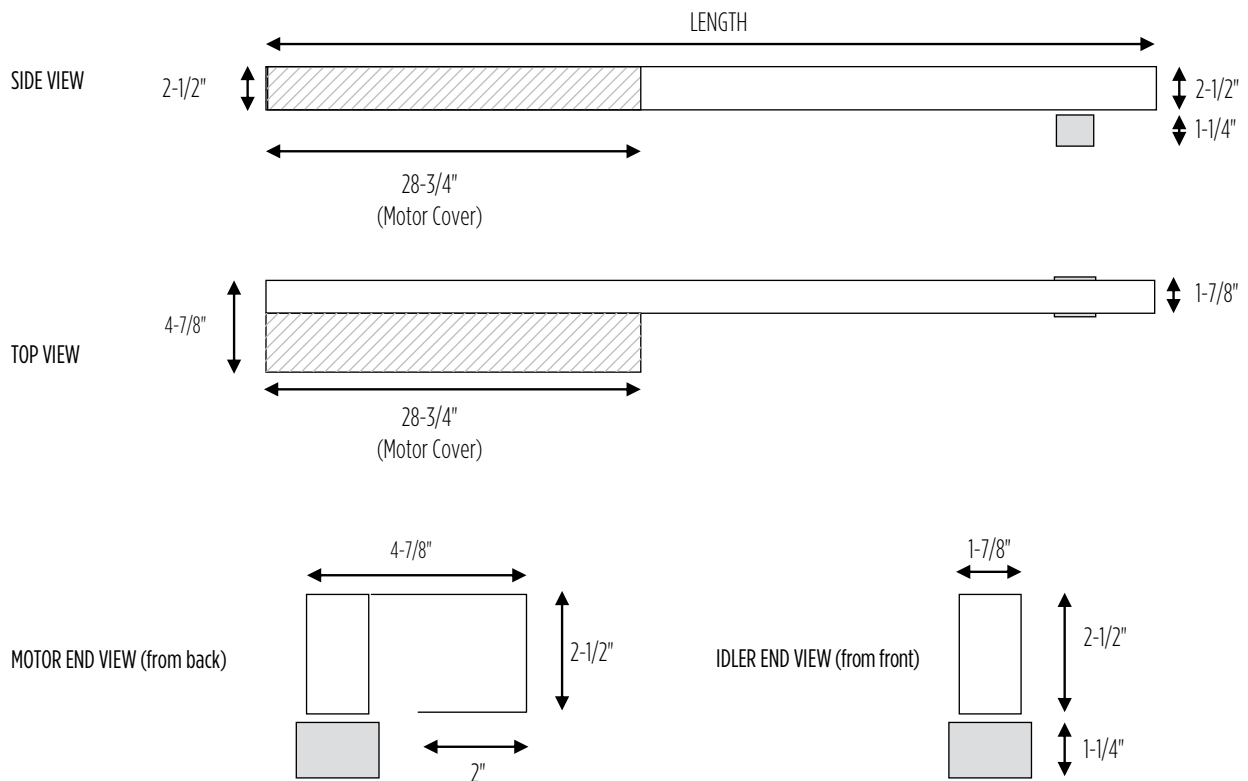
Over the years, homeowners and businesses have moved their attention to an outdoor living lifestyle, where outdoor patios and decks have grown in size and sophistication. Decks now commonly run the full length of the house and have multiple levels, including built-in hot-tubs, outdoor fireplaces and are accessorized with expensive furniture and even complete outdoor kitchens. The outdoor deck has become a key entertainment centre for many families, while the health threat of cancer from UV exposure has increased. This has created a demand for shade products to go with the decks as evidenced by the continued growth of the shade canopy market.

Only ShadeFX™ uses the patented single track actuating mechanism. Patent www.shadefx.com/patent

