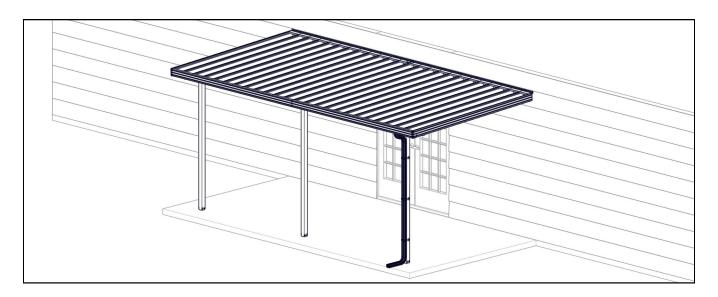
APOLLO PATIO COVER

INSTALLATION INSTRUCTIONS



Before You Begin:

Consult your local building department for any required permits

You may be required to obtain a building permit for this structure. Contact your local building department for details.

Read instructions thoroughly

Please read all instructions and notes carefully prior to assembly.

A solid attachment is required for all existing structures

All points of attachment to existing structures (such as house, deck, or patio) must be into solid, structurally sound, and secure material. Example: wood or metal studs, joists, headers, plates, or sills. Attachment may be made to block, concrete, brick, or stone veneer with suitable anchors, purchased separately. **Note:** Failure to properly fasten unit to wall, deck, porch, or patio may result in damage to the unit, damage to the structure it is attached to, and could cause serious bodily injury.

Check for all parts

Use the Parts and Hardware List to check for any missing parts. To prevent scratching of painted materials, place on a tarp or other protective material.

Assistance may be required during certain steps of assembly.

\searrow

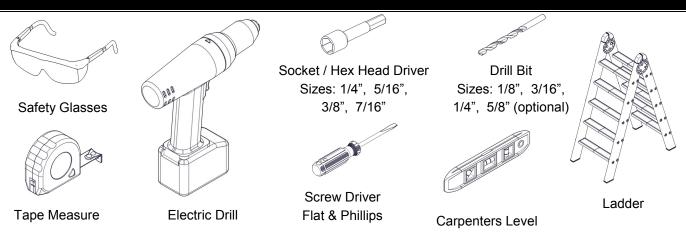
CAUTION

- Proper site preparation is required.
- Standard shade structure design does not include additional loads such as hanging heavy plants, swings, or other objects.

1

- DO NOT stand or sit on the shade structure roof.
- Repair or replace broken parts immediately.
- This kit contains parts with metal edges. Please be careful when handling.

Tools Needed for Installation



Other Required Tools: Gloves, Chalk Line, Silicone Caulking

Recommended Tools: Rubber Mallet, Carpenters Square, Pliers, Metal Hack Saw

Installation Notes and Tips

- Complete site preparation before beginning assembly.
- DO NOT attempt to assemble on a day with strong winds.
- Have assistance nearby to lift and secure parts in place.
- Cutting and drilling metal components will cause shavings which must be carefully removed by sweeping or brushing. If this is not done, the metal shavings will rust and stain the surface finish.
- It is recommended to lower the speed of electric drills during this installation. Installing Tek screws at a high RPM may cause the Tek screws to become damaged or break during installation.
- Avoid over-driving, under-driving, or driving at an angle to properly install fasteners. Over-driven
 fasteners can depress the material and allow water to collect around the fastener, which will corrode
 the surface finish. Under-driven fasteners can cause leaks and may back out over time.



- The center-to-center spacing of the roof panel locks must be maintained as the panels are installed.
 If this is not done, problems may not show up until towards the end of the installation when parts may
 appear to be cut too short or too long. If this happens, check each roof panel spacing and re-set if
 necessary.
- We strongly recommend using a high grade sealant, such as our 100% silicone caulk and sealant.
 Caulking should be applied uniformly and without skips. A poor caulking job can cause leaks.

Note: These are basic installation guidelines for our standard load units and may not be suitable to your specific installation. It is important to follow all local and national building codes when installing any exterior improvement product. If you have questions regarding the proper installation, please call us toll free at 1-888-768-8404.

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Safety Information

- Please read and understand this entire manual before attempting to assemble or install the product.
- Standard design for shade structures by our company meets 20 lbs. per square foot live load and 90 miles per hour wind load based on the International Building Code (IBC) 2009 and American Society of Civil Engineers (ASCE) 7-05 design code. Engineering for greater load requirements is available; please call 1-888-768-8404 for information. Local building codes should be verified before installation.
- The design of the shade structure as set forth herein pertains only to the components and assemblies
 as manufactured by our company. The design of and attachment to supporting
 structural elements are outside the scope of this guide. It shall be the Owner and Installer's
 responsibility to provide sound supporting structure and attachment and to consult with qualified
 individuals where the design or verification of such components is required.
- It shall be the Owner and Installer's responsibility to verify that local building code requirements are met and the proper permits are obtained prior to the installation. Professional engineering services may be required.

Site Preparation

(Materials NOT supplied with kit)

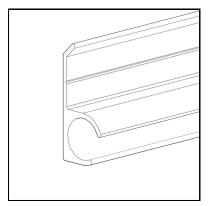
Note: Site preparation is required for this shade structure. Placing posts on a footing is highly recommended. Without footings, settling could occur. The manufacturer is not responsible for replacing parts damaged or property lost due to incorrect assembly.

Complete the site preparation and footings before unpacking parts and beginning assembly.

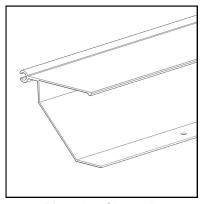
To prepare your shade structure site, follow the steps below:

- 1) Consult your local authorities for building codes and covenants before beginning foundation or installing shade structure.
- 2) Before any digging, check with local utilities to determine the location of buried cables, pipes, etc.
- 3) Minimum soil bearing strength at shade structure location is 1000 pounds per square foot. Actual soil conditions at shade structure location shall be verified and the specific footing requirements shall be designed by a qualified designer. It is the Owner and Installer's responsibility to verify soil conditions and requirements for compliance with local building codes.

