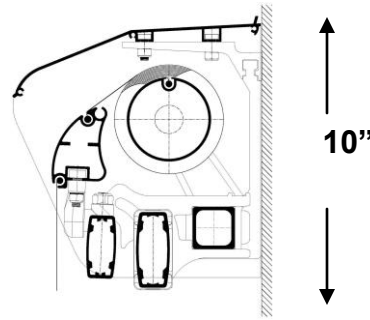


SUNAIR®

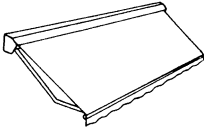
Retractable patio awning





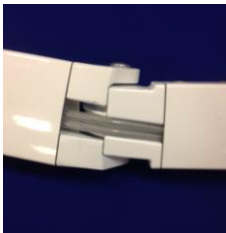




15 year limited
frame warranty

- Highest quality Lateral Arm Awning.
- Forged aluminum elbow and shoulder components.
- Double stainless PVC coated cable arm design for durability.
- 4:1 / 8:1 Bevel gear for most efficient operation.
- All aluminum extruded front bar, Torsion bar, and roller tube.
- Powder coated components and extrusions.
- A stop in the gear to prevent the fabric from over rolling
- Stainless steel fasteners
- Optional: One-piece aluminum hood system.
- Optional: XP Cross over arms & Valance Plus.

The Sunair® retractable patio awning model is the matriarch of our retractable awning line. This product has evolved over the years as a top of the line awning product on the market using only the finest materials, with extremely attractive styling. The Sunair® model also comes standard with many of options not normally associated standard on other awning system.

Awning Style	Type	Standard Frame Colors	Standard Widths	Standard Projections	Recommend Application	Recommend Fabrics to Use
	Sunair Lateral Arm Awning	White, Ivory, Mocha, Brown, Bronze, Grey, Taupe Forest Green, & Black	Through 35' 40' Possible	4'2", 5'7" 6'11", 8'7", 10'2", 11'6", 13'0" 14'0"	Deck, Patio, or Storefront	Para, Sunbrella Sattler Dickson

<u>SUNAIR® FEATURES:</u>			<u>COMPETITION</u>	<u>SUNAIR® BENEFIT:</u>
ARMS		All arm parts under stress are made of forged aluminum including the shoulder, elbow, and arm components. All arms 8' 7" and above use three heavy duty steel springs.	Typically the competition uses all Die-cast or extruded aluminum arm parts. The competition typically uses one or two springs to save on cost.	Forged aluminum arm components are stronger than all die castings or extrusions resulting in a stronger awning against the elements. Three heavy duty steel springs provide better arm tension and longer arm life.
FLEXIBILITY		Sunair® uses only the strongest materials yet is engineered for flexibility with a unique two way movable front arm attachment.	Most systems use a single front pin that only moves in one direction.	Our unique two way movable front arm attachment relieves strain, increases flexibility and strength in the arm which reduces damage.

<u>SUNAIR® FEATURES:</u>			<u>COMPETITION</u>	<u>SUNAIR® BENEFIT:</u>
ELBOW		<p>The Sunair® uses twin high quality stainless aircraft cable covered in a vinyl PVC sleeve.</p> <p>The hinge is triple angled with an elliptical cable radius.</p>	<p>Typically the competition uses a single smaller cable which is not always coated.</p> <p>Most systems do not have this angle and the fabric rubs on the arms.</p>	<p>Twin covered cables are far superior to a single cable, as cable wear is reduced, allowing better arm and fabric tension and durability.</p> <p>The elliptical cable radius increases tension as the awning extends. The angles help keep the fabric from dragging on the arms.</p>
FABRIC		<p>Hundreds of 100% acrylic premium grade solid and striped fabric colors to choose from. You surely will find a fabric to suite your need and taste.</p>	<p>Sometimes the competition uses vinyl or a non acrylic fabric. Some companies use poor quality lighter thickness acrylics fabrics.</p>	<p>Acrylic fabric is more attractive and breaths better than vinyl. Vinyl traps heat and will crack over time. Acrylic fiber is also resistant to fading and mildew and has a water repellant Teflon coating.</p>
PROFILES & PAINT		<p>All extrusions and components are exclusively made of the highest quality aluminum. The extrusions and aluminum parts all electro statically powder coated.</p>	<p>The competition often mixes aluminum and steel profiles to save on cost. Many competitors also say that they powder coat the components, but they actually wet – lacquer the extrusions to save on cost.</p>	<p>Aluminum extrusions are strong, yet will not corrode over time like steel. This equates to a longer lasting awning.</p>
GEARS		<p>Sunair® uses a heavy duty German 4:1 ratio bevel gear with a stop. A 13:1 gear is used on larger widths.</p>	<p>The competition often uses inferior quality 7:1 gears without a stop</p>	<p>The 4:1 gear is the most efficient gear made. This gear minimizes the time and effort needed in operating a manual awning. The stop eliminates fabric damage due to over rolling.</p>
THREAD		<p>All fabrics are sewn with Tenara® thread. This thread is manufactured from GORE-Tex, and is clear and nearly invisible.</p>	<p>The competition typically uses a synthetic thread. Often the competition cuts corners and uses only a white thread which is very visible on the fabric.</p>	<p>Tenara® thread is made of Teflon and will not deteriorate from exposure to the elements. The clear thread is nearly invisible on most fabric colors.</p>



IS THE CLEAR CHOICE!

SUNAIR® OPTIONS:

MOTORIZING



Telis 1 remote
for RTS motors

Standard
toggle switch

Eolis Wirefree
Motion sensor

Sunis Sun
sensor

MOTORIZING YOUR AWNING MAKES IT EASY TO OPERATE

The SOMFY RTS motor features an integrated radio receiver that allows you to operate the awning by remote. With the plug-in cord, you can eliminate the electrician and plug the motor into an exterior outlet. This motor can be hard wired as well by cutting off the plug at the end of the cord.

Somfy motors are also available as a traditional hardwire system and a normal toggle switch can be installed inside on the wall. With a simple flick of a switch either on the wall or with a remote, the awning will extend or retract automatically

SOMFY offers two Sun and Wind systems. These sensors either retract or extend your awning when sunny, or help protect it from damaging wind.