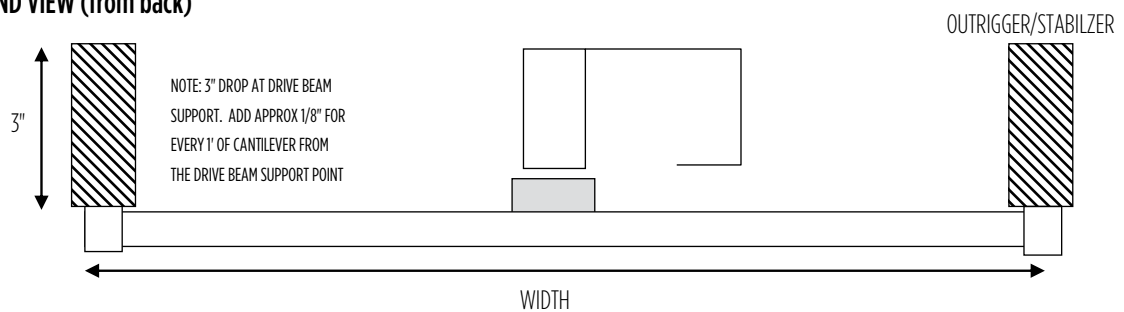
PRODUCT DIMENSIONS



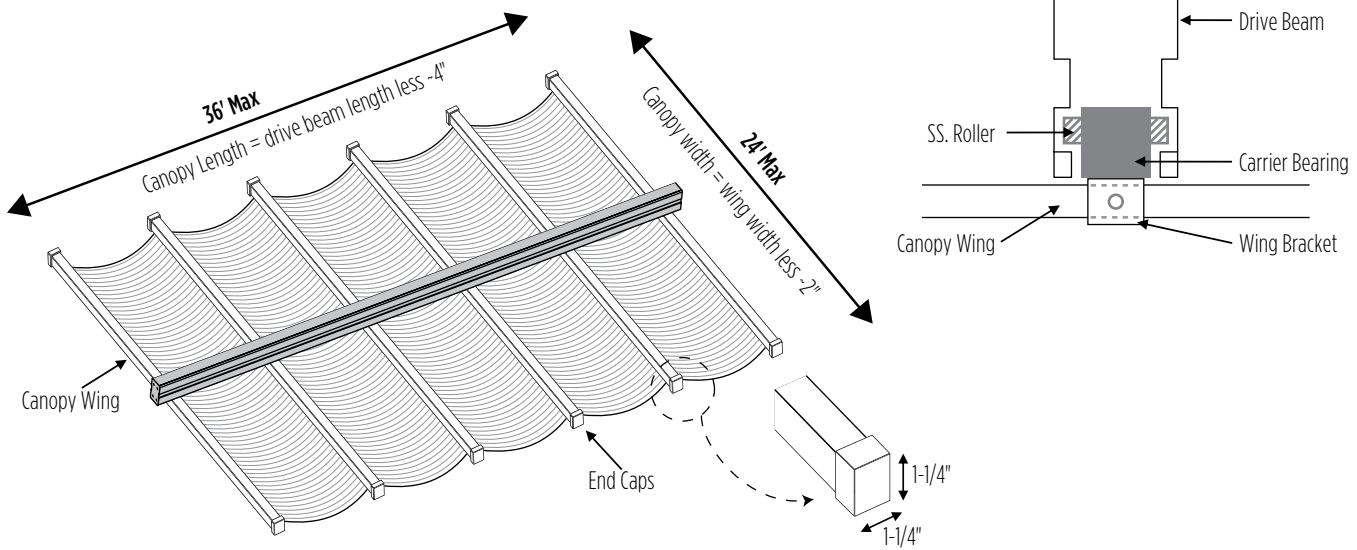
DRIVE BEAM



ASSEMBLY END VIEW (from back)



PRODUCT DIMENSIONS

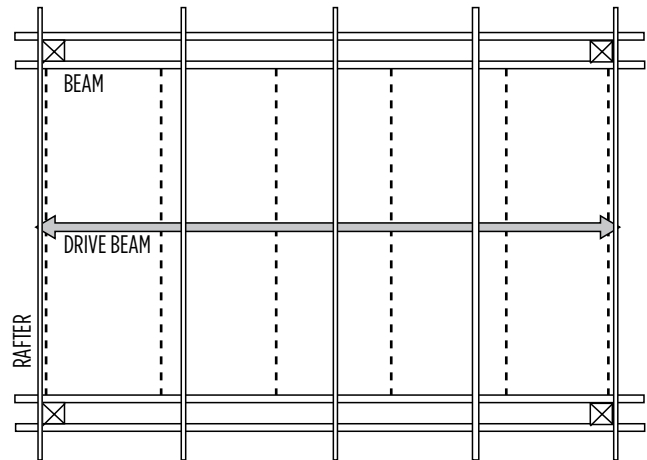


MEASURING YOUR PERGOLA: TWO OPTIONS

① INSTALL DRIVE BEAM PERPENDICULAR TO RAFTERS

Recommended drive beam length (grey arrow) is between outside faces of outside rafters.

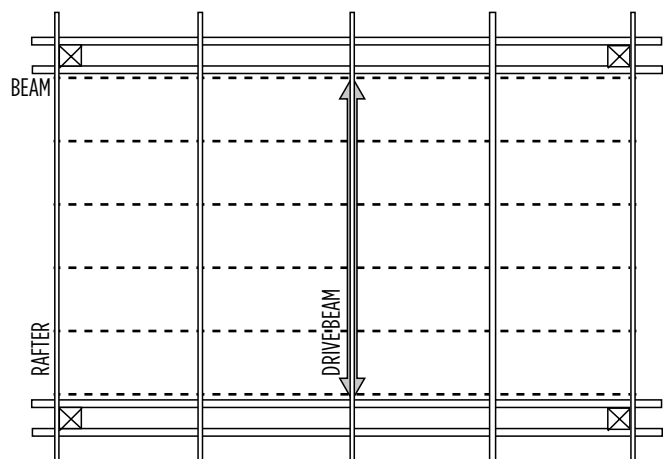
Recommended wing width (dashed lines) is between inside of beam to inside of beam, **reduced by 1-1/2" for clearance.**



② INSTALL DRIVE BEAM PARALLEL TO RAFTERS

Recommended drive beam length (grey arrow) is between inside face of beam to inside face of opposite beam, **reduced by 1/4" for clearance.**

Recommended wing width (dashed lines) is between outside faces of outside rafters. No clearance adjustment required.