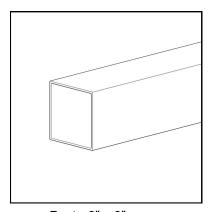
Parts List



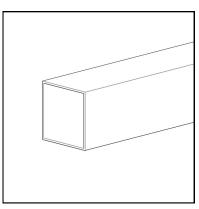
Awning Rail
Part Code: 11610



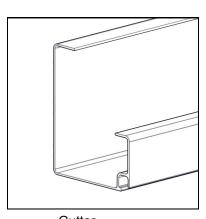
Mounting Channel Part Code: 11678



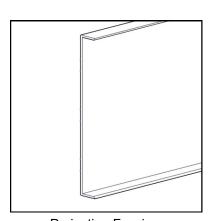
Post - 3" x 3"
Part Code: 11270



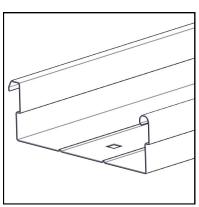
Header - 3" Box Beam Part Code: 11252



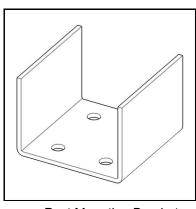
Gutter
Part Code: 11120



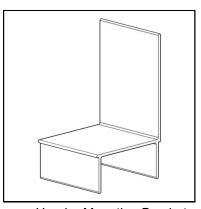
Projection Fascia Part Code: 11307



Roof Panel - 8" Flat Style
Part Code: 10206

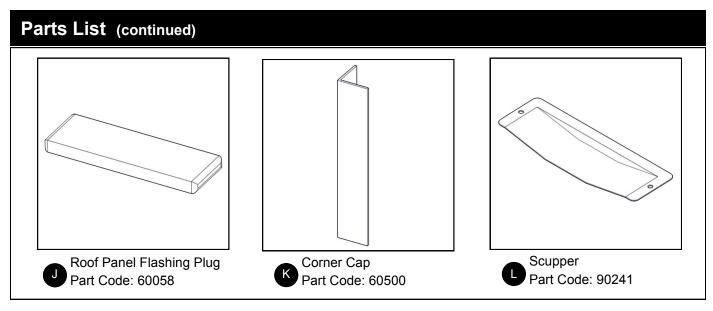


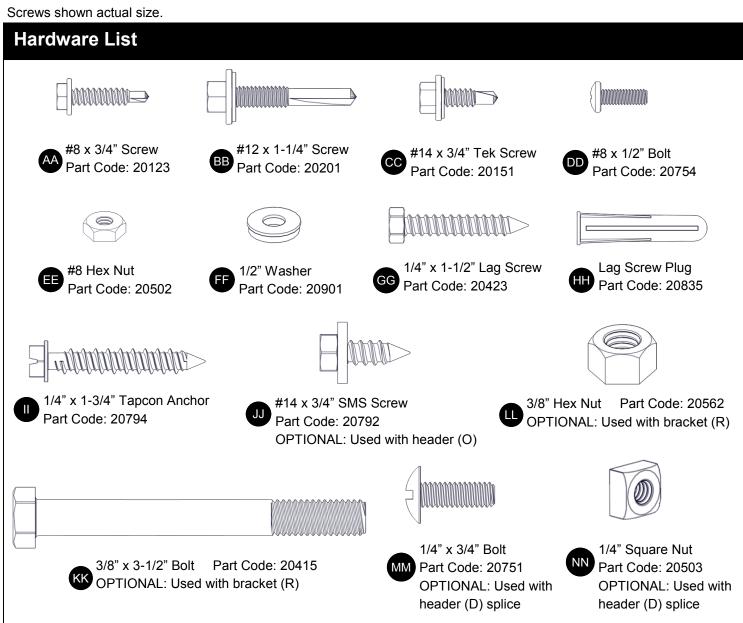
Post Mounting Bracket Part Code: 50100

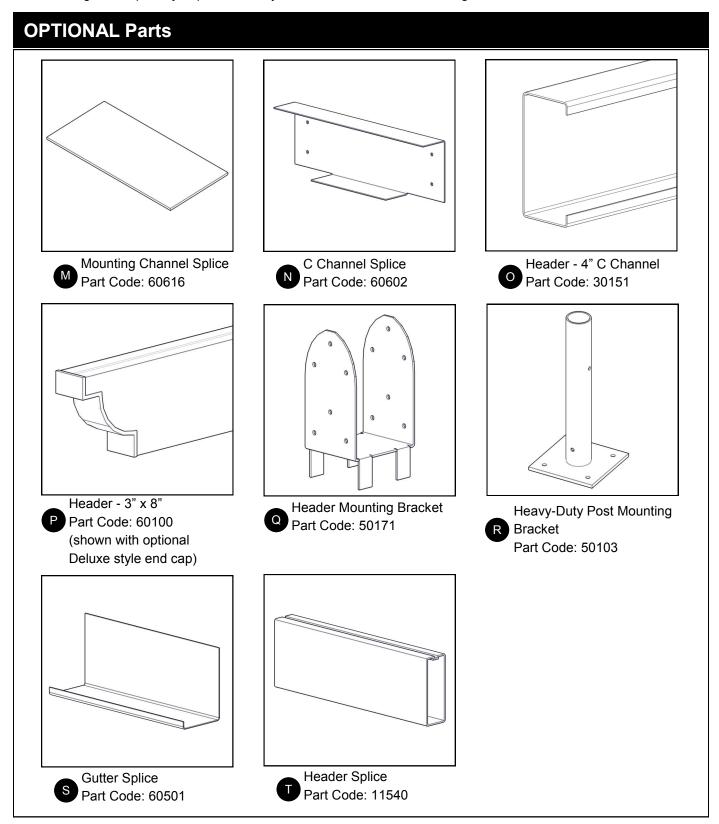


Header Mounting Bracket Part Code: 50101

NOTE: Length and quantity of parts will vary based on the size of the awning.