The Battery operated Eolis Wirefree motion sensor can be used if you only require wind control. Add a Sunis sun sensor for sun control. These controls are battery operated and do not require an electrician.

9 STANDARD FRAME COLORS

Note:
Standard colors depicted
on right are not exact.
See sample color chips for
actual color.



The Sunair® model is available in 9 each standard powder coat frame colors, the most in the industry. Over 200 each custom “RAL” frame colors are available by special order and upcharge.

100's OF FABRIC COLORS

FABRIC



Sunair® offers hundreds of 100% acrylic fabric colors from the leading national fabric weavers like, Tempotest by Para, Sattler, Sunbrella, and Dickson by Glen Raven Mills.

Fabric Covers:

Every sewn fabric cover from Sunair® is cut and sewn using state of the art computer aided ultrasonic machines, assuring a better fit and performance of the fabric on the awning frame.

All fabric covers are sewn with Tenara® clear Teflon Thread.



OPTIONAL HOOD

Sunair® offers an optional aluminum one piece hood, made from the highest quality aluminum. The hood protects the fabric when the awning is in retracted position. With the aluminum hood, your awning is always automatically covered when you retract it. If the awning is mounted under an overhang protruding at least 10", then the optional hood is not needed.



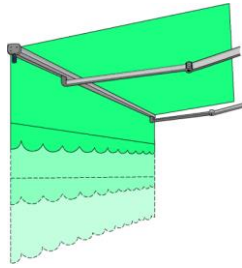
VALANCE PLUS

Maximum projection manual 13'

Maximum projection motorized 11' 6"

Maximum width acrylic fabric 20'

Maximum width mesh fabric 24'



The valance plus is an optional roll down drop valance. This valance is great for extra shade on western exposures when the sun is low on the horizon. Max height is 4 ft. on valance.

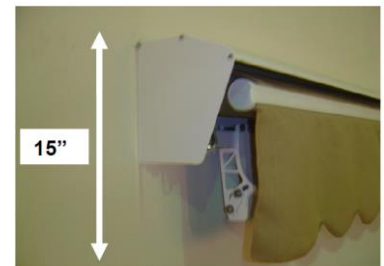
Available motorized or manual. If motorized you need to upgrade to a Telis 4 remote.

Available with Ferrari Soltis 86 or Recscreen 5000P. You can also choose an acrylic fabric. Ask your Sunair® dealer if this product is right for you. Darker mesh fabrics will block the sun, and also maintain some view through the fabric. Not maximum width different fabrics.



SUNAIR® XP CROSSOVER ARMS

If the area on the wall to mount the awning on is very narrow, but a larger projection is desired, the Sunair® XP with crossover arms offers the ability to overlap the arms in order to fit larger projection arms onto a narrow frame. This cross-arm version is available when the projection exceeds the width. Do note that the roller assembly is 15" tall requiring a larger valance. Example: Above awning is 11' wide by a 13' projection.



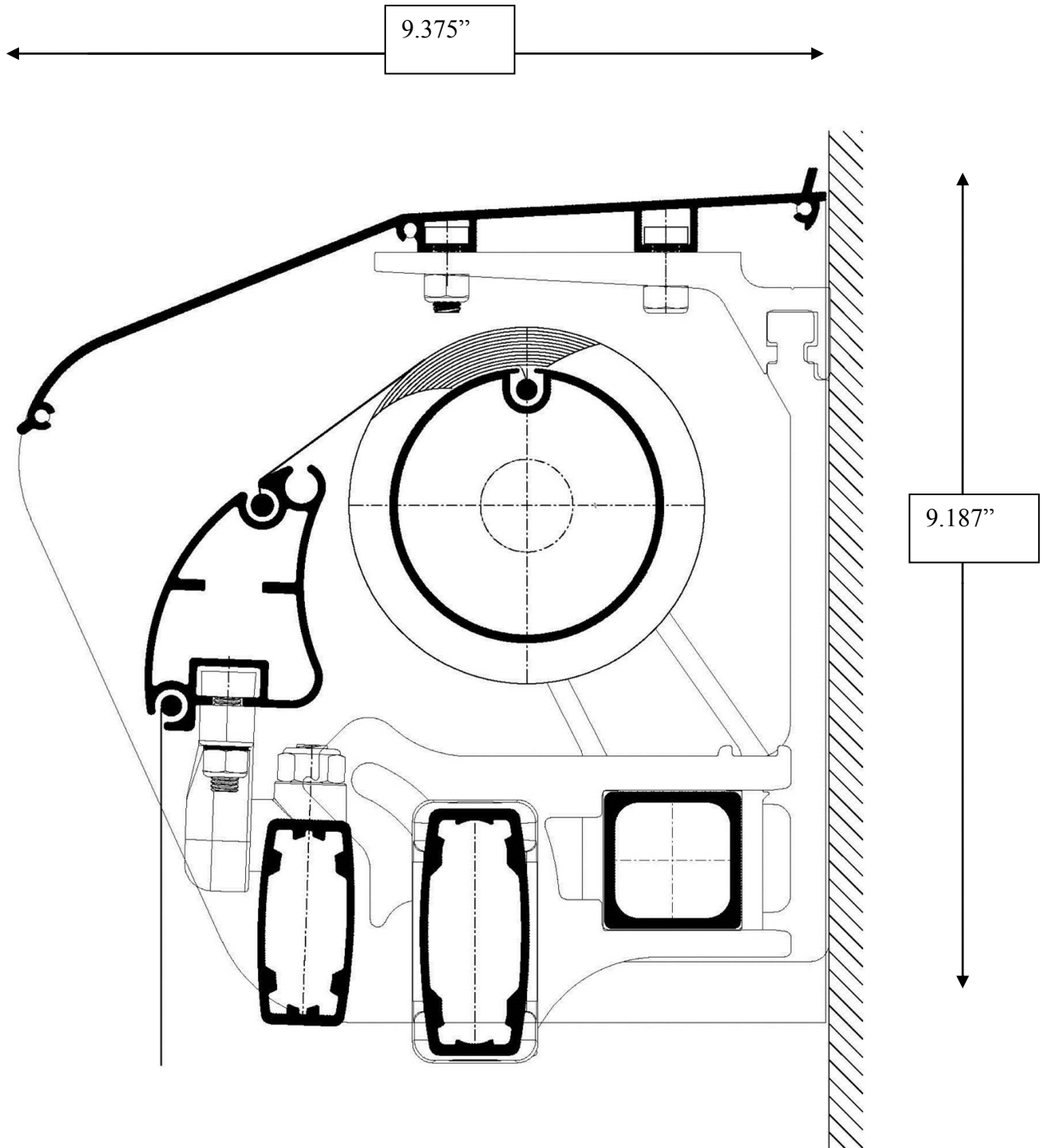
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Jessup, MD 20794