GETTING STARTED: INSTALLATION INSTRUCTIONS

Thank you for purchasing a ShadeFX™ Canopy system to enhance your outdoor living experience. Before installing and operating the system, please view our videos on YouTube by searching 'ShadeFX'.

ShadeFX Canopies Inc. is not responsible for the structural integrity of the frame the canopy mounts to. That responsibility lies with the frame constructor. Please ensure full precautions are taken regarding the strength of the frame system to support the canopy, and for it to remain intact under negative (lifting) loads which can occur during windy conditions.

CAUTION - This system is not designed to support a snow load. Always retract the canopy for winter storage under the home eaves or under the canopy garage. Failure to do so may result in injury or death.

CAUTION - This system is not designed to support weight of any kind other than rain. Do not climb, rest, crawl, walk, hang or pull on the canopy, canopy wings, or the drive beam. Injury or death and damage to the system may result.

CAUTION - Always use a Ground Fault Interrupt (GFI) electrical source to power the motor and any other outdoor electrical devices to be used with the canopy system. Failure to do so may result in injury or death.

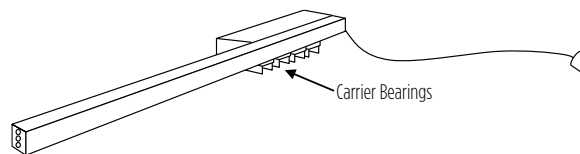
CAUTION - Do not block or restrict the free movement of the canopy wings in any way. They are designed to float freely at their respective ends and this is a key element to the long term smooth operation of the system. The electric motor DOES NOT have an overload reverse function. Therefore do not put fingers, hands, or any other appendages including hair anywhere near the belt drive mechanism. To do so may result in injury or death.

CAUTION - Always install the system with two individuals. The weight of a large canopy can be significant and the height of its installation may require a ladder. Always be mindful of your footing. When using ladders, read, understand and follow the safe operating guidelines associated with their use. Failure to do so may result in injury or death.

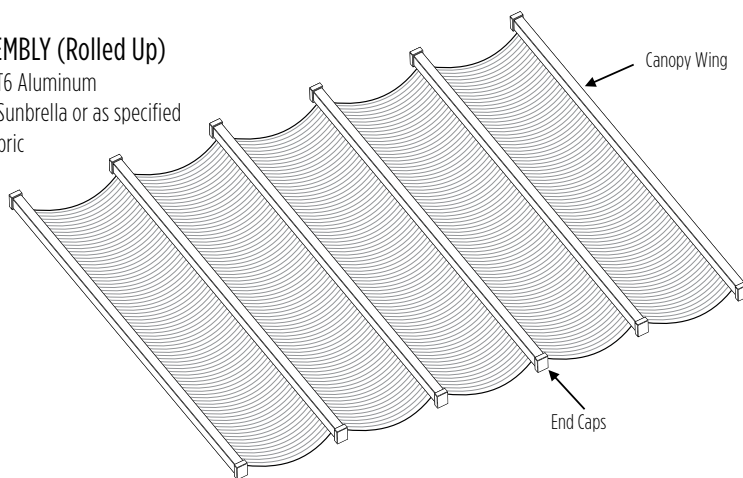
CAUTION - Although ShadeFX is designed to be used while extended in windy and rainy conditions it must not be left extended during storms of any kind. Retract the canopy system when winds exceed 35 mph. Failure to follow these guidelines may result in injury or death.

WHAT YOU RECEIVE

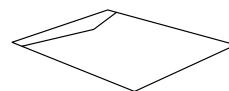
- 1 **DRIVE BEAM**
 - Extruded T6 anodized aluminum
 - Can structurally span up to 120"
 - Integral one-piece assembly



- 2 **CANOPY ASSEMBLY (Rolled Up)**
 - Extruded T6 Aluminum
 - Premium Sunbrella or as specified canopy fabric

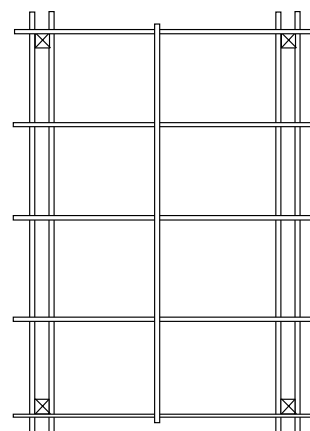


- 3 **HARDWARE KIT**
 - Includes instructions and mounting screws



WHAT EXISTS OR NEEDS TO EXIST

- 1 **A PERGOLA FRAME OR PLAIN PERIMETER FRAME**
- 2 **STABILIZERS IN SAME MATERIAL AS PERGOLA**
 - 2x2's or 2x4's totalling 2x length of drive beam
- 3 **110 VAC GFI POWER SOURCE (Motor Drive Only)**



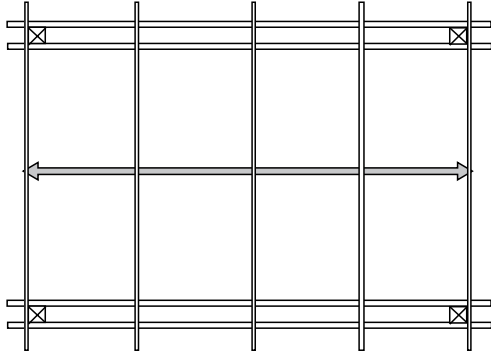
TOOLS REQUIRED

- 1 1/8" Drill Bit
- 2 #2 Robertson (square) extended bit at least 3" long
- 3 Drill to drive mounting screws
- 4 2 ladders (or 12" long clinch clamp to secure drive beam to rafter before screws make permanent fastening)
- 5 Extra screws for stabilizers (length and type depending on material and installation options on page 6)