Required Parts Not Included In Kit:

If attaching shade structure to masonry surface (concrete, brick, or stone veneer), you may be required to purchase suitable anchors separately as the lag screws provided may not be sufficient. Check local building codes.

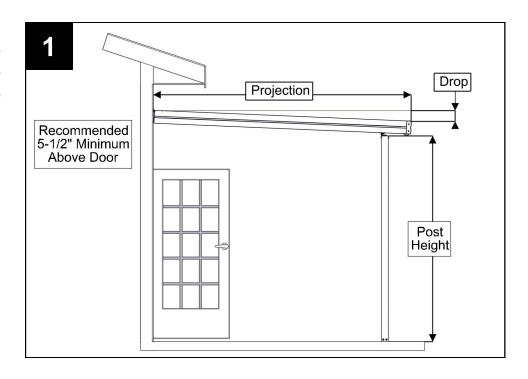
Mark a level line on the surface where the shade structure is to be mounted. Recommended 5-1/2" minimum above an out-swinging door or window.

It is recommended that the front height of the shade structure be lower than the mounting height 1/2" per foot of projection. It is NOT recommended to install the shade structure completely flat. DO NOT direct drainage toward the back of the shade structure.

To properly determine the mounting height, add post **(C)** length, plus header height, plus the required drop.

EXAMPLES:

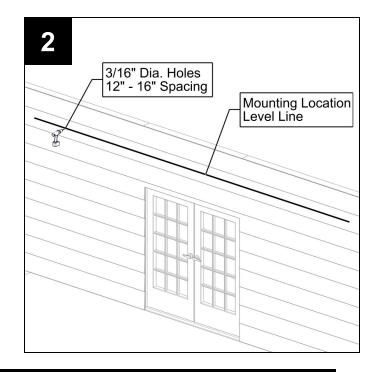
12'-0" Projection = 6" Drop 10'-0" Projection = 5" Drop 8'-0" Projection = 4" Drop



STEP 2

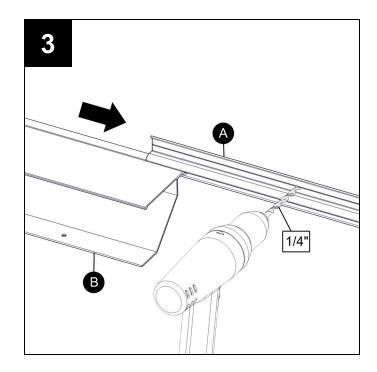
Using a 3/16" bit, drill holes every 12" - 16" through the mounting surface, depending on wall stud spacing.

NOTE: Shade structure must be attached to a solid structural support. DO NOT attach to sheathing, siding, flashing, or any other non-structural surface.



Using a 1/4" bit, drill holes through awning rail (A) to match hole spacing on the mounting surface.

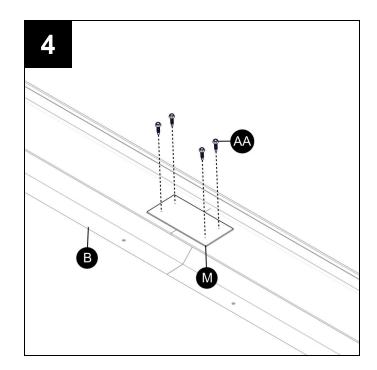
Slide the hinge of mounting channel **(B)** into the slot of awning rail **(A)**.



STEP 4 - MOUNTING CHANNEL SPLICE

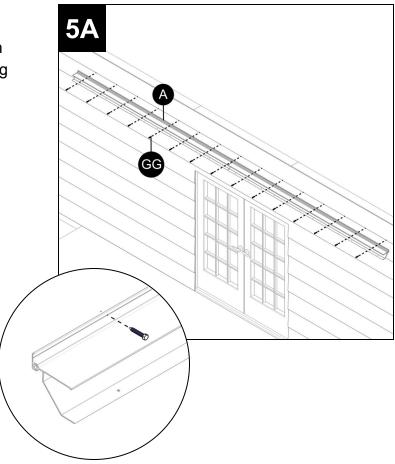
Complete this step only if mounting channel (B) is in two or more pieces.

Apply caulk to mounting channel splice **(M)**. Attach two pieces of mounting channel **(B)** using (4) #8 x 3/4" screws **(AA)**.



STEP 5A - MOUNTING TO WOOD FRAME

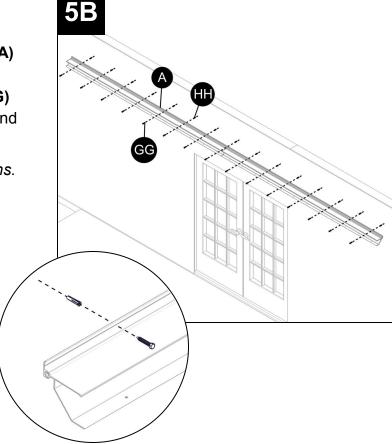
Align the holes in awning rail (A) with the holes in the mounting surface. Attach awning rail (A) using 1/4" x 1-1/2" lag screws (GG) through each hole.