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Rev 03/24/16

Technical Cross Section of Assembled SUNAIR® Lateral Arm Awning



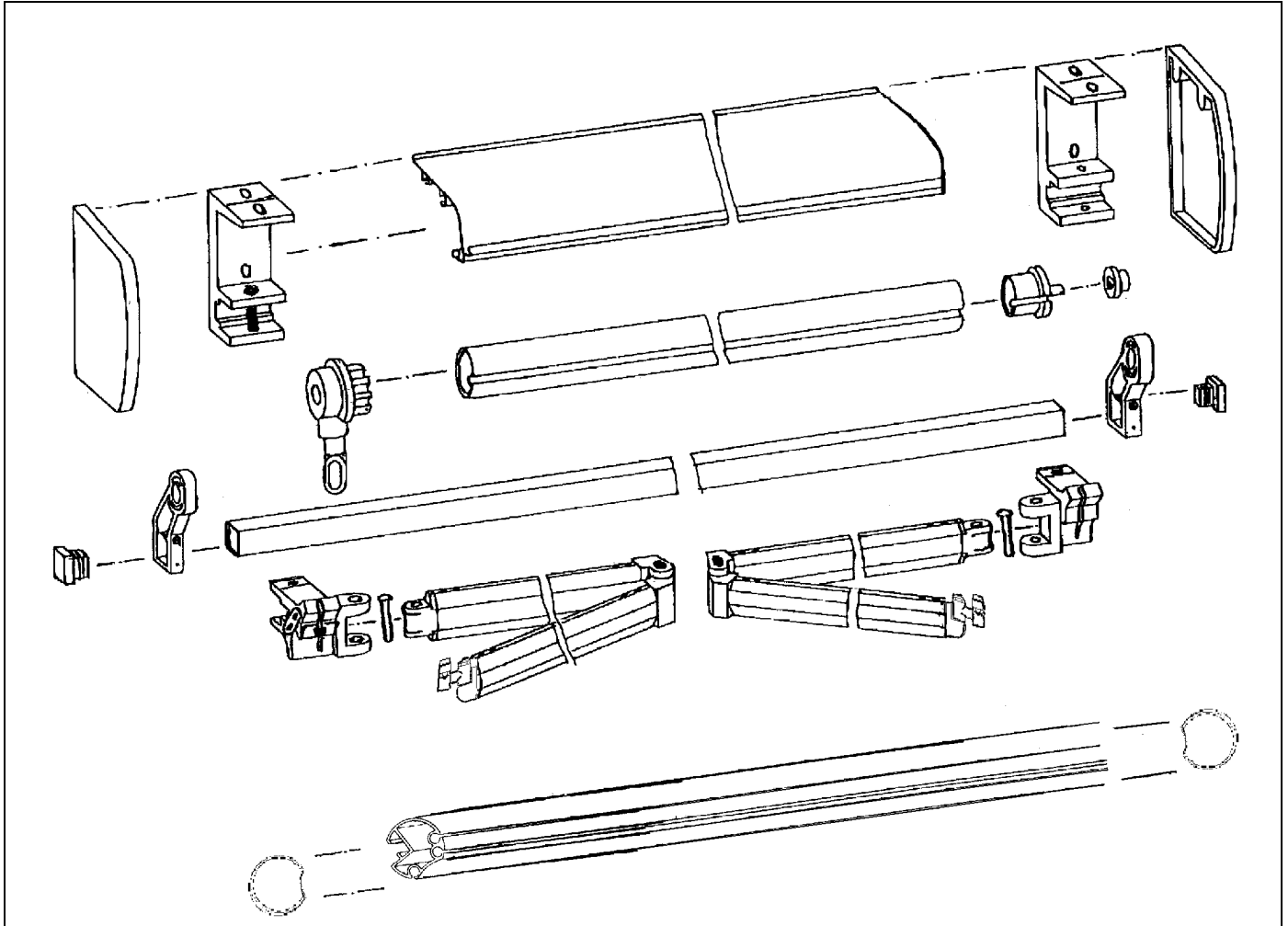
(Illustration Not to Full Scale)



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SUNAIR®

EXPLODED VIEW



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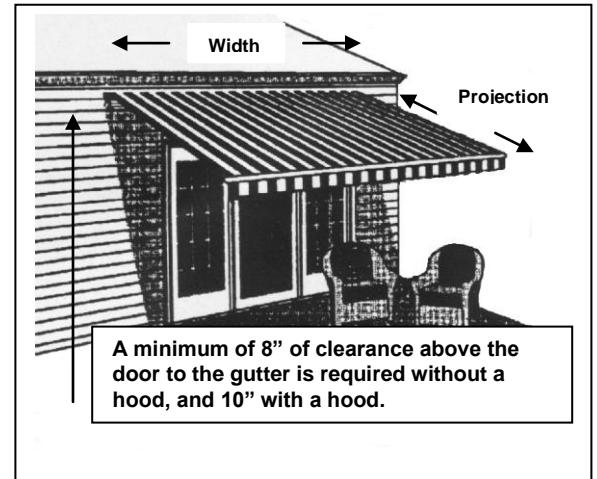
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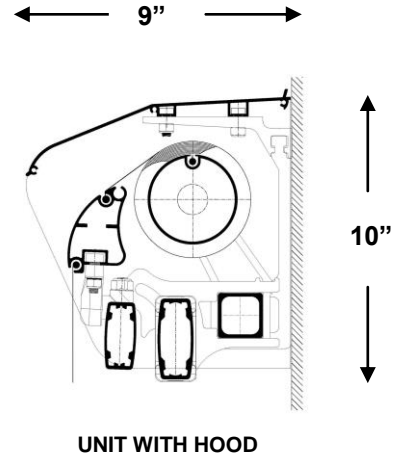
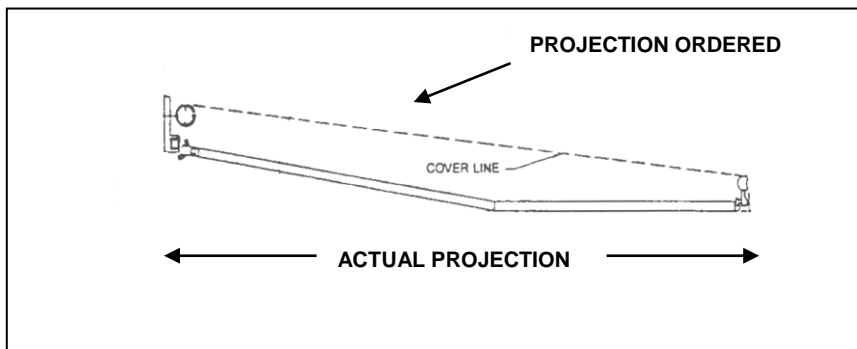
SUNAIR® MEASURING:

WIDTH:

The width is based upon the size of the deck. Due to the large sizes of some decks it is not always necessary to cover the entire deck. Make sure the wall is free of down spouts, chimneys and electrical conduit. Any object protruding out from the wall will interfere with the roller mechanism. Note the hood is always 1" wider than the width of the awning frame. The fabric width is always 5" less than the awning frame on units up to 20' wide, and 5 ½" less on units over 20' wide.



The roller assembly of the SUNAIR® measures 8" high without a hood and 10" high with a hood. Be certain that you have at least 8 – 10" of unobstructed mounting surface (see sketch below right).



The SUNAIR® Lateral Arm Awning is designed for residential decks, patios and commercial storefronts. Smaller projections should be used for a storefront awning. The awnings are designed for sun protection; they are not designed to withstand wind or heavy rain and should not be sold for such purposes. As a dealer you are responsible for alerting the customer of the rain and wind restrictions (see warranty). With an ideal pitch the awning may be used in light rain if monitored at all times. If while using the awning during a rainy day make, sure no water buildup occurs on the awning.

PROJECTION:

Determine the ground clearance above the door or window, and then determine the desired projection. Refer to the pitch chart below for the ideal mounting height and pitch for the desired projection. The greater the pitch on the awning the less projection it will have (see pitch chart). When the awning is extended the front bar should be at least 7 ft off the deck or patio. On a commercial installation the distance from the ground to the front bar should be at least 8 ft. The pitch chart indicates that for every 12"

of projection of the awning the mounting brackets should be located 3" higher than the front bar when the awning is extended (3/12 rule).

For example: The brackets on an awning with 10' projection needs to be mounted 9'6" from the ground on a residential installation, $10' \times 3" = 2'6"$ & $2'6" + 7' = 9'6"$). Because the ideal pitch may not always be attained, it is possible to install the awning lower than the ideal pitch. While the "3/12" rule is ideal, it is perfectly fine to install the awning with a 2/12 pitch. A 1/12 pitch is absolute minimum. Maximum pitch is 45°.

Note: A good rule of thumb is never to install a Lateral Arm Awning below 8 feet at the top of the installation bracket. If only eight feet is attainable do not install an awning with more than 10'2" projection.

If the installation height is too low or the desired projection is too great for the available space the awning may have to be installed on the roof (see our installation manual).

HOOD:

All awnings should have a hood to protect the fabric roller tube when the awning is installed on an open wall. If the house has an overhang of at least 10", and the awning is fully protected by the overhang when retracted the hood is not needed. The hood system is 1" wider than the width of the awning.

Note: AU16C brackets must be used with the "Decora" hood. The AU16 upgrade is included in the Decora Hood price.

MOTOR vs. MANUAL:

Always try to recommend a motor! A motor greatly enhances the product with the ease of operation, and the customer will use the awning more often. The decision to motorize the awning may depend on the budget of the potential buyer. The following information should be taken into consideration when deciding on the type of operation.

- All awnings with a width not exceeding 20 ft can easily be manually operated.
- A 6ft projection is easier to crank than a 13 ft projection.
- At 21ft wide a third arm is added. Operating manually takes longer because the higher ratio gear 8:1 or 13:1 that is used instead of the 4:1 gear used for all awnings up to 20' wide.
- All awnings above 20ft wide should be motorized.

Always offer the CMO (manual override) motor for larger projections. Larger projection awnings are more sensitive to wind gusts and you can still manually operate the awning if a storm arrives and the electricity is shut off.

The RTS motor features an integrated receiver that allows you to operate the awning by remote. With the plug-in cord, you can eliminate the

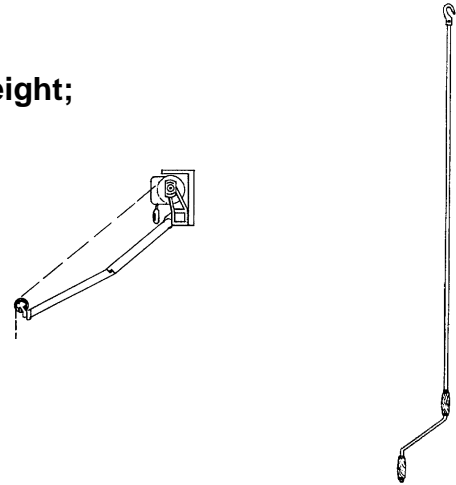
electrician and plug the motor into an exterior outlet. The RTS motor is available in standard and CMO. Choose either a Telis transmitter or a Deco Flex wall switch to operate the awning.