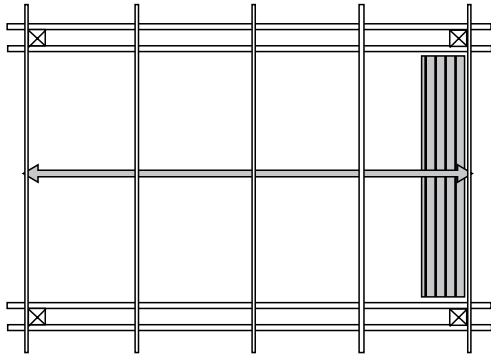
INSTALLATION INSTRUCTIONS: 2 OPTIONS

① INSTALL DRIVE BEAM PERPENDICULAR TO RAFTERS

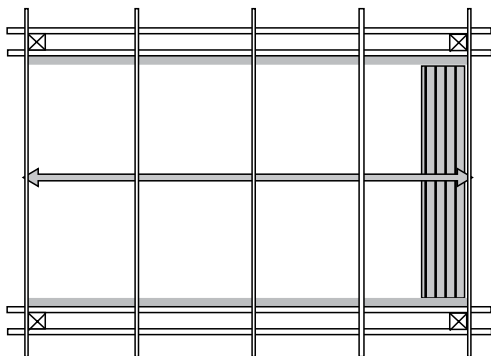
Locate the drive beam (grey arrow) under rafters such that it is in the middle of the gap between the inside faces of the pergola beams. Drill and screw to underside of rafters at least every 48 inches. Drill 2 holes side by side, each 1/3" in from the edge of the drive beam. This fastens the drive beam without pinching its profile that the canopy bearings ride in. (See diagram on page 8)



② Attach the canopy assembly by removing the cross pins in the carrier bearings, locating the canopy wing with the cross hole in the bracket, and replacing the cross pin. Do this from back to front and note that the rear most carrier bearing will need to be fixed with a cross drilled set screw unless there is a beam/rafter/wood valance for it to screw into.

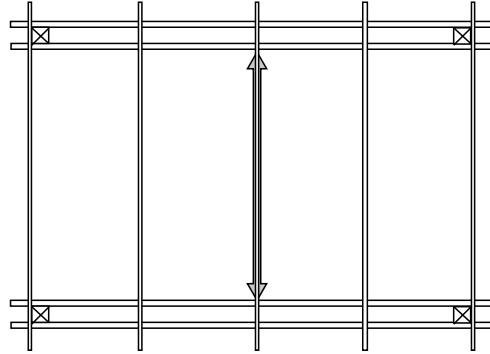


③ Install canopy stabilizers (see ① on page 9 for more details)

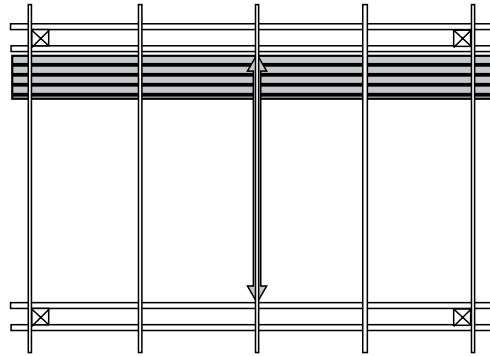


② INSTALL DRIVE BEAM PARALLEL TO RAFTERS

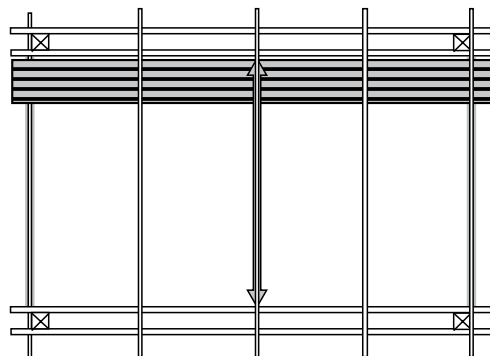
Locate the drive beam (grey arrow) under the middle rafter of the pergola and between the inside faces of the pergola beams. Drill and screw to underside of rafters at least every 48 inches. Drill 2 holes side by side, each 1/3" in from the edge of the drive beam. This fastens the drive beam without pinching its profile that the canopy bearings ride in. (See diagram on page 8)



② Attach the canopy assembly to the drive beam by removing the cross pins in the carrier bearings, locating the canopy wing with the cross hole in the bracket, and replacing the cross pin. Do this from back to front and note the back canopy wing can be screwed directly into the pergola beam.

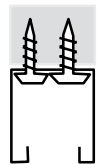


③ Install canopy stabilizers (see ② on page 9 for more details)



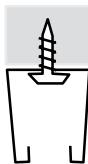
FASTENING DIAGRAM

GOOD



A pair of anchor screws equally torqued into the drive beam side by side will maintain channel shape.