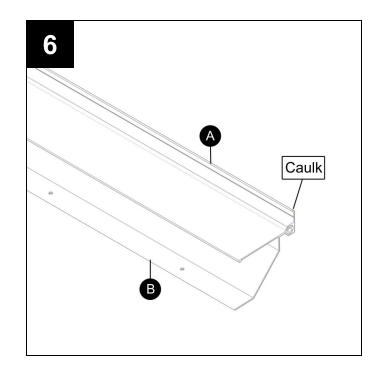
STEP 5B - MOUNTING TO MASONRY

Insert lag screw plug **(HH)** into each hole in the mounting surface. Align the holes in awning rail **(A)** with the holes in the mounting surface. Attach awning rail **(A)** using 1/4" x 1-1/2" lag screws **(GG)** into each lag screw plug **(HH)**. The plug will expand inside the wall when the screw is installed.

NOTE: This may not be suitable for all installations. Check local building codes. If using masonry anchors purchased separately, follow the manufacturer's guidelines for proper installation.



Apply a continuous bead of caulk along the back side of awning rail (A).



STEP 7

Using chalk lines, mark the outline of the shade structure on the foundation. Mark the location of each post by subtracting the desired overhang from the overall dimensions. If layout drawings were received with your order, use those as the guide.

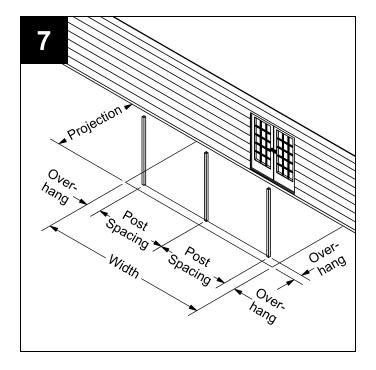
On standard load units, the posts should be spaced no more than 10'-0" apart with no more than 2'-6" overhang from either side of the cover.

If the header is in two or more pieces, be sure a post is positioned under each splice.

Depending on available surface and local building codes, there are several options for mounting the posts (C).

Standard Bracket Installation: Go to page 12
OPTIONAL Heavy-Duty Bracket Installation:
Go to page 13

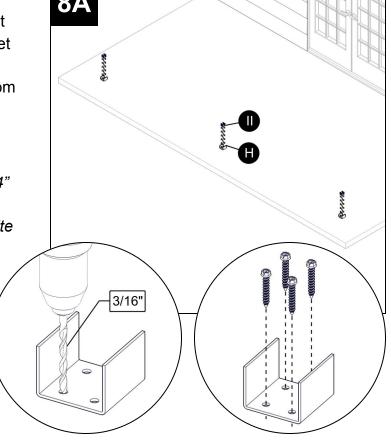
Buried Post Installation: Go to page 14



STEP 8A - STANDARD BRACKETS

If you received the standard post mounting bracket **(H)**, mark the location of the (4) holes in the bracket at a post location. Using a 3/16" bit, drill holes to match the pattern on the bracket. Remove dust from the holes and attach post mounting bracket **(H)** to the foundation using (4) 1/4" x 1-3/4" Tapcon anchors **(II)**.

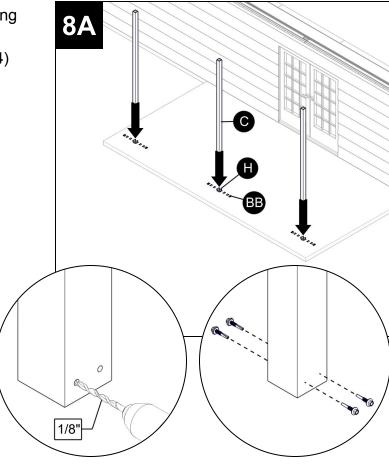
NOTE: If attaching to wood or composite deck, 1/4" x 1-1/2" lag screws (**GG**) must be used. DO NOT use Tapcon anchors to attach to wood or composite surface.



Fit a post **(C)** over post mounting bracket **(H)**. Using a 1/8" bit, drill (4) pilot holes through the post and bracket, (2) on each side. Attach the post using (4) #12 x 1-1/4" screws **(BB)**.

Repeat for all remaining posts (C).

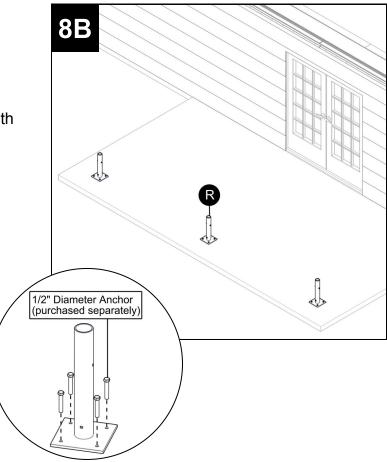
Continue on page 15



OPTIONAL

STEP 8B - HEAVY-DUTY BRACKETS

If you received the optional heavy-duty mounting brackets **(R)**, mark the location of the (4) holes in the bracket at a post location. Anchor bolts 1/2" diameter must be purchased separately for use with this bracket. Follow the manufacturer's guidelines for proper installation.

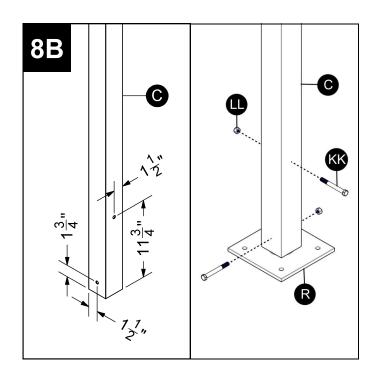


Using a 7/16" bit, drill (4) holes through post **(C)** according to the dimensions shown.

Attach post **(C)** to heavy-duty mounting bracket **(R)** using (2) 3/8" x 3-1/2" bolts **(KK)** and 3/8" hex nuts **(LL)**.

Repeat for all remaining posts (C).

Continue on page 15



OPTIONAL

Note: Review Site Preparation on page 4

STEP 8C - BURIED POSTS

If you plan to bury posts **(C)**, consult your local building authorities for required footing diameter and depth. Dig footings to the required size at each post location.



CAUTION: Before any digging, check with local utilities to determine the location of buried cables, pipes, etc.

NOTE: A footing inspection is often required before pouring concrete. Consult your local building authorities.

Measure the length of post **(C)** and determine the desired height above grade. Remove loose dirt from the footing hole and compact the bottom. Pour enough gravel or rubble (such as driveway stone) into the footing to achieve the desired post height. Compact the gravel to make a solid surface to set the post.

Diameter

Gravel to Set

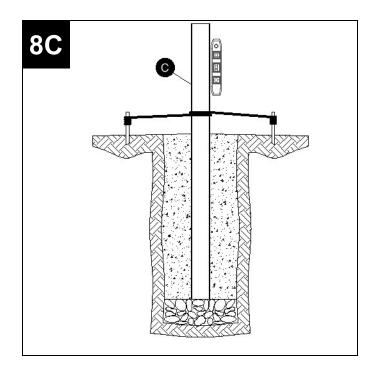
Above Ground

Above Ground

Set post **(C)** in the footing hole. Use a carpenter's level to plumb the post, then use stakes and rope (or ratchet straps, optional) to hold the post plumb and in position. Fill the footing hole with concrete. Slope the top of the footing in all directions to prevent water from ponding around the post. Also slope the ground around the footing to provide drainage.

IMPORTANT: Allow all footings to completely harden before continuing installation.

Continue on page 15



Depending on the header style received with your order, there are two header mounting bracket options.

3" BOX BEAM, 4" C CHANNEL HEADER, OR GUTTER ONLY:

Fit header mounting bracket (I) in the top of post (C) so that the back of the bracket faces away from the front of the cover. Have assistance hold the top of post (C) steady. Using a 1/8" bit, drill (4) pilot holes through the post and bracket, (2) on each side.

Attach using (4) #12 x 1-1/4" screws (BB). Repeat for all posts (C).

3" Box Beam Header Installation:

Go to page 16

4" C Channel Header Installation:

Go to page 17

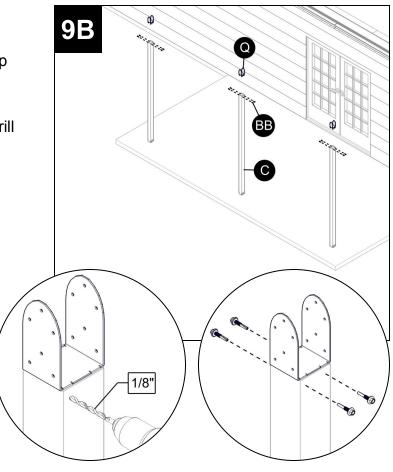
Gutter only installation:

Go to page 19

3" x 8" HEADER:

Fit optional header mounting bracket (**Q**) in the top of post (**C**). The front/back of the bracket should face the front/back of the cover. Have assistance hold the top of post (**C**) steady. Using a 1/8" bit, drill (4) pilot holes through the post and tabs of the bracket, (2) on each side. Attach using (4) #12 x 1-1/4" screws (**BB**). Repeat for all posts (**C**).

3" x 8" Header Installation: Go to page 18



(BB)

1/8"

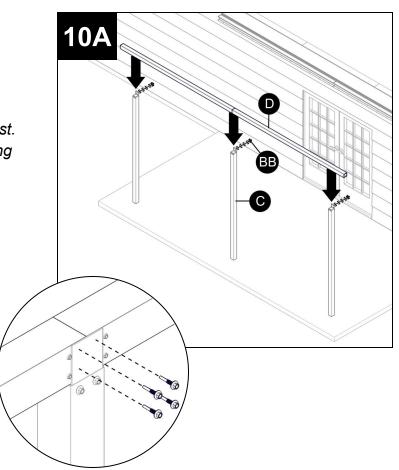
STEP 10A - 3" BOX BEAM

Position header **(D)** over posts **(C)** with an equal amount of overhang on both ends.

NOTE: If header **(D)** is in two or more pieces, be sure one end of the header is centered over a post. Complete splice installation below before attaching to posts.

Attach header **(D)** to header mounting bracket **(I)** using (4) #12 x 1-1/4" screws **(BB)**.

Continue on page 20



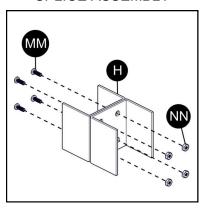
OPTIONAL - 3" BOX BEAM SPLICE

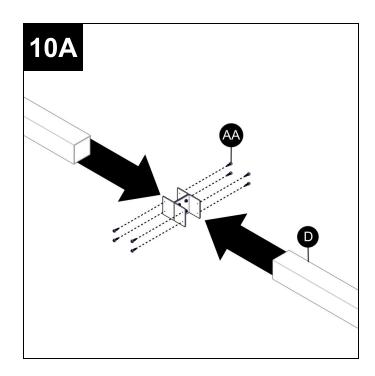
If header **(D)** is in two or more pieces, insert an equal amount of the provided splice into the ends of the headers.

The header splice (if not sent pre-assembled) is (2) post mounting brackets **(H)** attached using (4) 1/4" x 3/4" bolts **(MM)** and 1/4" square nuts **(NN)**.

Attach the header splice to header (D) using (4) #8 \times 3/4" screws (AA).

SPLICE ASSEMBLY





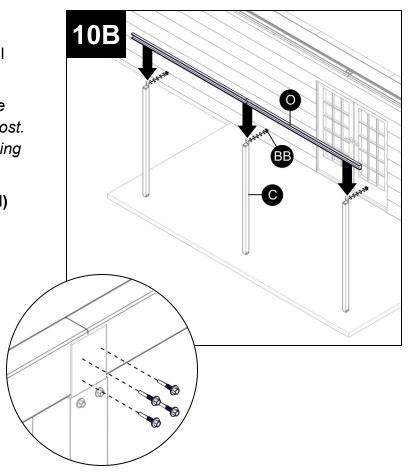
STEP 10B - 4" C CHANNEL

Position header **(O)** over posts **(C)** with an equal amount of overhang on both ends.

NOTE: If header (O) is in two or more pieces, be sure one end of the header is centered over a post. Complete splice installation below before attaching to posts.

Attach header **(O)** to header mounting bracket **(I)** using (4) #12 x 1-1/4" screws **(BB)**.

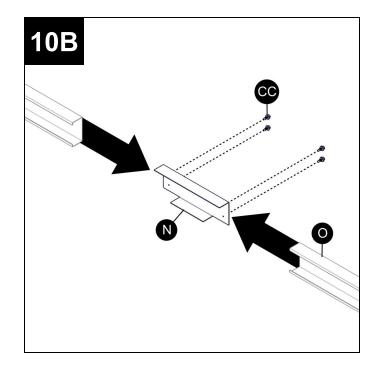
Continue on page 20



OPTIONAL - 4" C CHANNEL SPLICE

If header **(O)** is in two or more pieces, insert an equal amount of C channel splice **(N)** into the ends of the headers.

Attach C channel splice **(N)** to header **(O)** using (4) #14 x 3/4" Tek screws **(CC)**.



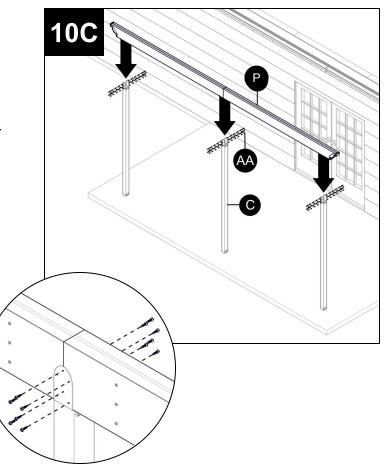
STEP 10C - 3" x 8" HEADER

Position header **(P)** over posts **(C)** with an equal amount of overhang on both ends.

NOTE: If header (P) is in two or more pieces, be sure one end of the header is centered over a post.

Attach header **(P)** to header mounting bracket **(Q)** using (12) #8 x 3/4" screws **(AA)**.

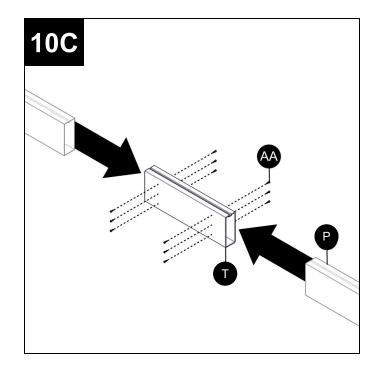
Continue on page 20



OPTIONAL - 3" x 8" HEADER SPLICE

If header **(P)** is in two or more pieces, insert an equal amount of header splice **(T)** into the ends of the headers.

Attach header splice **(T)** to header **(P)** using (12) #8 x 3/4" Tek screws **(AA)**.

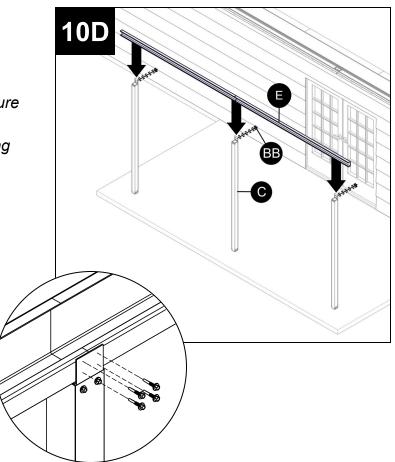


STEP 10D - POST TO GUTTER

Position gutter **(E)** over posts **(C)** with an equal amount of overhang on both ends.

NOTE: If gutter **(E)** is in two or more pieces, be sure one end of the gutter is centered over a post. Complete splice installation below before attaching to posts.

Attach gutter **(E)** to header mounting bracket **(I)** using (4) #12 x 1-1/4" screws **(BB)**.

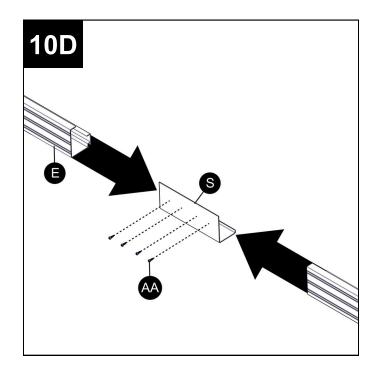


GUTTER SPLICE - OPTIONAL

Complete this step only if gutter (E) is in two or more pieces.

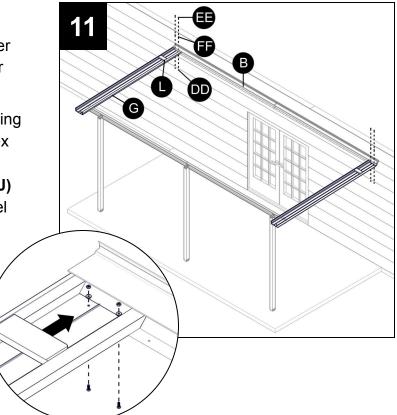
Apply a generous amount of caulk to the back and bottom of gutter splice **(S)** to prevent leaks. Insert an equal amount of the splice into the ends of the gutters.

Attach gutter **(E)** to gutter splice **(S)** using (4) #8 x 3/4" screws **(AA)**.



Attach one roof panel **(G)** at each end of the cover before attaching other panels to ensure the cover stays square.

Attach the formed end of roof panel (**G**) to mounting channel (**B**) using (2) #8 x 1/2" bolts (**DD**), #8 hex nuts (**EE**), and 1/2" washers (**FF**) through the pre-drilled holes. Insert roof panel flashing plug (**J**) between the roof panel (**G**) and mounting channel (**B**).



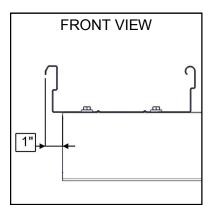
STEP 12

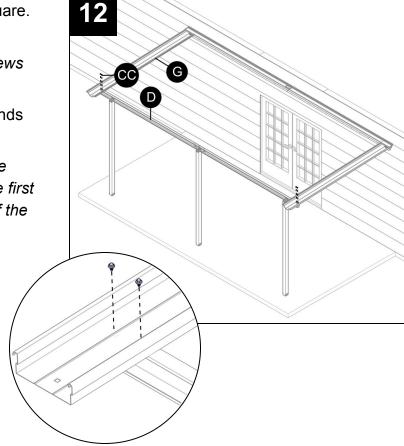
Attach roof panel **(G)** to header **(D)** or **(P)** using (2) #14 x 3/4" Tek screws (CC) through the pre-drilled holes. DO NOT completely tighten screws at this time. This will allow you to adjust the roof panels during installation to ensure the cover stays square.

NOTE: If using optional C Channel header (O), attach roof panel (G) using #14 x 3/4" SMS screws (JJ).

The first and last panels should overhang the ends of the header by approximately 1".

NOTE: If installing with the posts attached to the gutter, let the roof panels rest on the gutter. The first and last panels should be flush with the ends of the gutter.





Position the lock of the next roof panel **(G)** over the lock of the previous panel. Snap the locks together by hooking the locks and rolling the panel down.

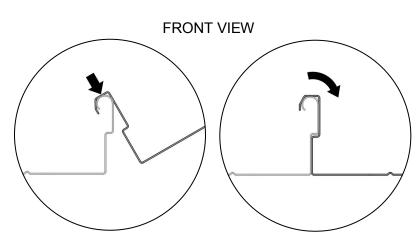
NOTE: It is very important to maintain the 8" dimension between the center of the locks of each roof panel (G). Failure to do so may result in problems showing up near the end of the installation, where the header or gutter may appear to be an incorrect length. If this happens, check the spacing of each roof panel and re-set if necessary.

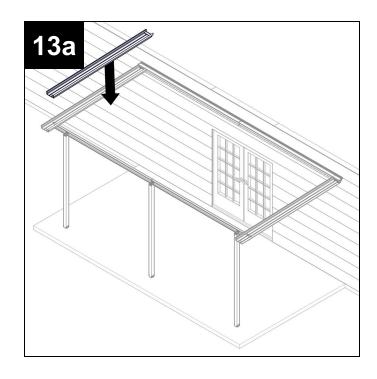
Slide roof panel **(G)** into mounting channel **(B)** until the front end is flush with the previous panel. Repeat steps 11-12 on page 20 to attach roof panel **(G)** to mounting channel **(B)** and the header.

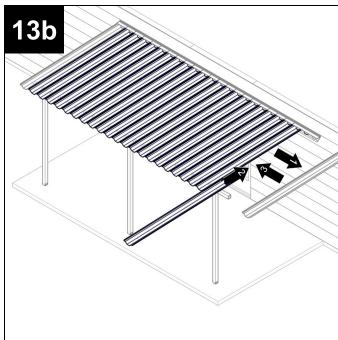
NOTE: If installing with the posts attached to the gutter, lift the front of the roof panels over the gutter if necessary to attach other panels. Once sufficient amount of roof panels are in position, attach the first panels to the gutter as shown in Step 14 on page 22.

Repeat for all remaining roof panels **(G)**. When you reach the end of the cover, remove the last panel before installing the second-to-last panel. Then re-install the end panel.

Once all roof panels **(G)** are installed, tighten all screws, bolts, and nuts at attachment points.

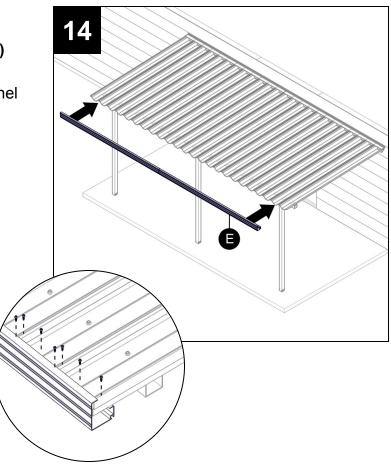






Position gutter **(E)** over the front of roof panels **(G)** with an equal amount of overhang on both ends. Working from above the roof, attach each roof panel **(G)** to gutter **(E)** using (3) #8 x 3/4" screws **(AA)**.

NOTE: DO NOT push the roof panels all the way against the gutter. It is necessary to leave a small gap for water to drain properly.

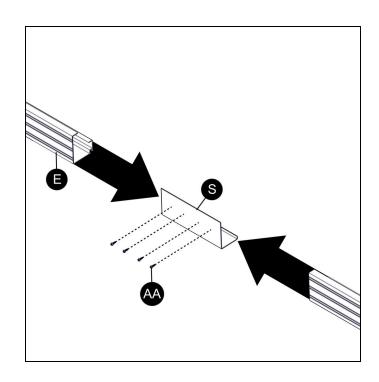


GUTTER SPLICE - OPTIONAL

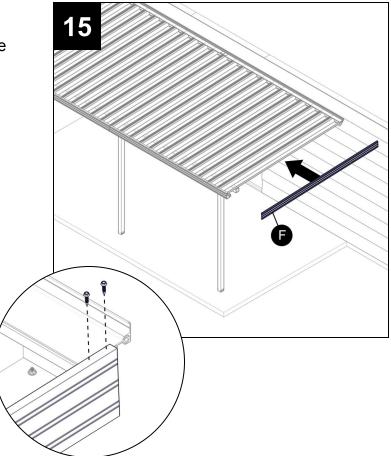
Complete this step only if gutter (E) is in two or more pieces.

Apply a generous amount of caulk to the back and bottom of gutter splice (S) to prevent leaks. Insert an equal amount of the splice into the ends of the gutters.

Attach gutter **(E)** to gutter splice **(S)** using (4) #8 x 3/4" screws **(AA)**.



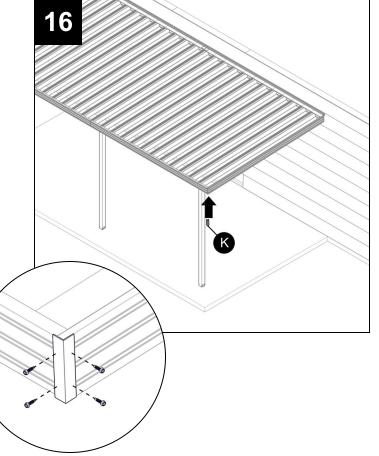
Position projection fascia **(F)** over either end of the roof so that one end of the fascia is flush with the front of gutter **(E)**. Attach the opposite end of the fascia to mounting channel **(B)** using (2) #8 x 3/4" screws **(AA)**.



STEP 16

Apply caulk to the inside of corner cap **(K)**. Position corner cap **(K)** over gutter **(E)** and projection fascia **(F)**. Attach using (4) #8 x 3/4" screws **(AA)**. Also attach the top of projection fascia **(F)** to the top lip of gutter **(E)** using (1) #8 x 3/4" screw **(AA)**.

Repeat Steps 15-16 to attach remaining projection fascia **(F)**.



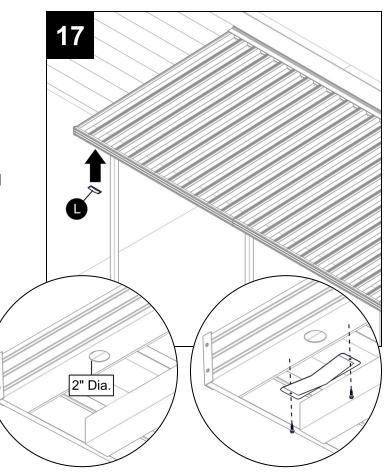
STEP 17 - SCUPPER INSTALLATION

If optional downspout kit was received with your order, you may not have received scupper (L). Follow the separate downspout assembly instructions attached.

Determine the desired location to drain water from gutter **(E)**. Cut a hole no bigger than 2" diameter in the bottom of the gutter. Alternatively, you may drill several small holes in a rectangular pattern no bigger than 2" x 3".

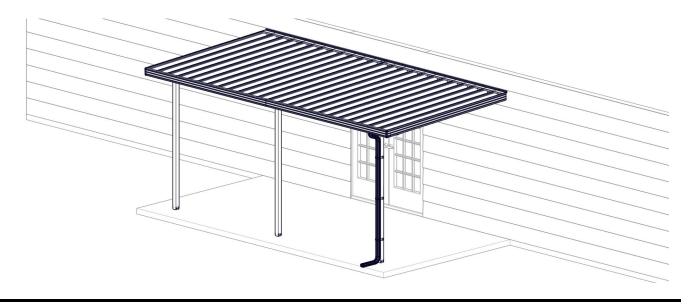
Apply a generous bead of caulk around the top flange of scupper (L). Attach the scupper to gutter (E) using (2) #8 x 3/4" screws (AA).

Repeat for any remaining scuppers (L).



Assembly Completed

Remove any metal shavings from the shade structure by sweeping or brushing. Be sure to follow the Care and Maintenance instructions attached.





Warranty

What the Warranty Covers:

The manufacturer warrants its products that have been installed in accordance with the installation guidelines, under normal usage conditions, and with proper maintenance as follows: Twenty-five (25) year limited warranty on steel against material failure and defects. Ten (10) year warranty against peeling, cracking, blistering, or crazing of the surface finish of aluminum and steel components. One (1) year warranty against defects in materials and workmanship.

Period of Coverage:

The warranty period begins on the date of original shipment.

What The Manufacturer Will Do To Correct Problems:

If defects or damage of the kind mentioned above should occur within the warranty period, the manufacturer will replace the defective parts only; upon receiving the written and documented claim of purchaser.

What the Warranty Excludes:

Because of normal aging and weathering of materials, it may not be possible to perfectly match the colors of original parts and replacement parts. The manufacturer will not provide or pay for the installation of such replacement parts. The manufacturer shall not be responsible for weather related failures, damages due to faulty installation, misuse or abuse of the product, or for consequential damages, including personal injuries or property damages. There are no warranties, express or implied, which extend beyond the description on the face hereof.

How Do You Get Service:

If you believe that you have a claim under this warranty, submit a copy of your original receipt or other reasonable evidence of the date of purchase, the identity of the product, and photos and a description of the allegedly defective product to the address below. Please also include your name, address, and phone number so that a customer service representative can respond to your submission. Ultimate determination of the existence and extent of any claimed defect under this warranty shall be made by the manufacturer in its sole discretion.

General Awnings LLC 888-330-3115 support@generalawnings.com

POST SIDE PLATES (OPTIONAL)

- -Center two side plates next to each post. The top of the side plates should be flush with the top of the header.
- -Drill 5/8" holes through the front face of the side plate according to the dimensions shown in Fig. SP-1.
- The hole pattern at the top of the side plate may have been pre-drilled. If not, see the dimensions in Fig. SP-3.
- -Attach the side plate to the post using #12 x 1-1/4" HWH #5 Tek screws through each hole (see Fig. SP-2).
- -Insert a hole plug into all exposed holes.