CRANK SIZE: (Manual & CMO motors)

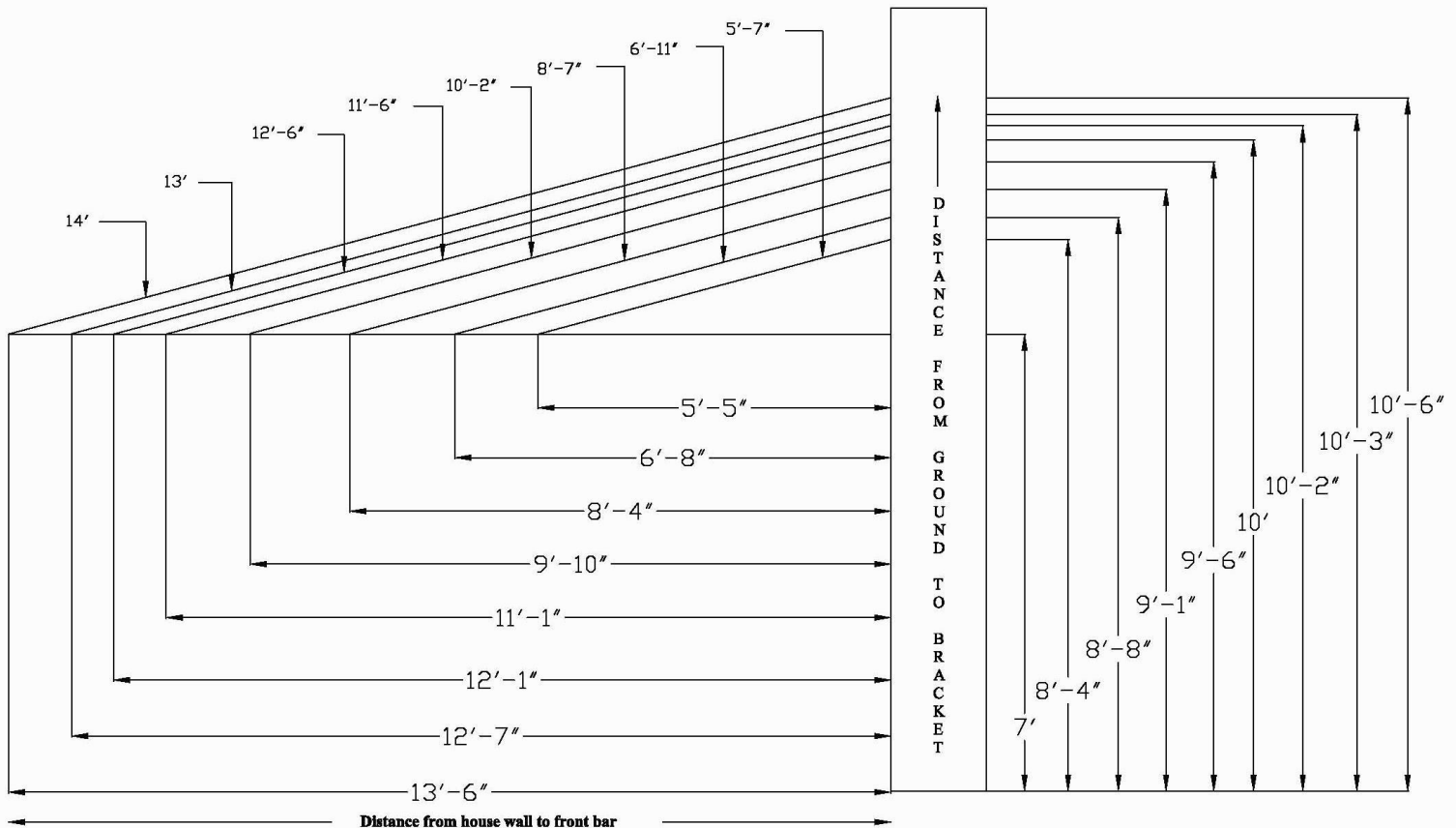
The ideal crank size depends on the mounting height;

MOUNTING HEIGHT USE A:

8 ft high	57" crank
9 ft high	65" crank
10 – 11ft high	77" crank
12ft high	97" crank



PITCH CHART AND IDEAL MOUNTING HEIGHT

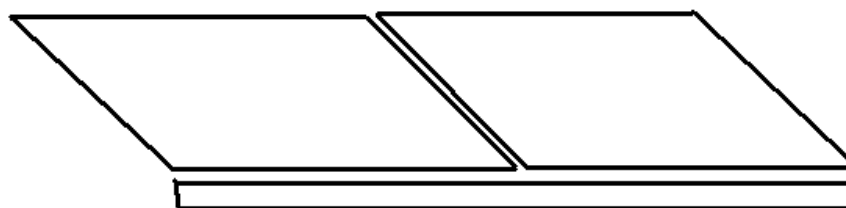


Note: With the awning installed at the proper pitch, you will loose some projection (see above)

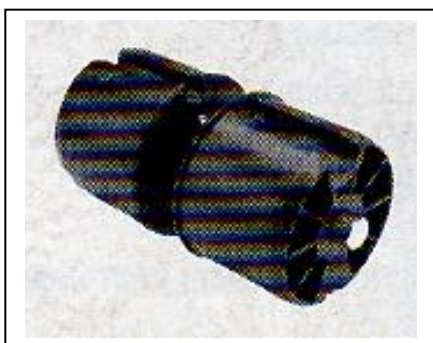
Split unit options

AU54 Split Unit is available for the SUNAIR® awning only, with maximum projection of 14 ft. The SUNAIR® unit will have an intermediary shaft AU17 with a double gudgeon AU60. The fabric will then be split on two roller tube sections with a gap of about 3" in the fabric. The two roller tubes will be operated with one motor /gear. There is an extra charge for this option. The split can be anywhere along the width and does Not have to be in the center. This option may eliminate center supports depending on the width of each section. Indicate on the order the width of each section, and include a sketch.

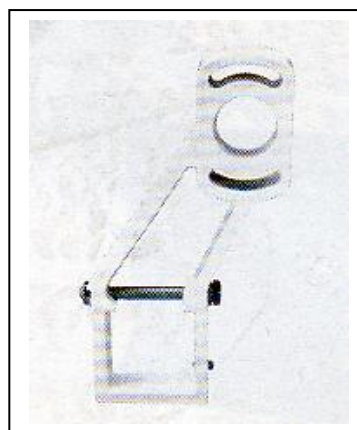
← Unit width →



Valance can be in one piece or two separate pieces. Any style valance is available



AU60 Split Center Gudgeon
For: Split Rollers

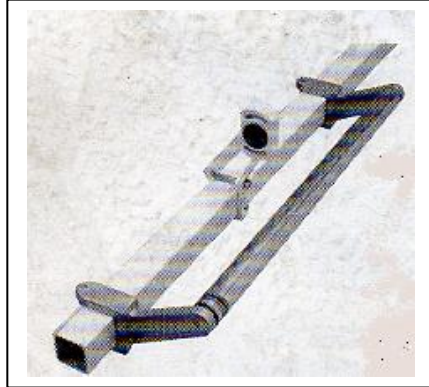
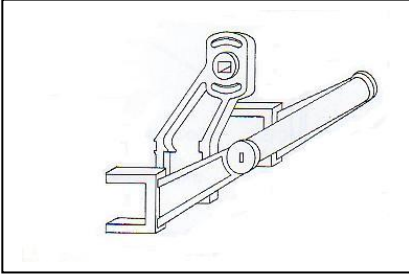


AU17 Shaft Support

Installation of awning with AU54:

The two units will be fully assembled except for the valance. Slide the two units together, and then lift the awning into the brackets. Make sure that the two grooves where the fabric is attached to the roller tubes are lined up with each other before pushing the two pieces together. After the awning is installed in the brackets, then you can attach the valance. By removing the front bar end cap (AU28), you will see the second groove. After the mini roller is installed, you can install the valance in the front bottom groove. Make sure you lock the valance with fabric locks.

AU55 Split Unit is the same as a split unit above, however a small AU58 Mini roller with fabric is added to cover the fabric gap between the two covers. There is an extra charge for this option (See pictures below).



Installation of awning with AU55:

The two units will be fully assembled except for the valance. Slide the two units together, and then lift the awning into the brackets. Make sure that the two grooves where the fabric is attached to the roller tubes are lined up with each other before pushing the two pieces together. After the awning is installed in the brackets, then you can attach the small AU58 mini roller with the AU56/57 brackets in the middle, underneath, and covering the gap. As you are assembling the roller and the brackets on the square bar, you need to pre-tension the spring roller by turning the small square tab and the spring about 5 – 6 turns before inserting it in the brackets. This keeps tension on the fabric. As the awning extends, more tension is then added to the roller keeping the fabric taut. The arrow on the roller (Covered by fabric) should point outwards away from the wall, and towards the extension of the awning. The fabric for the mini roller is attached with AU70 spline in the fabric groove behind the groove where the fabric for the main cover is already installed on the front bar. By removing the front bar end cap (AU28), you will see the second groove. After the mini roller is installed, you can install the valance in the front bottom groove. Make sure you lock the valance with fabric locks



SUNAIR® AWNINGS & SCREENS

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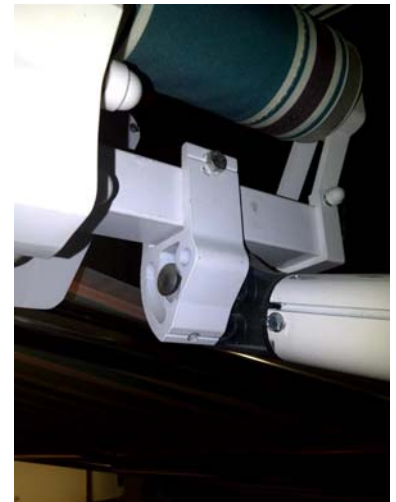
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PHOENIX, AZ**

**800 – 548 – 0408
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OUTRIGGER SPECIFICATIONS & INSTALLATION



NUMBER OF OUTRIGGERS:

Every awning installed with the Outrigger system requires a minimum of two Outriggers per awning. The actual number may vary and depends on the width and projection. The actual outrigger projection bar can only be mounted between the arms as not to interfere with the opening and closing of each arm. The distance between the Outriggers can not exceed 14 ft (see figure 1). If a third Outrigger is needed certain sizes requires the middle Outrigger to be installed off center. For the actual number of Outriggers needed, see the “Outrigger selection chart”.

INSTALLATION HEIGHT:

The Outriggers increases the functionality of a retractable awning. Your awning is now able to withstand more wind and possibly rain. To properly utilize the system for rain the awning must be installed with a proper pitch for rain. In order for the rain to properly flow off the fabric a 2 1/2” pitch must exist for every one ft projection.

NOTE: The Outriggers do not guarantee the awning system from wind and rain damage. A retractable awning should always be retracted when you are not on the premises.

Unit height of the total system is 10” without a hood, and 12” with a hood (see figure 2).

INSTALLATION:

The Outriggers have to be installed between the arms as the arms are in folded position. Retract the awning and determine location. The two outer Outriggers are located outside of the two outer arms. Typically the location is at one of the high points of the valance scallop. The Outriggers will then not interfere with the valance. **NOTE:** The height of the valance from the front bar to the top section of the valance scallop should not exceed 4 1/2”. Space the remaining Posts evenly and off center if necessary.

Attach the rear bracket to the square bar. Make sure the upper joint is lined up with the proper position of the Outrigger. The rear bracket can be attached either on the left or right side of the Outrigger (upper joint).

Now determine the length of the projection bar. Extend the awning. Slip the curve on the projection bar. With the curve the Outrigger should extend flush with the valance when the awning is fully extended. Cut the projection bars.

Now determine the length of the posts. Make sure your pitch is right on the awning before measuring for the post. When the awning is extended to it's fullest the cut measurement of the post should be the measurement from the deck to the bottom of the front bar minus 9".

Assemble the Outrigger. Place a rivet through the profile into the components to lock them in place. Bolt onto the deck and rear bracket.

The next step is to attach the front couplings to the front bar. Open the front bar end caps and slide the couplings on. Align the couplings with the Outriggers, and tighten. Now slide the trolley on the Outrigger profile and attach with bolts. Note: You may have to retract the awning slightly to align the trolley with the coupling.

If the system has more than two posts you have to loosen the Lateral arms from the front attachment(front bar) in order to slide the new couplings on to hold the trolleys. Retract the awning and tie the arms together close to the front arm attachment to take the pressure off them. Extend the awning one inch. Mark the place with a pencil where the Lateral arms attach to the front bar In order to re-attach them in the same place. Note: The fastening system is the same for the trolley coupling as for the arm attachment. Detach the slider with the two bolts from the coupling and push it towards the center of the awning. The new slider with the two bolts will become your new arm front attachment. You may have to re-adjust the arms when done. Make sure all bolts are re-tighten, especially the front arm attachments.

When the outriggers and trolleys are fully attached drill the whole for the pins. The pins are used to tighten the fabric. Extend the awning fully. Drill a 1/4" whole horizontally through the profile about 1" behind the trolley. Attach the pin with the chain on the post with the screws supplied. Make sure you attach the pins within reach of the hole.

MOTORS:

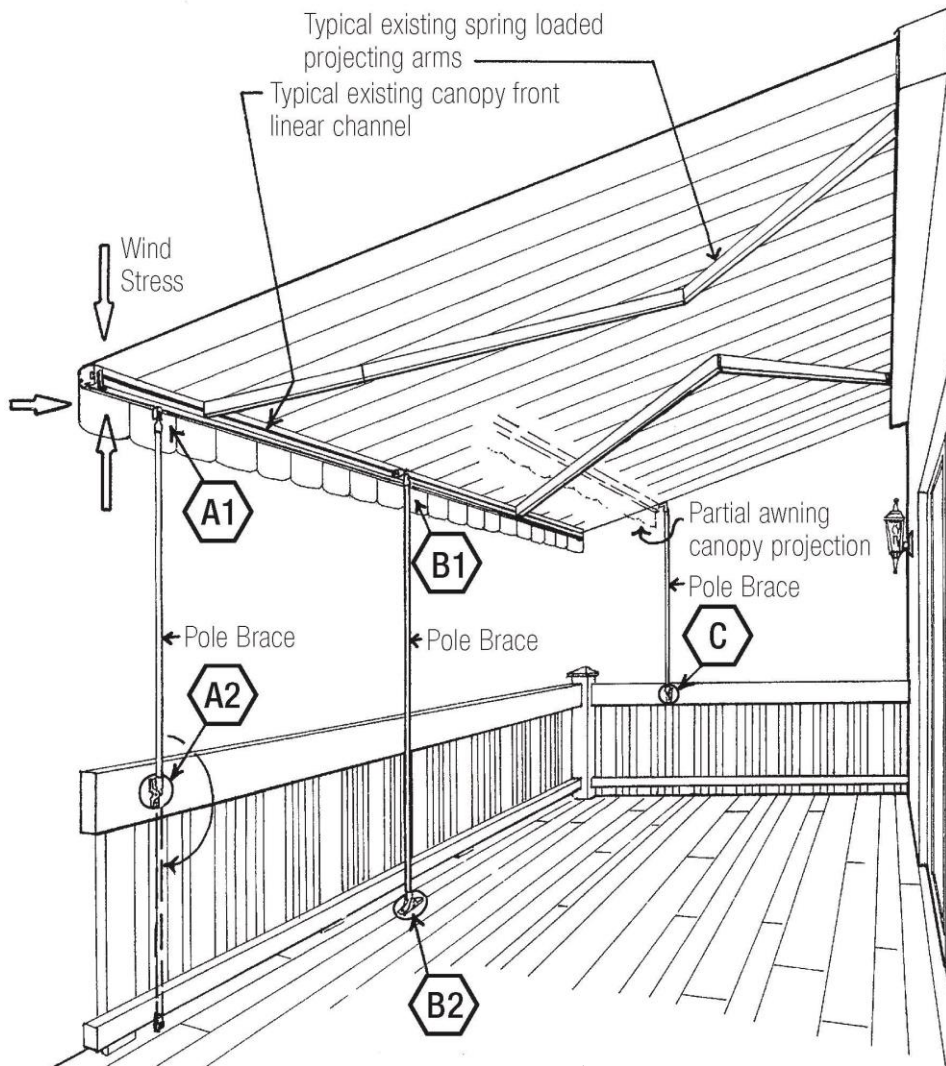
If using a motor with this system you have to use the CMO version. Use the manual override crank to tension the fabric. DO NOT use the motor to tension the fabric.

AWNING ASSIST BRACE



Typical Installation of the manually operable pole brace to a typical existing awning canopy

- A1 Top end of pole brace secured to bottom slot channel of existing front linear aluminum extruded channel.
- A2 Lower end secured to a existing rail or wall.
- B1 Top end of pole brace secured to rear slot channel of existing canopy front linear aluminum extruded channel.
- B2 Lower end secured to a existing ground building surface.
- C During the partial projection of a existing awning canopy the lower end of pole brace may be secured to ground surface or side rail or wall.



AU41 2015

Awning Assist Brace*

8 ft. Long

***Subject to availability**

Important!

- 1) **Minimum 2 posts per awning.**
- 2) **One (1) post per arm needed.**
- 3) **If 3 arms, 3 posts needed.**
- 4) **For Sunair, Sunstar, and Sunchoice models only**
- 5) **NOT for Suntube model.**
- 6) **Must be released before operating awning.**

AU41 Available Colors:

White, Mocha, Ivory

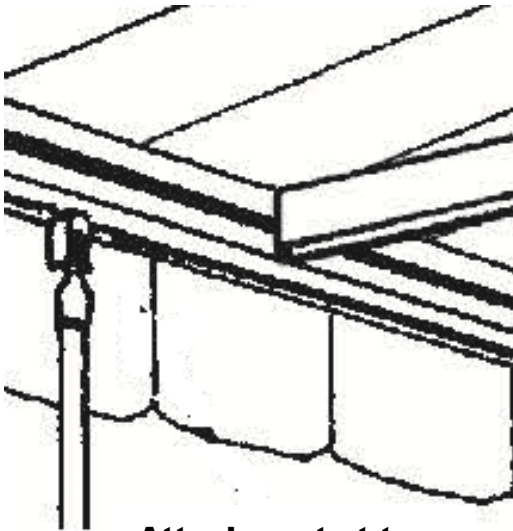
NOTE: The Assist braces provide added stability to a retractable awning when it is extended. Adding these posts does not make the awning into a stationary awning. There is also no guarantee the awning will not be damaged in wind. Damage to awning or property is NOT covered by the Sunair® warranty. Please see warranty and separate instructions for proper use of these posts.

Sunair® Awnings

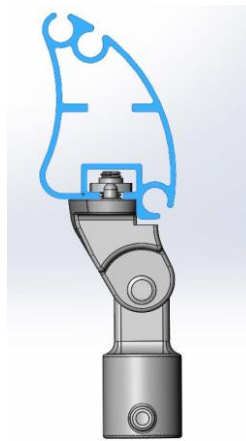
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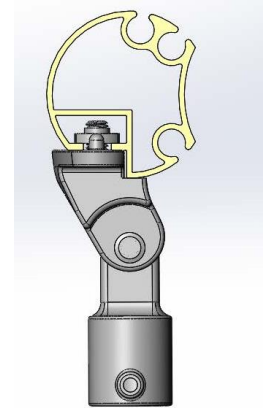
INSTALLING AU41 AWNING ASSIST BRACES



Attachment at top

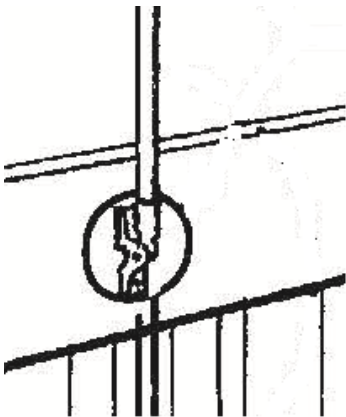


Sunair® Front Bar

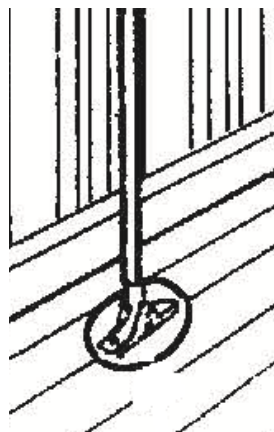


**Sunstar® &
Sunchoice® Front Bar**

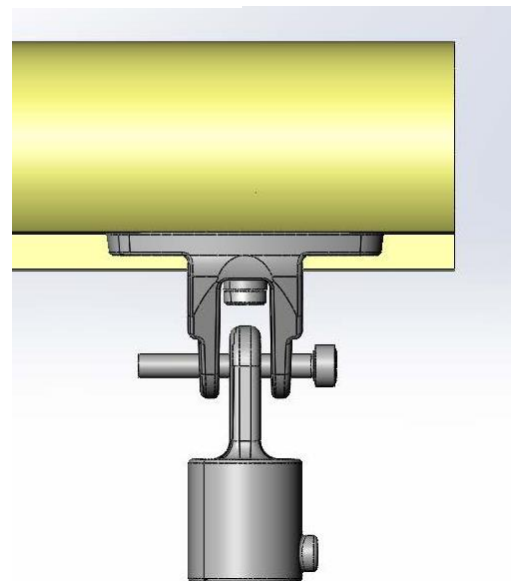
Note: Not available for Suntube model



Floor attachment #1



Floor attachment #2



8 ft. posts can be
cut down to
desired length.

Important!

- 1) Minimum 2 posts per awning.
- 2) One (1) post per arm needed.
- 3) If 3 arms, 3 posts needed.
- 4) Not for Suntube model.
- 5) Release Post prior to operating awning.
- 6) Posts shipped 8 ft. Long

INSTALLING AU41 cont...

Installation Instructions

Tools normally required: Level, Hacksaw or Plumber's Pipe Cutter, Screwdriver, Power Drill & Concrete Bits (for concrete applications).

Extend awning to full position and remove plastic end cap.

Assemble top bracket (2 lugs & center hole). see diagram

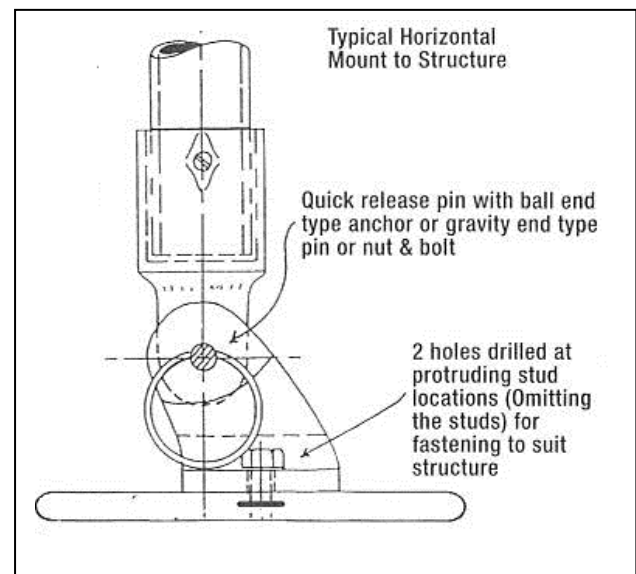
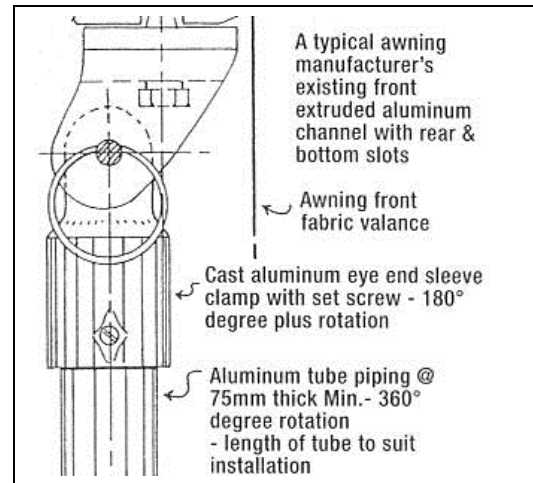
Insert into awning channel using appropriate bolts and discard extra's. Typically same as awning arm has been attached to. Attach top sleeve fitting with quick release pin.

Assemble Pole and bottom assembly as follows:

- Insert pole to slip end fitting
- Tighten and pin to bottom bracket
- Place plate into position (arrows parallel to top bar)
- Insert bottom bracket and twist 90°
- Align with top of slip end fitting and cut to size (pipe cutter or hacksaw)
- Insert and tighten

Place a level on pole to suit needs, pole must be 90° or leaning forward to reduce wind shear.

Bolt bottom plate to surface using four screws provided (Optional: Bolt bottom bracket without plate using 2 screws). Tighten all Screws.



NOTE: The Assist braces provide added stability to a retractable awning when it is extended. Adding these posts does not make the awning into a stationary awning. There is also no guarantee the awning will not be damaged in wind. Damage to awning or property is NOT covered by the Sunair® warranty. Please see warranty and separate instructions for proper use of these posts.

Any automatic wind sensors or automatic electronics must be removed and de-programmed before using the awning assist braces.



Sunair® Awnings

Jessup, MD

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