BAD

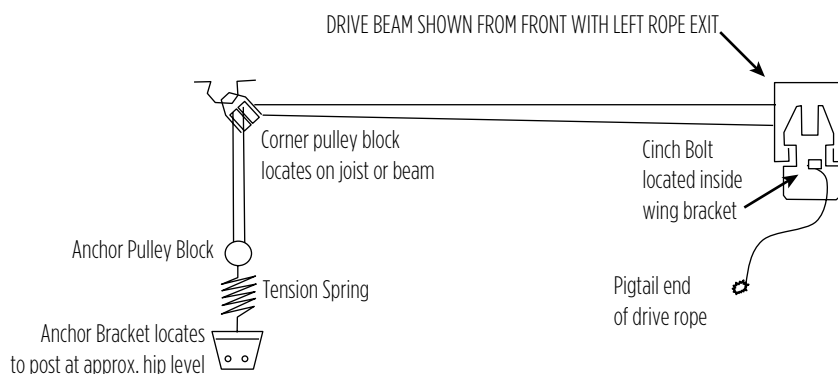


One anchor screw torqued in the middle of the drive beam will pinch the channel and cause a jam point in the track.

CAUTION - At the retracted end of the drive beam, ensure the mounting screws are used at every opportunity to fasten to a joist or beam because the entire weight of a wet canopy is concentrated at that end when not in use

ROPE DRIVE INSTALLATION

- Locate and anchor the rope pulleys as shown below or any appropriate variation for your specific pergola.
- Pull excess rope through the front wing mount
- With tension spring double it's normal length, tighten cinch bolt to secure the rope. You cannot overtighten this bolt.
- Cut off excess rope close to the wing bracket and use a flame to melt the frayed ends of the rope.



OPERATION

Once all the wings are attached to their respective brackets, the canopy is ready for trial operation. To drive the canopy, either draw on the cord system, or plug the motor power cord into a GFI protected electrical outlet.

Carefully, using the motor (by pushing remote control button) or manual cord (by pulling the cord), extend the canopy fully allowing for the it to stop by itself at the end

of the track, or at the factory preset limit switch location (motor). During movement of the canopy, **ensure** there is no undue restriction or blockage of its free movement, especially in the rafters/joists. Return the canopy **carefully** allowing it to stop at the fully retracted position.

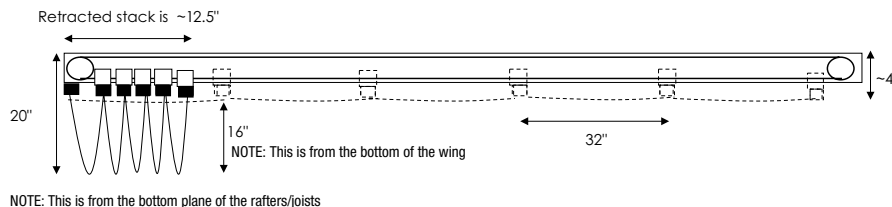
Provided the canopy extends and retracts smoothly, stopping at the right place when fully retracted or extended,

you are now ready to install the stabilizers. Use the guide on page 8 to determine the location of the stabilizers. Once installed it should take a couple pounds of force to pull the canopy wing down off contact with the stabilizer. This minimizes knocking in the wind without causing too much friction.

CANOPY DROP

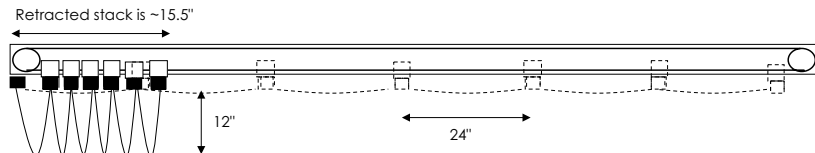
Standard wing spacing is now up to 36" max, resulting in a 22" drop from the underside of the rafters.

Therefore a 16' canopy with a 36" max wing spacing will have $16(12)/36 = 5.33$ canopy panels. We round up to 6 resulting in an panel length of 32" and a canopy drop when retracted of 20" using 7 wings.



MINIMIZING CANOPY DROP

Add 2 wings to a 16' canopy and the following results:



INSTALLATION INSTRUCTIONS: STABILIZERS

The stabilizers limit the motion of the canopy wings by containing them at the ends so they cannot tilt and tip in the wind. The top edge of the canopy wing should ride on the bottom edge of the stabilizers that are typically offset relative to the bottom of the rafters according to this chart:

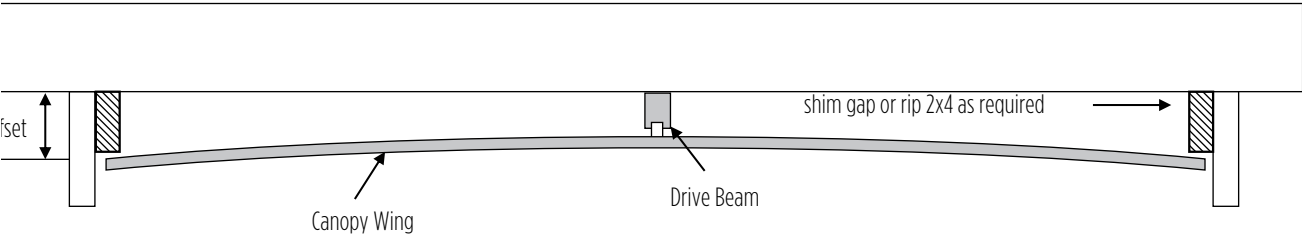
WING WIDTH	10'	12'	14'	16'
OFFSET *	3-1/2"	3-3/4"	4"	4-1/4"

The ideal stabilizer is a 2x2. There should be some stress on the wing from the stabilizer to ensure all movement in the wind is contained. Locate stabilizers where they just touch the top of the wing, then bring them down 1/4" or so to preload them.

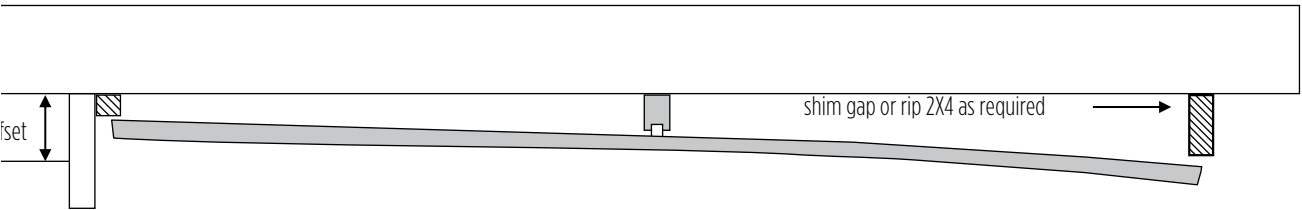
* Typical offset. It is best to tack stabilizers in place and set wing preload with the wings in place.

1 PERPENDICULAR INSTALLATION

RAIN RUNS OFF EITHER SIDE

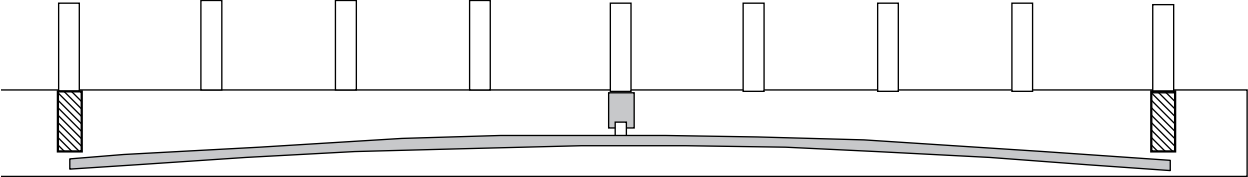


RAIN RUNS OFF TO ONE SIDE

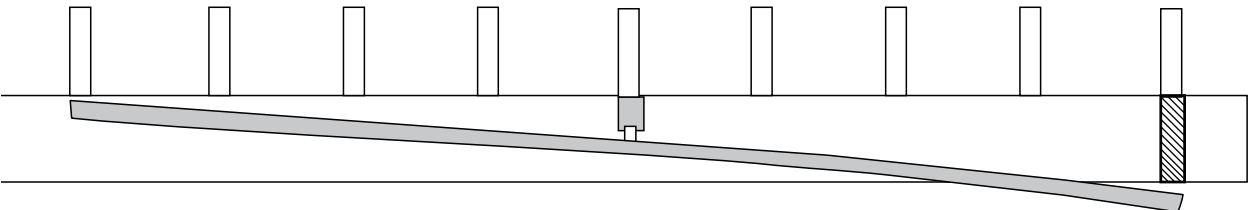


2 PARALLEL INSTALLATION

RAIN RUNS OFF EITHER SIDE



RAIN RUNS OFF TO ONE SIDE



WITH THE INSTALLATION OF THE STABILIZERS, YOU ARE FINISHED AND READY TO ENJOY OUTDOOR LIVING WITH COMFORT BY SHADEFX!

MAINTENANCE

ShadeFX is designed to be a maintenance free system. There is no need to lubricate, clean or adjust anything in the mechanism or motor system.

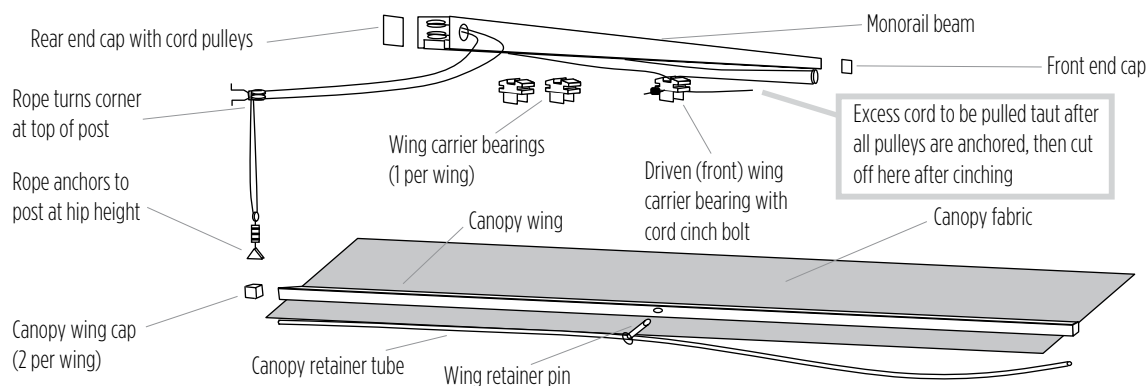
Fabric maintenance is limited to reasonable cleaning of the fabric when it becomes soiled or stained. The fabrics are made for heavy duty outdoor use. In all

cases a powerful hose-off (not pressure wash) with a mild brush scrubbing (no soap) is all that is needed to remove more stubborn stains/dirt.

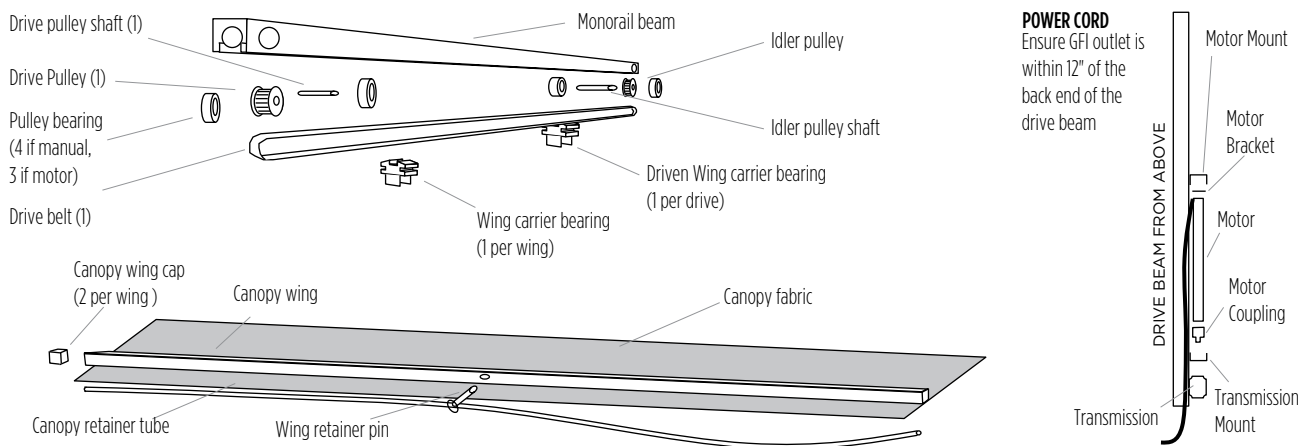
Tree gum, sap and grease are best removed with acetone or turpentine.

PARTS DIAGRAMS

ROPE PULL

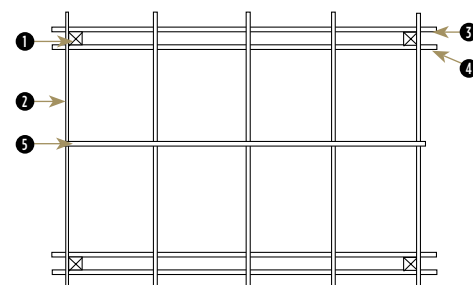


MOTOR DRIVEN



GLOSSARY

- ① Post
- ② Rafter (also called joist, rests on beams)
- ③ Outside Beam
- ④ Inside Beam
- ⑤ Purlin (sets distance between rafters on a long span, rests on top of rafters)



PRODUCT WARRANTY



ShadeFX™ products are warranted to be free of defects in material and workmanship for twelve years from the date of installation of the canopy system. During the first 5 years, parts, labour, and shipping (if applicable) are covered. During this period it is the responsibility of the purchaser to notify ShadeFX Canopies Inc. or its representative/dealer, of any claimed defect. Upon investigation, and subsequent confirmation of a legitimate defect, ShadeFX Canopies Inc. will at its option and expense either repair the canopy or provide a replacement. After the first five years of warranty expires, the warranty is limited to replacement of parts associated with the mechanical components of the system and is prorated for the remaining seven years of warranty and does not include shipping and labour costs associated with warranty support. The canopy and the motor (if applicable) are covered by their respective manufacturer's warranties.

The foregoing does not cover and ShadeFX Canopies Inc. (SFX) makes no warranty with respect to:

1. Failures not reported to SFX within (30) days of delivery/installation.
2. Failures or damage due to negligence, other than that of SFX, accident, abuse, improper installation, improper operation or abnormal conditions including abrasion with adjacent objects, or discoloration, staining, or physical damage from extended exposure to heavy wind that would cause violent flapping of fabric, or physical damage from natural flora or fauna.
3. Shade canopies that have been in any way tampered with, repaired or altered by anyone other than an authorized representative of SFX.
4. Shade canopies damaged in shipment or otherwise without the fault of ShadeFX Canopies Inc.
5. Expenses incurred by the Purchaser in an attempt to correct or repair any alleged defect.

6. Any losses, costs, expenses, liabilities and damages (including but without limitation to loss of use or profits, damage to persons or property, all liabilities of the purchaser to its customers or third persons, and all other special or consequential damages), whether direct or indirect, and whether or not resulting from or contributed to by the default or negligence of ShadeFX Canopies Inc., its agents, employees or subcontractors, which might be claimed as the result of the use or failure of the product shipped.

Purchaser shall not return canopies or parts thereof alleged to be defective without the approval of SFX. All parts claimed defective shall be substantially manifested by the purchaser to the satisfaction of SFX prior to any product being returned to the factory. The SFX factory will not accept collect shipments without prior written approval and authorizing claim code. SFX makes no further warranty, either express or implied or by trade usage in connection with the design, sale or use of its products. The liability of ShadeFX Canopies Inc. on its warranty shall in no event exceed the cost of correcting the defects in the product sold or replacing the same with non-defective product.

This warranty stated herein is in lieu of all other warranties expressed or implied, or merchant ability, or fitness for particular use and under no circumstances will Seller be liable for incidental or consequential damages.

COMPONENT MANUFACTURER WARRANTIES

If your Warranty issue involves the canopy fabric or the motor drive, ShadeFX will facilitate support and continue to be your one point of contact to resolve any claims within the coverage of the following manufacturer's warranties:



SUNBRELLA FABRIC CANOPY

WARRANTY - This limited warranty is valid only if a copy of the invoice for the item purchased is submitted showing date of original purchase.

WHAT IS COVERED? - This limited warranty covers the fabric becoming unserviceable because of loss of color or strength from normal usage and exposure conditions, including sunlight, mildew and atmospheric chemicals. Consumer is responsible for normal care and cleaning of the fabric. This warranty covers fabric only. Glen Raven's liability is expressly limited to this warranty.

HOW LONG IS THE COVERAGE PERIOD? - For Sunbrella®, Sunbrella Plus® and Sunbrella Firesist® this limited warranty coverage runs for five years from the date of original installation.

WHAT WILL GLEN RAVEN DO? - Glen Raven will supply new fabric free to replace the fabric that becomes unserviceable.

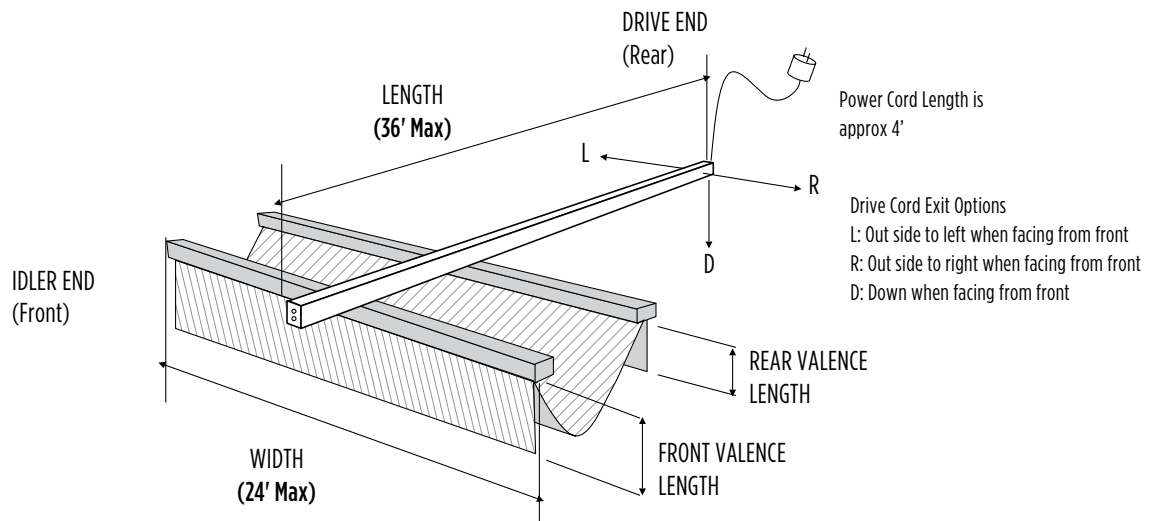
HOW CAN YOU GET SERVICE? - Call the dealer or retailer from whom you purchased the product, to inspect the claim. They, in turn, will contact the manufacturer of the item purchased. The manufacturer will then contact Glen Raven and secure replacement fabric for you.

SOMFY DRIVE MOTOR

Somfy offers end product suppliers a 5 year warranty on all motors and controls. Specifically, Somfy warrants its motors and controls to be free from defects in material and workmanship under normal and proper use for a period of 5 years commencing with the date stamped on each product. If the Somfy product fails within this 5 year period, we will repair or replace it free of charge through your end product supplier.

**PRODUCT WARRANTY AND CONTACT INFO:
CALL TOLL FREE: 855-509-5509 FOR IMMEDIATE SUPPORT**

SHADEFX ORDER FORM



Bill To:

Ship To:

Length of drive beam (overall length tip to tip)

Width of canopy wings (overall length tip to tip)

Width of fabric on wings

Drive Type ☐ No Drive Rope Pulley: ☐ Left ☐ Right ☐ Down ☐ Motor

Wing Type ☐ Standard ☐ Arched

Drive Beam & Wing Finish ☐ Aluminum ☐ White ☐ Custom Color

Fabric Selection Name and #

Front Valance (standard is 6")

Rear Valance (standard is 6")

Maximum allowable canopy drop (22" from bottom of joist is standard)

Net Purchase Price (excluding taxes and freight)

Total Amount

Authorized By/PO #:

Date: