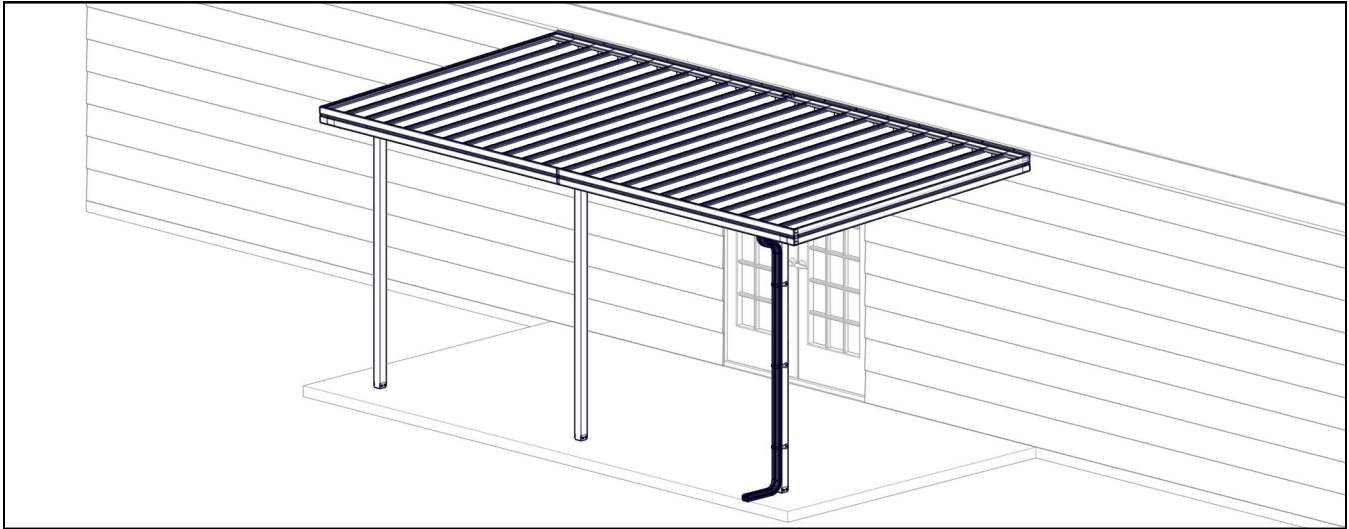


# WINDSOR PATIO COVER

## INSTALLATION INSTRUCTIONS

Contact us at:  
888-330-3115 or  
[www.generalawnings.com](http://www.generalawnings.com)



### Before You Begin:

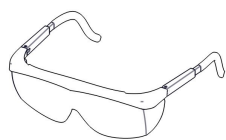
- **Consult your local building department for any required permits**  
You may be required to obtain a building permit for this structure. Contact your local building department for details.
- **Read instructions thoroughly**  
Please read all instructions and notes carefully prior to assembly. We are not responsible for replacing parts lost or damaged due to incorrect 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.**



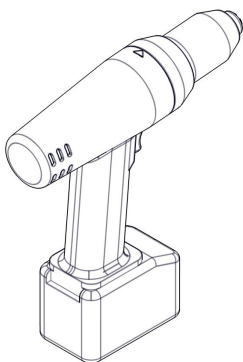
### CAUTION

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

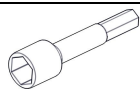
## Tools Needed for Installation



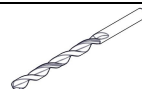
Safety Glasses



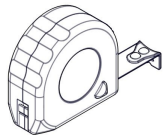
Electric Drill



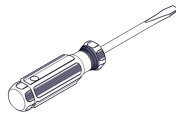
Socket / Hex Head Driver  
Sizes: 1/4", 5/16",  
3/8", 7/16"



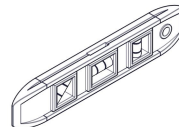
Drill Bit  
Sizes: 1/8", 3/16",  
1/4", 5/8" (optional)



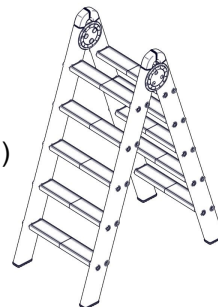
Tape Measure



Screw Driver  
Flat & Phillips



Carpenters Level



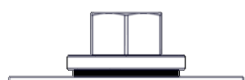
Ladder

Other Required Tools: Gloves, Chalk Line, Silicone Caulking

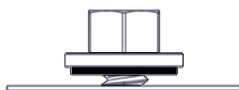
Recommended Tools: Rubber Mallet, Carpenters Square, Pliers, Metal Hack Saw

## 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.



✓ CORRECT



✗ TOO LOOSE



✗ TOO TIGHT

- 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 of any of our products, please call us toll free at 888-330-3115 and ask for assistance.

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## Safety Information

- Please read and understand this entire manual before attempting to assemble or install the product.
- Standard design for our shade structures 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; call 1-888-330-3115 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 us. 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.*

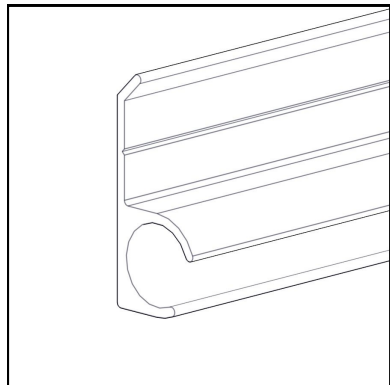
Complete the site preparation and footings before unpacking parts and beginning assembly.

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

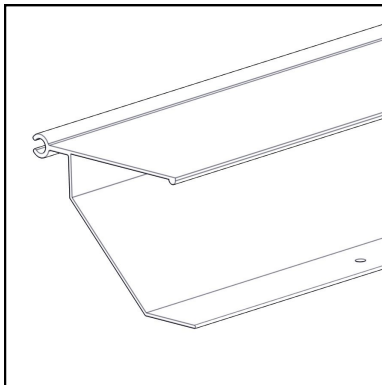
- 1) Consult your local authorities for building codes and covenants before beginning foundation or installing shade structure.
- 2) Before any digging, check with local utilities to determine the location of buried cables, pipes, etc.
- 3) Minimum soil bearing strength at shade structure location is 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.

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

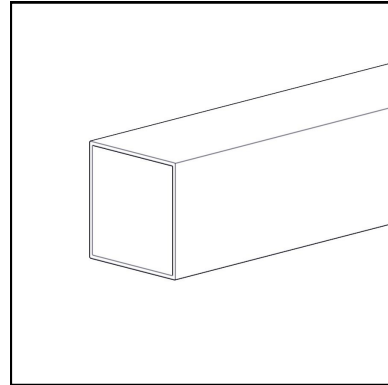
## Parts List



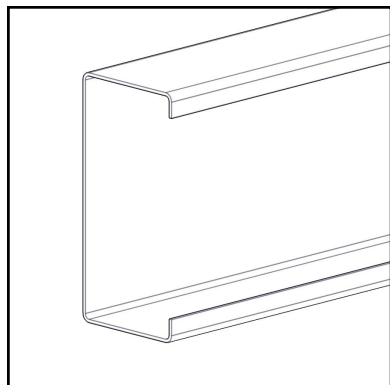
**A** Awning Rail  
Part Code: 11610



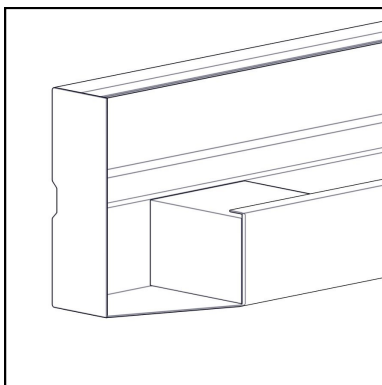
**B** Mounting Channel  
Part Code: 11678



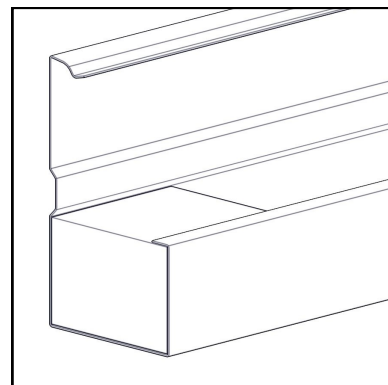
**C** Post - 3" x 3"  
Part Code: 11271



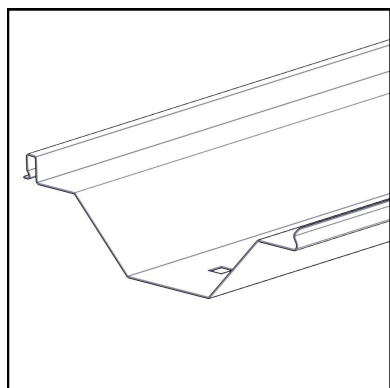
**D** Header - 4" C Channel  
Part Code: 30151



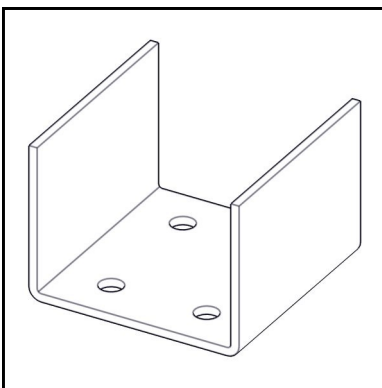
**E** Front Gutter Code: 60604  
w/ Flashing Plug Code: 60645  
at both ends (unless spliced)



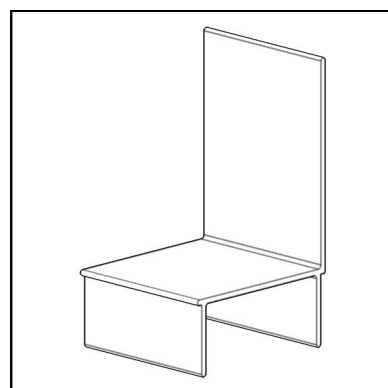
**F** Side Gutter Code: 60604  
w/ Bird Block Code: 60621  
at one end only



**G** Roof Panel - 10" V Style  
Part Code: 10104



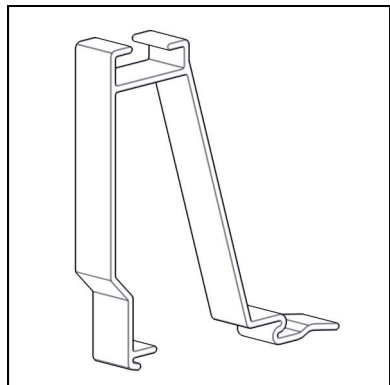
**H** Post Mounting Bracket  
Part Code: 50100



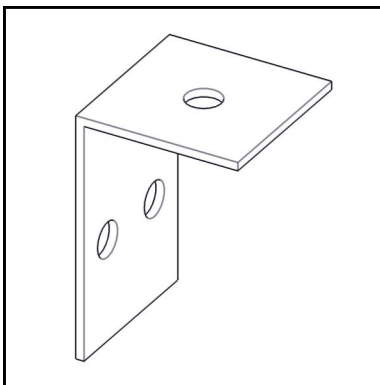
**I** Header Mounting Bracket  
Part Code: 50101

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

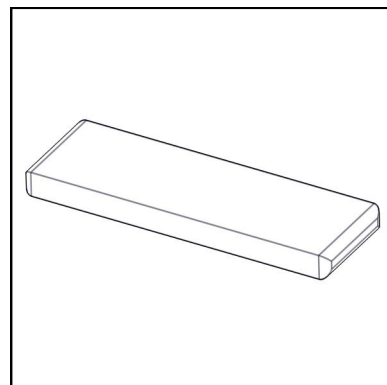
## Parts List (continued)



**J** Fascia Clip  
Part Code: 60615



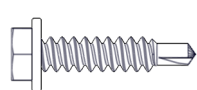
**K** Fascia Hanging Bracket  
Part Code: 60504  
(white only)



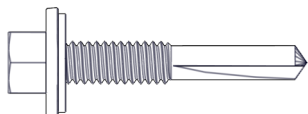
**L** Roof Panel Flashing Plug  
Part Code: 60619

Screws shown actual size.

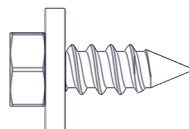
## Hardware List



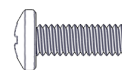
**AA** #8 x 3/4" Screw  
Part Code: 20123



**BB** #12 x 1-1/4" Screw  
Part Code: 20201



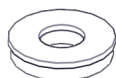
**CC** #14 x 3/4" SMS Screw  
Part Code: 20792



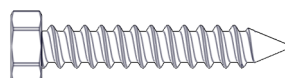
**DD** #8 x 1/2" Bolt  
Part Code: 20754



**EE** #8 Hex Nut  
Part Code: 20502



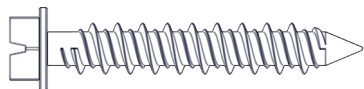
**FF** 1/2" Washer  
Part Code: 20901



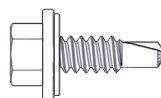
**GG** 1/4" x 1-1/2" Lag Screw  
Part Code: 20423



**HH** Lag Screw Plug  
Part Code: 20835



**II** 1/4" x 1-3/4" Tapcon Anchor  
Part Code: 20794



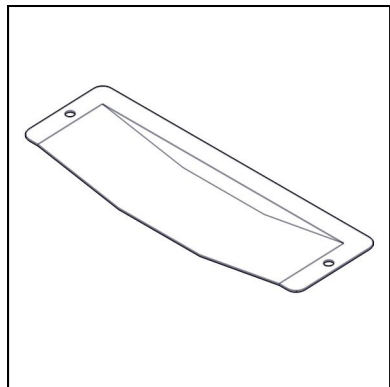
**JJ** #14 x 3/4" Tek Screw Part Code: 20151  
OPTIONAL: Used with 3" Box Beam  
and 3" x 8" Header

## Required Parts Not Included In Kit:

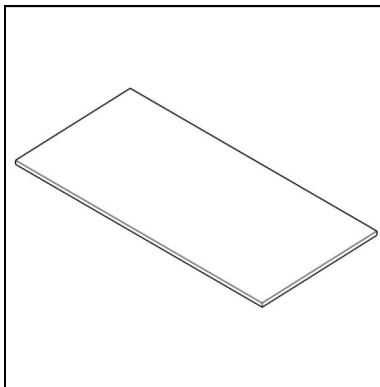
If attaching shade structure to masonry surface (concrete, brick, or stone veneer), you may be required to purchase suitable anchors separately as the lag screws provided may not be sufficient. Check local building codes.

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

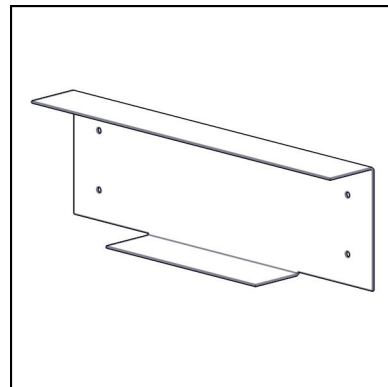
## OPTIONAL Parts



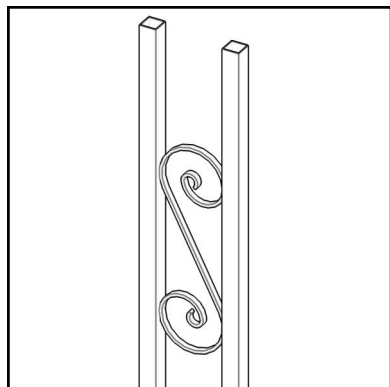
**M** Scupper  
Part Code: 90241



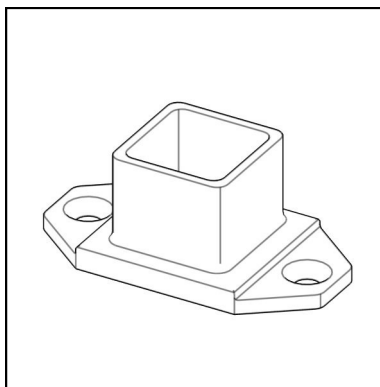
**N** Mounting Channel Splice  
Part Code: 60616



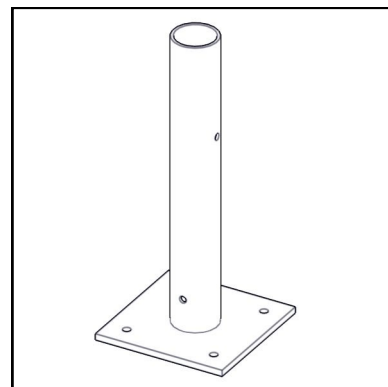
**O** C Channel Splice  
Part Code: 60602



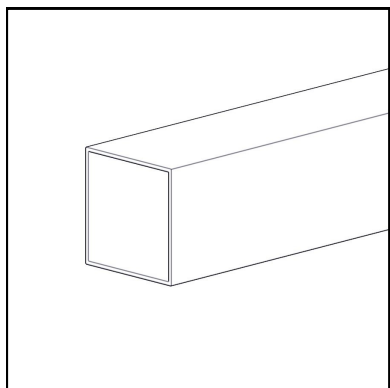
**P** Decorative Column



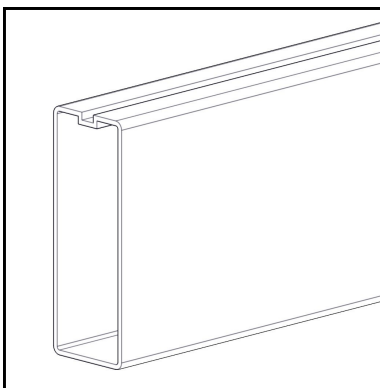
**Q** Column Mounting Bracket  
Part Code: 50131



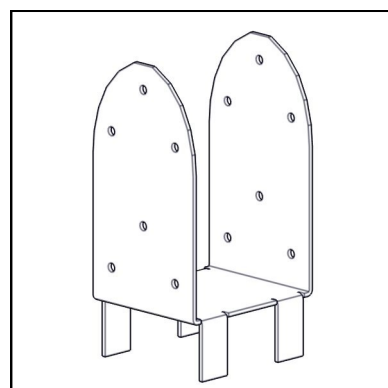
**R** Heavy-Duty Post Mounting  
Bracket  
Part Code: 50103



**S** Header - 3" Box Beam  
Part Code: 11271



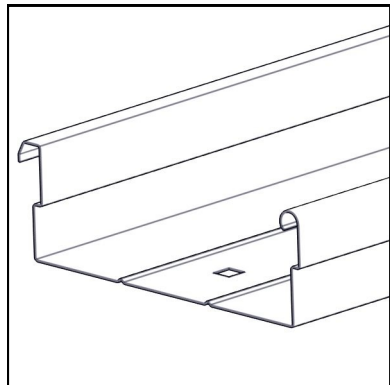
**T** Header - 3" x 8"



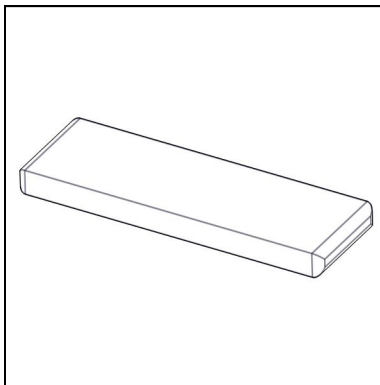
**U** Header Mounting Bracket  
Part Code: 50171

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

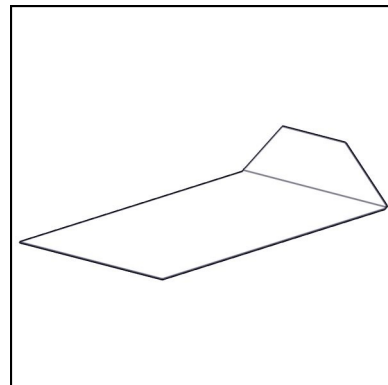
## OPTIONAL Parts (continued)



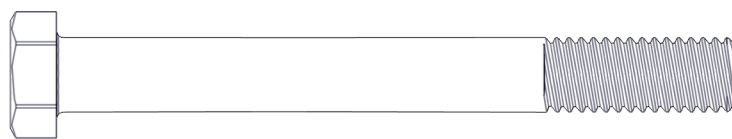
**V** Roof Panel - 8" Flat Style  
Part Code: 10206



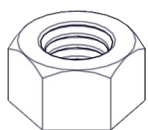
**W** Flat Panel Flashing Plug  
Part Code: 60058



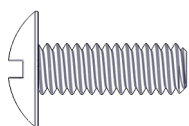
**X** Aluminum Bird Plug  
Part Code: 60625



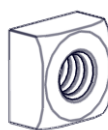
**KK** 3/8" x 3-1/2" Bolt  
Part Code: 20415



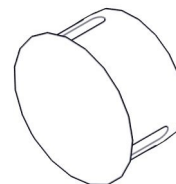
**LL** 3/8" Hex Nut  
Part Code: 20562



**MM** 1/4" x 3/4" Bolt  
Part Code: 20751



**NN** 1/4" Square Nut  
Part Code: 20503



**OO** 5/8" Hole Plug  
Part Code: 20850



## STEP 1

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.

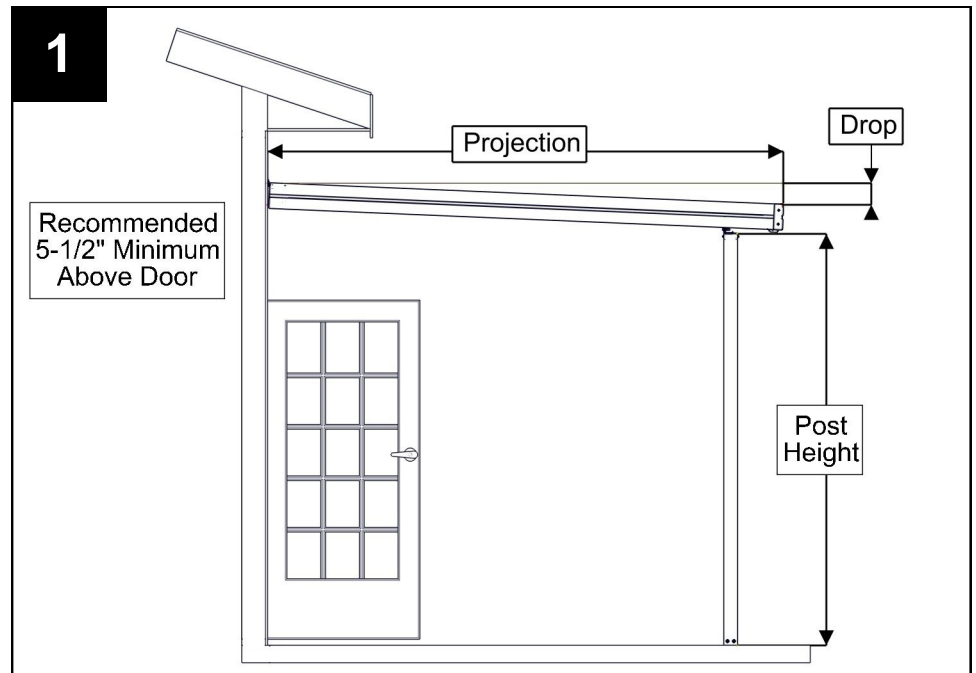
To properly determine the mounting height, add post (C) length, plus header height, plus the required drop.

### EXAMPLES:

12'-0" Projection = 6" Drop

10'-0" Projection = 5" Drop

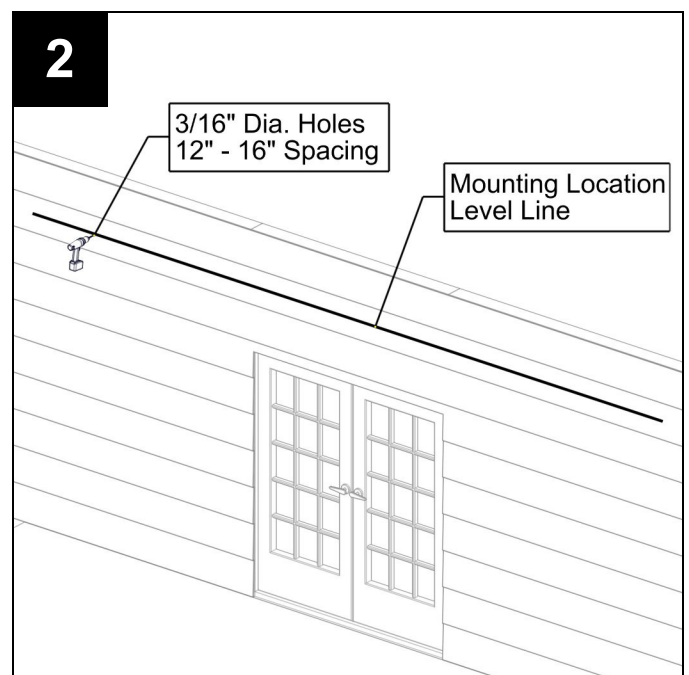
8'-0" Projection = 4" Drop



## STEP 2

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

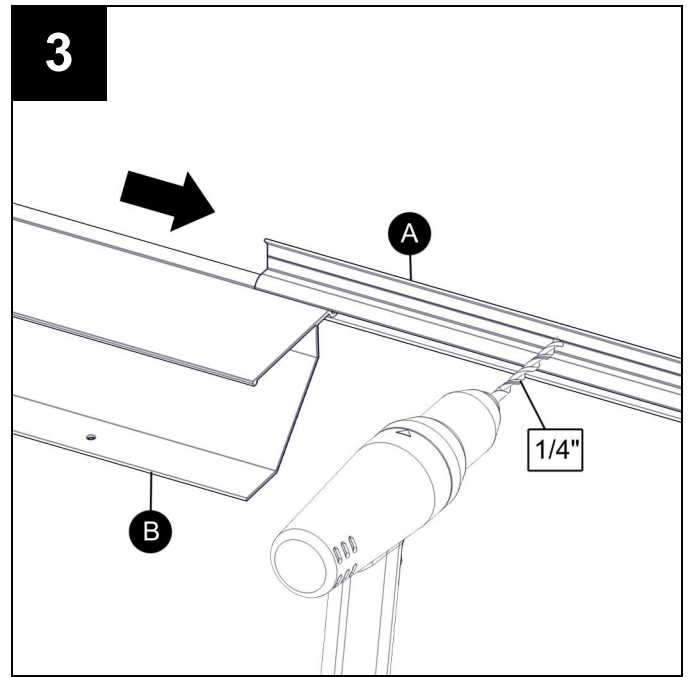
**NOTE:** Shade structure must be attached to a solid structural support. DO NOT attach to sheathing, siding, flashing, or any other non-structural surface.



### STEP 3

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

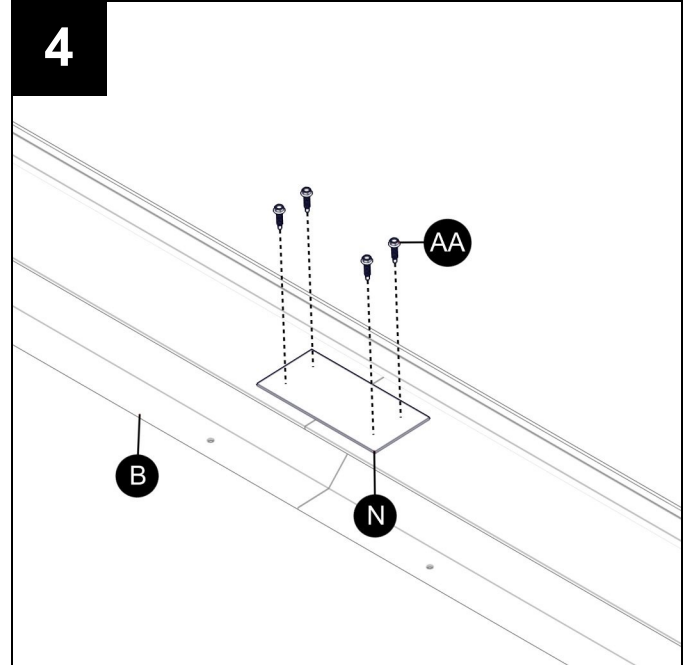
Slide the hinge of mounting channel **(B)** into the slot of awning rail **(A)**.



### STEP 4 - MOUNTING CHANNEL SPLICE

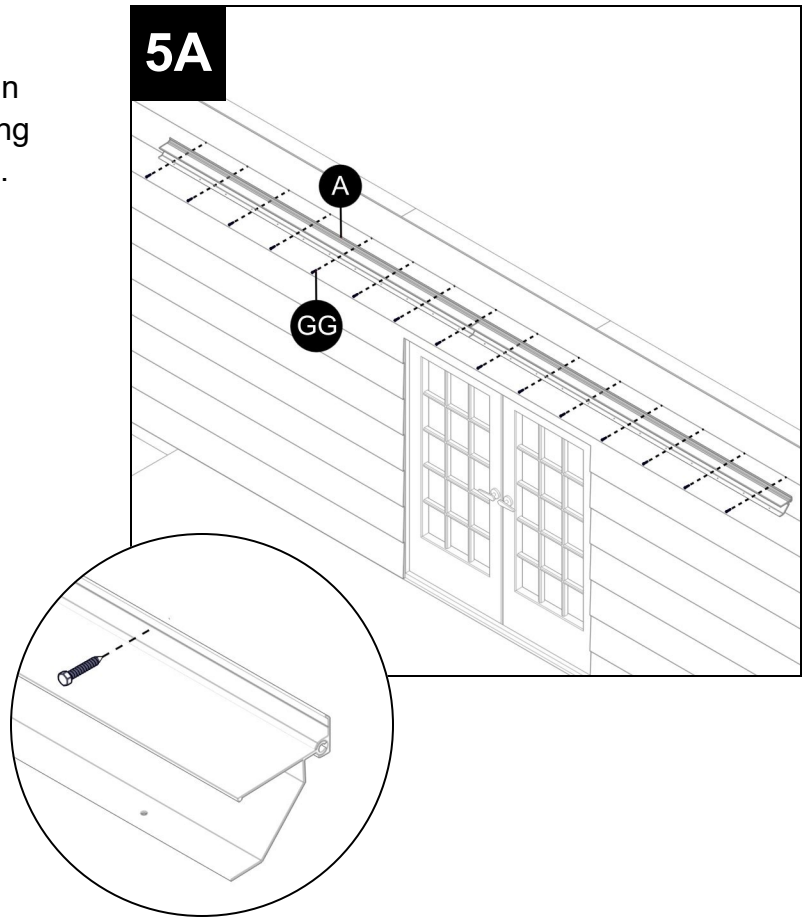
*Complete this step only if mounting channel **(B)** is in two or more pieces.*

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



## STEP 5A - MOUNTING TO WOOD FRAME

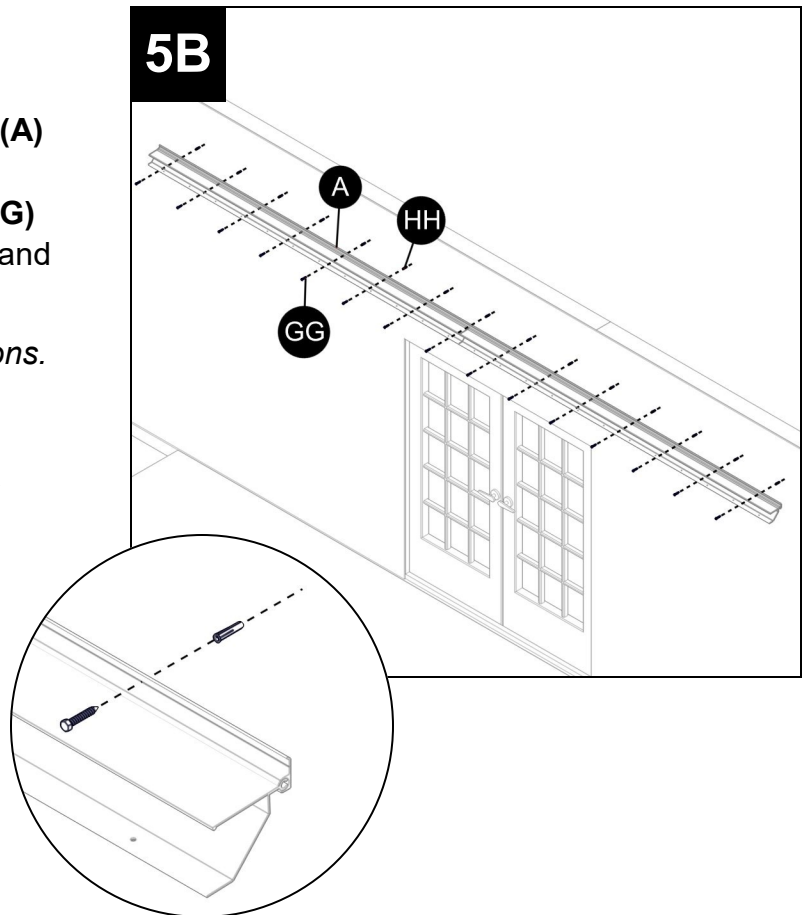
Align the holes in awning rail (**A**) with the holes in the mounting surface. Attach awning rail (**A**) using 1/4" x 1-1/2" lag screws (**GG**) through each hole.



## STEP 5B - MOUNTING TO MASONRY

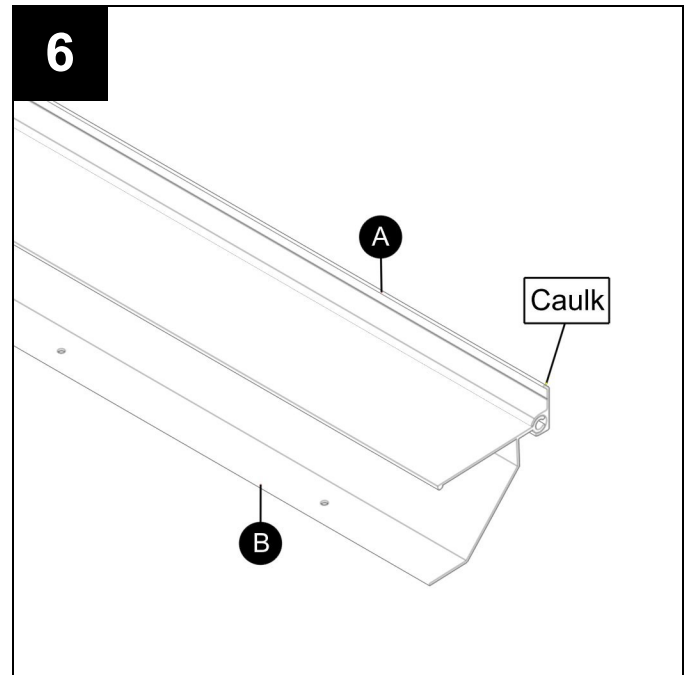
Insert lag screw plug (**HH**) into each hole in the mounting surface. Align the holes in awning rail (**A**) with the holes in the mounting surface. Attach awning rail (**A**) using 1/4" x 1-1/2" lag screws (**GG**) into each lag screw plug (**HH**). The plug will expand inside the wall when the screw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



## STEP 6

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



## STEP 7

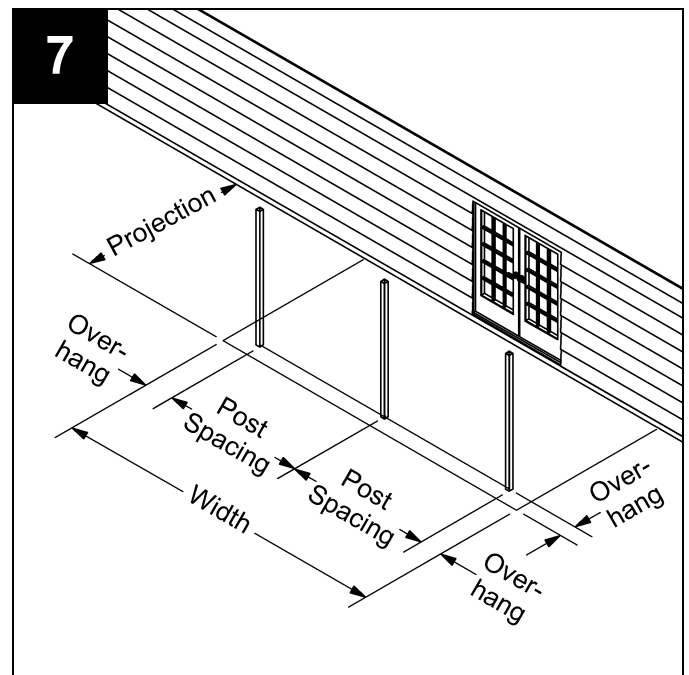
Using chalk lines, mark the outline of the shade structure on the foundation. Mark the location of each post by subtracting the desired overhang from the overall dimensions. If layout drawings were received with your order, use those as the guide. If installing decorative columns **(P)**, post spacing must match the pre-punched square holes in C channel header **(D)**.

*NOTE: Standard units come with the roof panels pre-punched for 6" beam setback. Alternate setback may be specified when ordering, or you may specify unpunched panels.*

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 13*

*OPTIONAL Heavy-Duty Bracket Installation: Go to page 14*

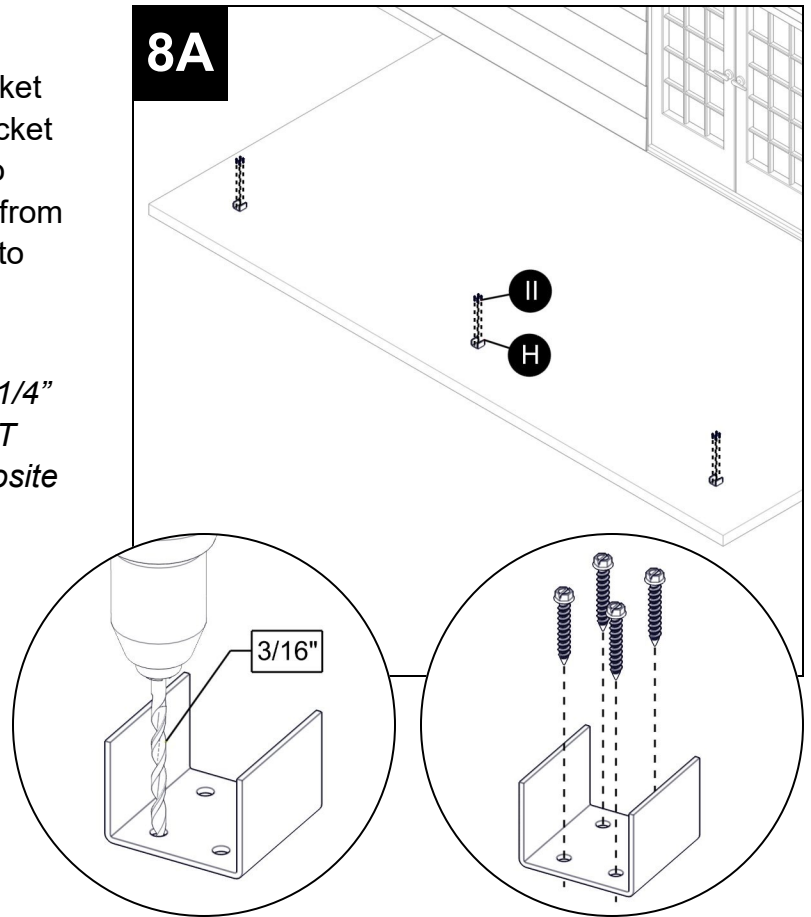
*Buried Post Installation: Go to page 15*

*Decorative Column Installation: Go to page 16*

## 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**).

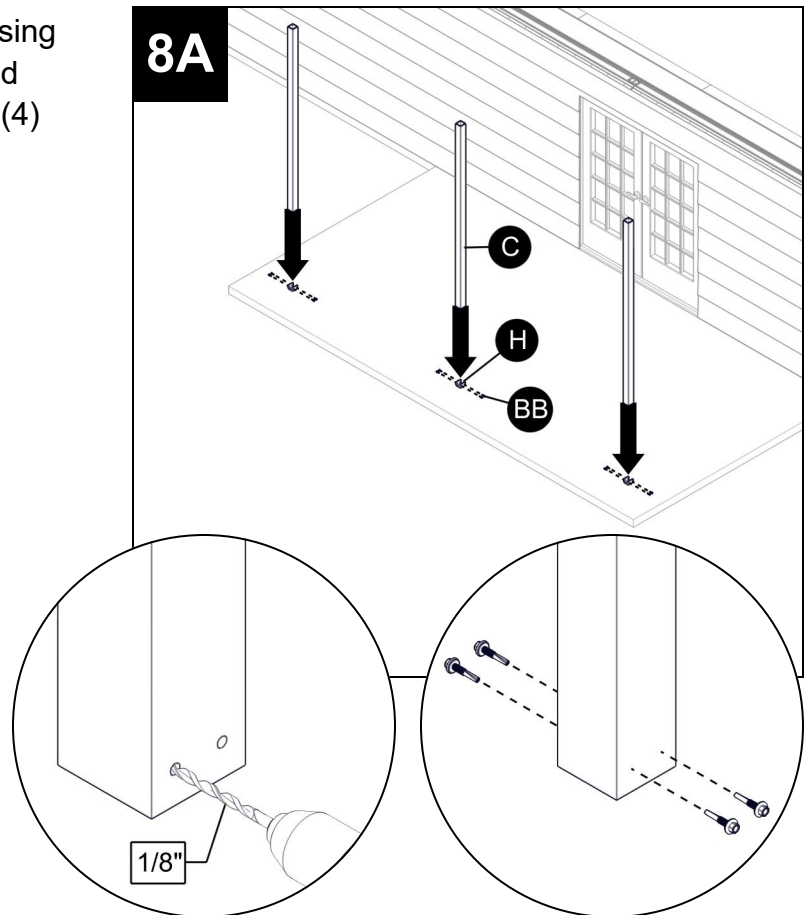
**NOTE:** If attaching to wood or composite deck, 1/4" x 1-1/2" lag screws (**GG**) must be used. DO NOT use Tapcon anchors to attach to wood or composite surface.



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**).

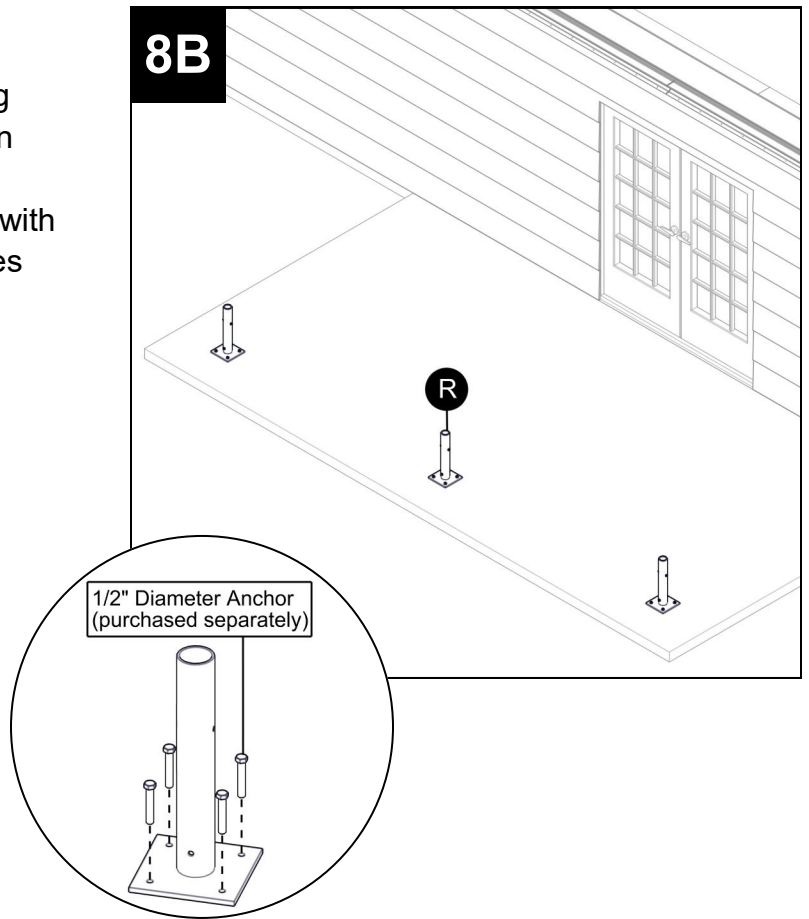
**Continue on page 17**



## 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.

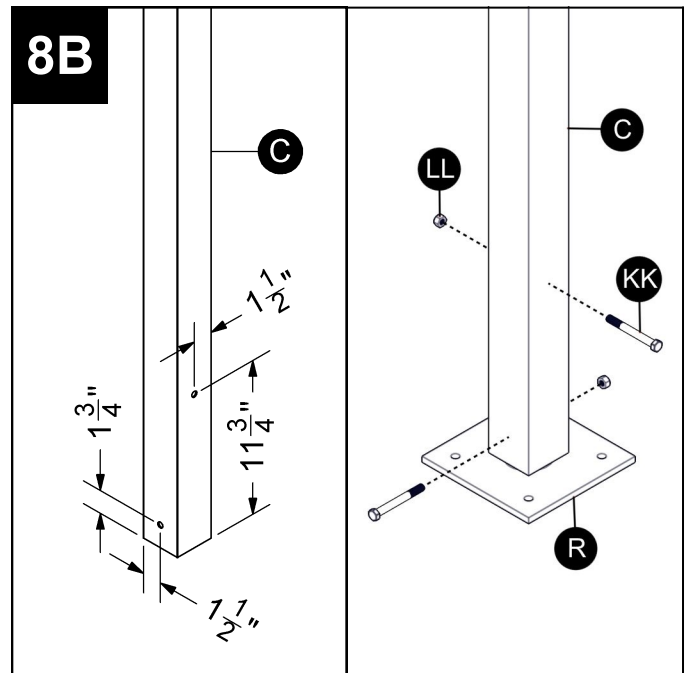


Using a 7/16" bit, drill (4) holes through post (**C**) according to the dimensions shown.

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 17*




## 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.

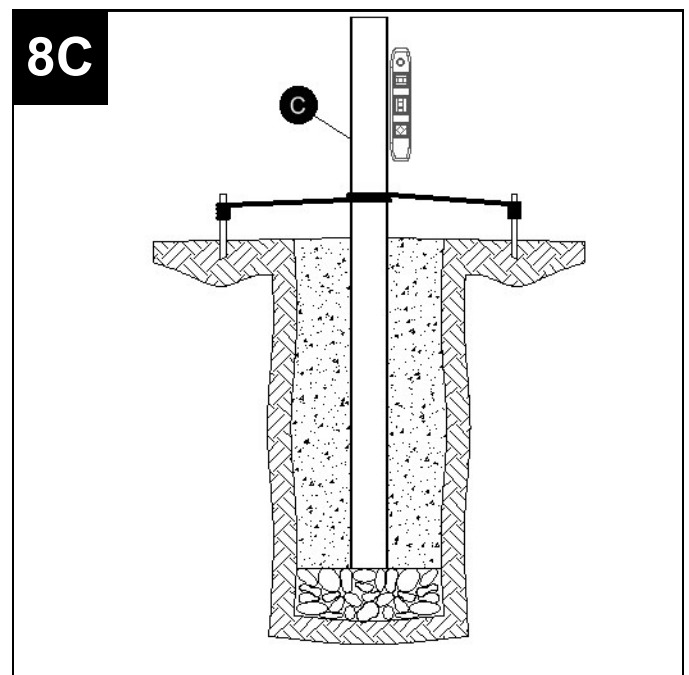
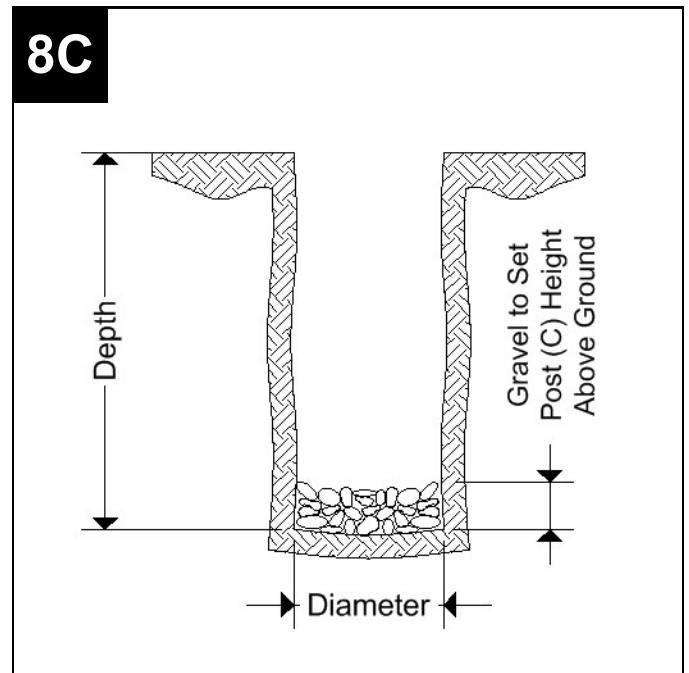
**NOTE:** A footing inspection is often required before pouring concrete. Consult your local building authorities.

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.

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 17**



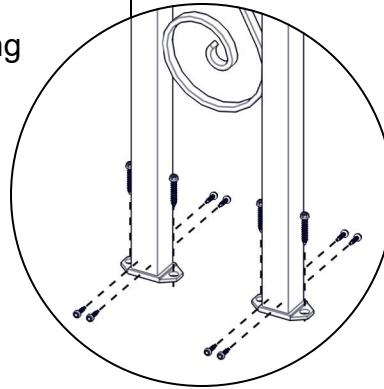
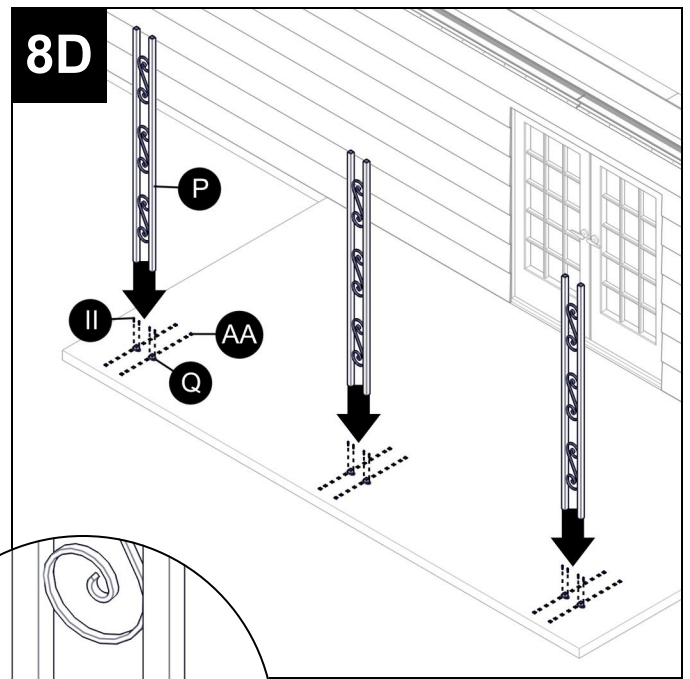


## STEP 8D - DECORATIVE COLUMNS

If installing decorative columns (**P**), mark the location of (2) column mounting brackets (**Q**) at a post location. Using a 3/16" bit, drill holes to match the pattern on the brackets. Remove dust from the holes and attach column mounting brackets (**Q**) 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.*

Attach decorative column (**P**) to column mounting brackets (**Q**) using (8) #8 x 3/4" screws (**AA**).

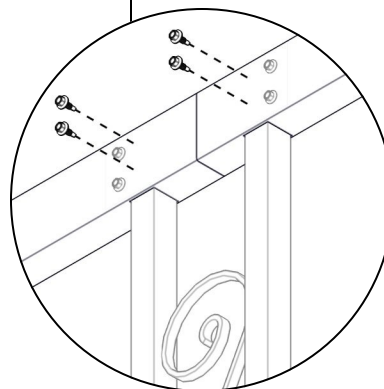
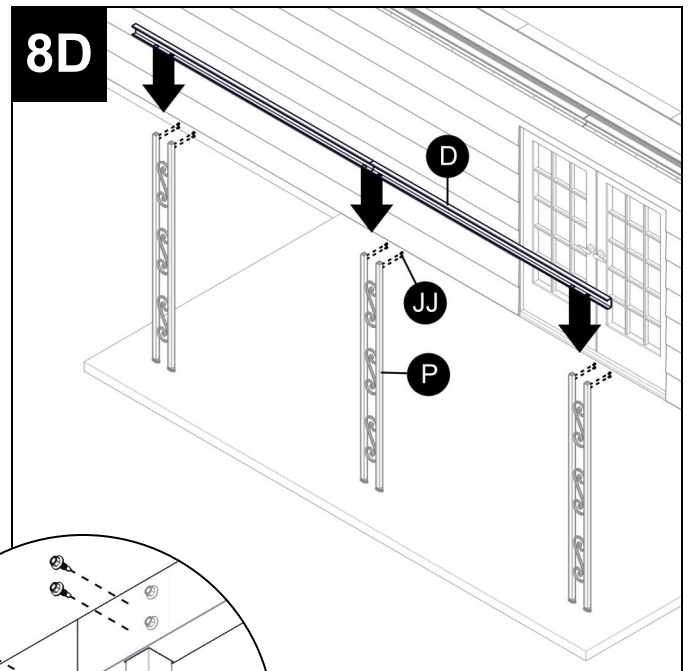


Mount C channel header (**D**) over decorative columns (**P**) by fitting each column into the pre-punched square holes in the bottom of the header. The open side of the header should face the front of the cover.

Attach C channel header (**D**) to decorative columns (**P**) using (4) #14 x 3/4" Tek screws (**JJ**) through the back of the header.

If header (**D**) is in two or more pieces, see splice detail on page 18.

*10" 'V' style panel installation: Go to page 21*  
*8" flat style panel installation: Go to page 23*





## STEP 9

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

### 4" C CHANNEL OR 3" BOX BEAM HEADER:

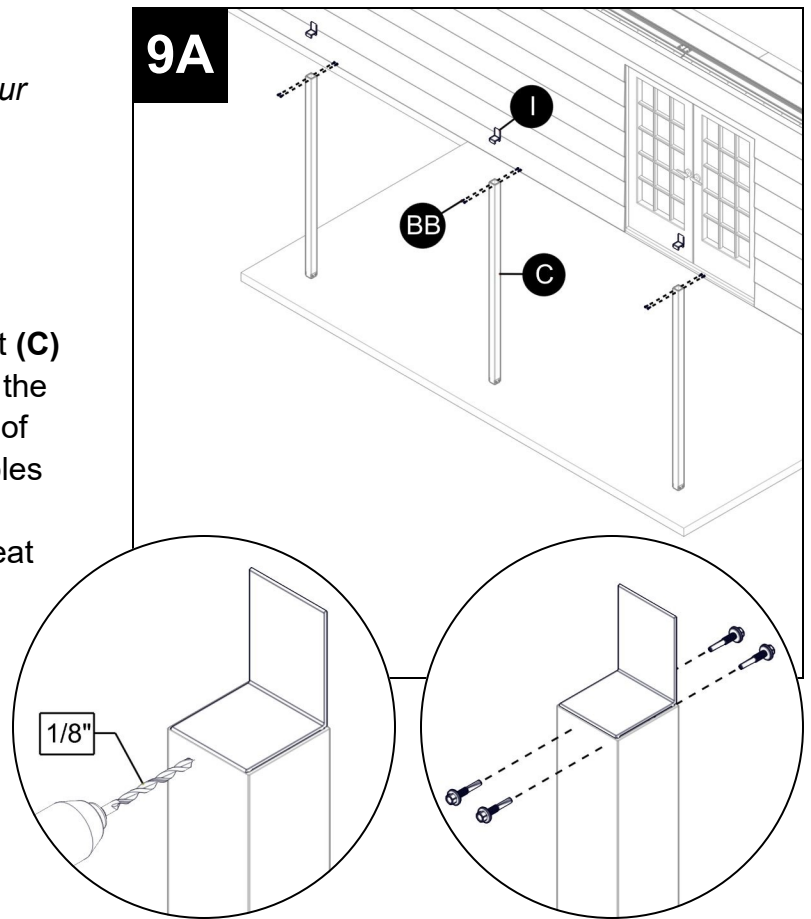
Fit header mounting bracket **(I)** in the top of post **(C)** so that the back of the bracket faces away from the front of the cover. Have assistance hold the top of post **(C)** steady. Using a 1/8" bit, drill (4) pilot holes through the post and bracket, (2) on each side. Attach using (4) #12 x 1-1/4"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

*4" C Channel Header Installation:*

*Go to page 18*

*3" Box Beam Header Installation:*

*Go to page 19*

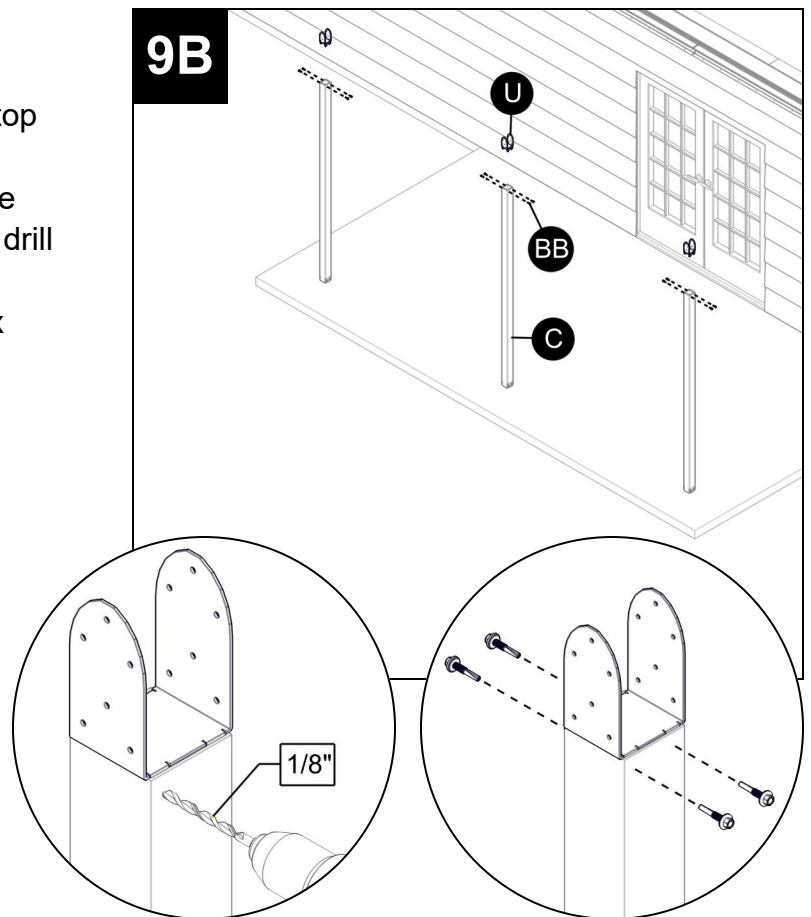


### 3" x 8" HEADER:

Fit optional header mounting bracket **(U)** 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 20*



## STEP 10A - 4" C CHANNEL

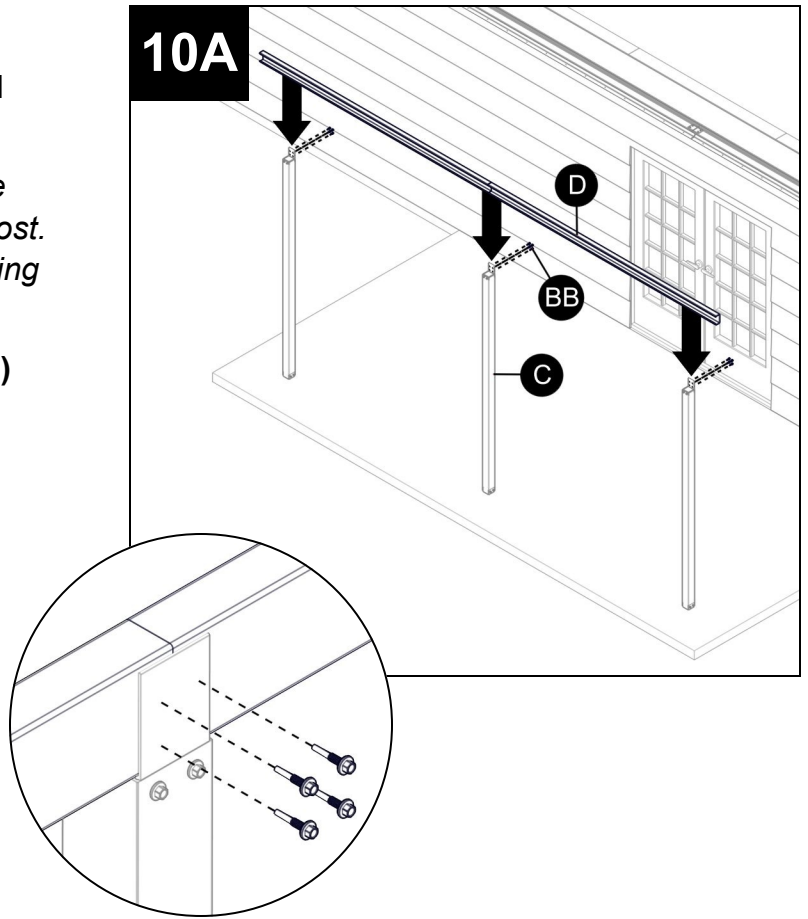
Position header **(D)** over posts **(C)** with an equal amount of overhang on both ends.

*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)**.

10" 'V' style panel installation: Go to page 21

8" flat style panel installation: Go to page 23

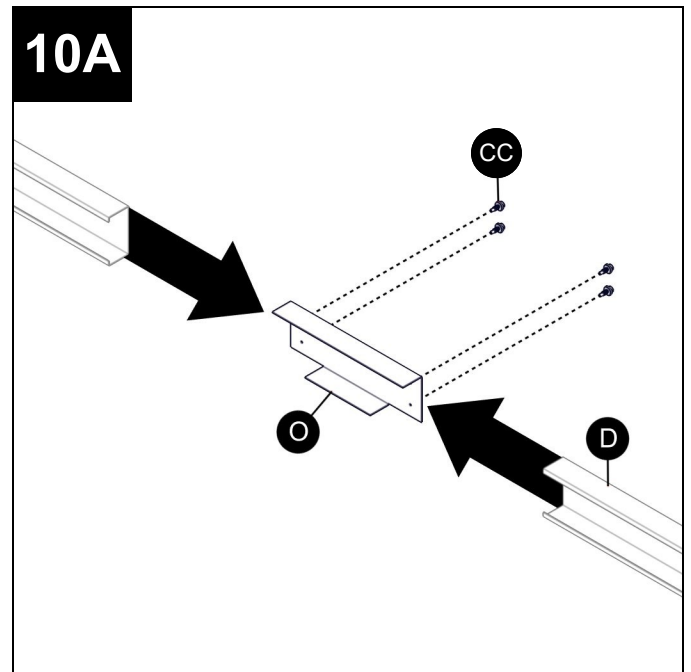


## OPTIONAL - 4" C CHANNEL SPLICE

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

*NOTE: The smaller tab should face the bottom of the header for optional decorative column installation.*

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



## STEP 10B - 3" BOX BEAM

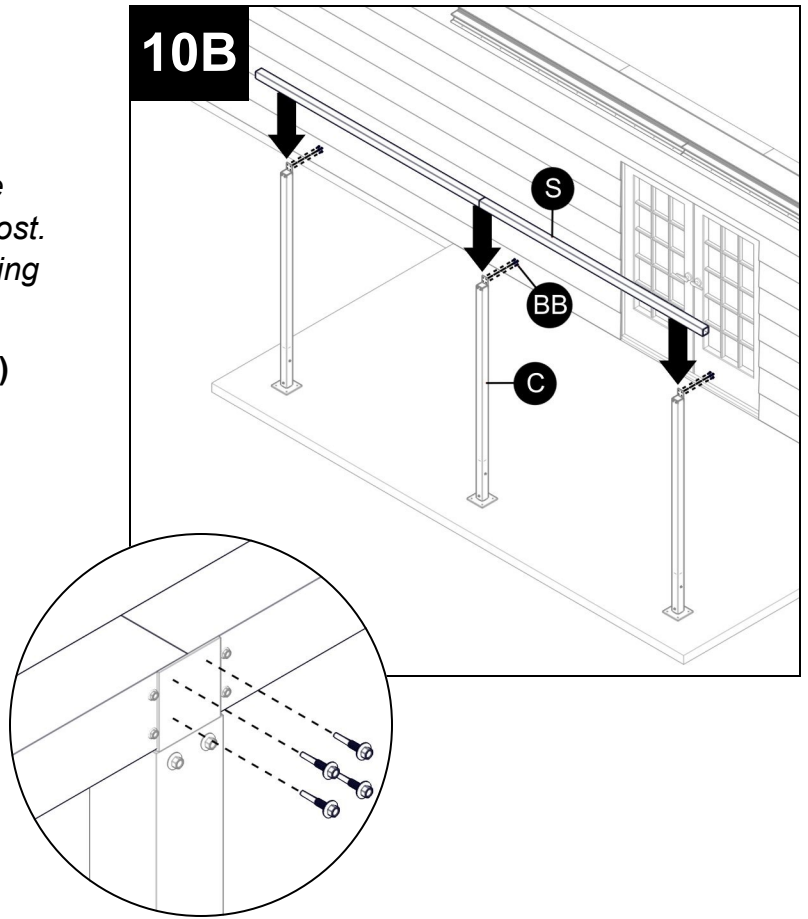
Position header (**S**) over posts (**C**) with an equal amount of overhang on both ends.

*NOTE: If header (**S**) 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 (**S**) to header mounting bracket (**I**) using (4) #12 x 1-1/4" screws (**BB**).

10" 'V' style panel installation: Go to page 21

8" flat style panel installation: Go to page 23



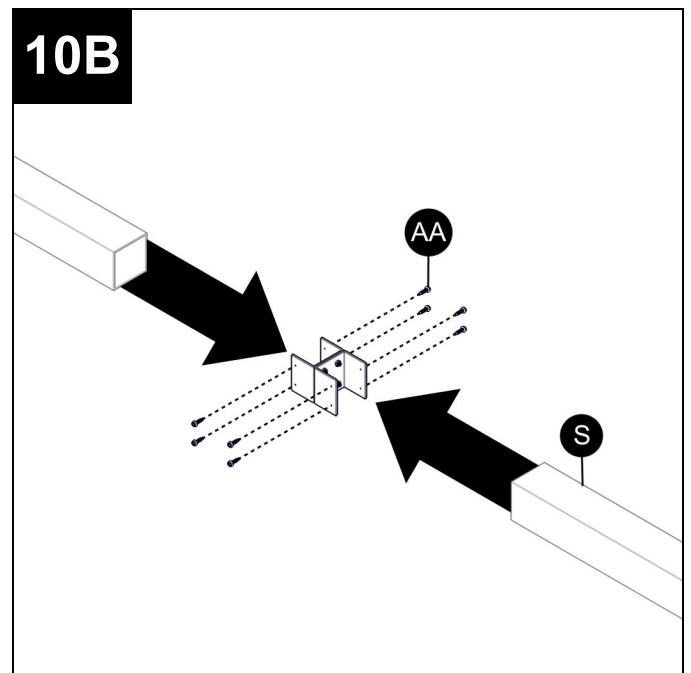
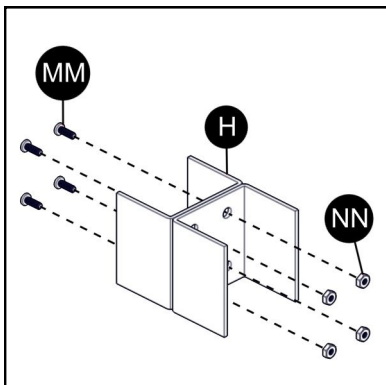
## OPTIONAL - 3" BOX BEAM SPLICE

If header (**S**) 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 (**S**) using (4) #8 x 3/4" screws (**AA**).

SPLICE ASSEMBLY



## STEP 10C - 3" x 8" HEADER

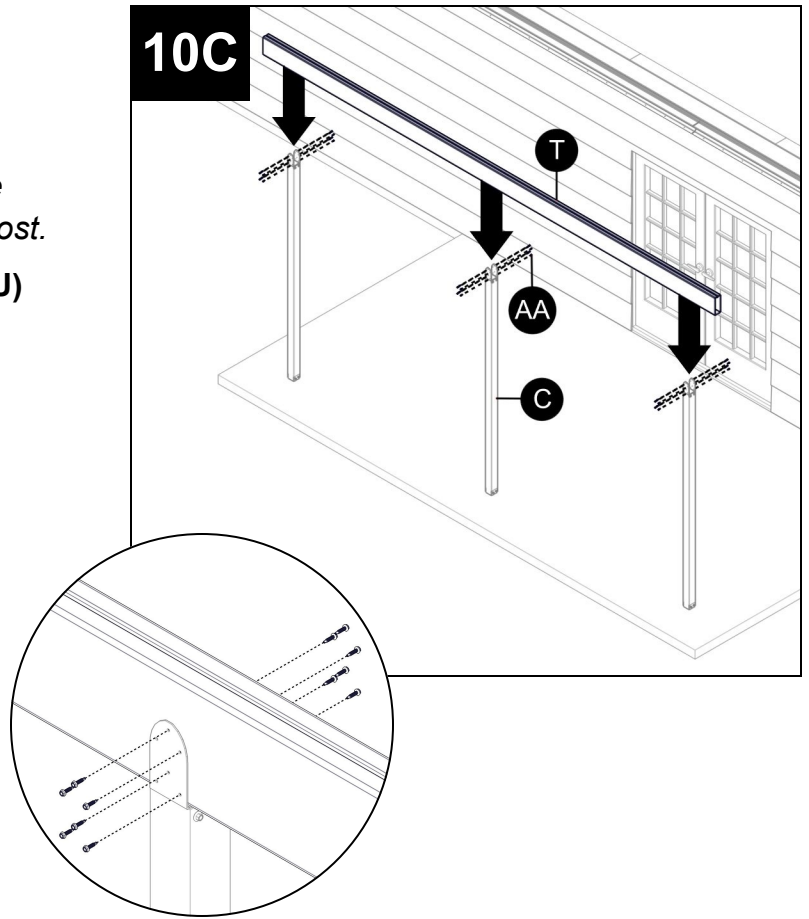
Position header **(T)** over posts **(C)** with an equal amount of overhang on both ends.

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

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

*10" 'V' style panel installation: Go to page 21*

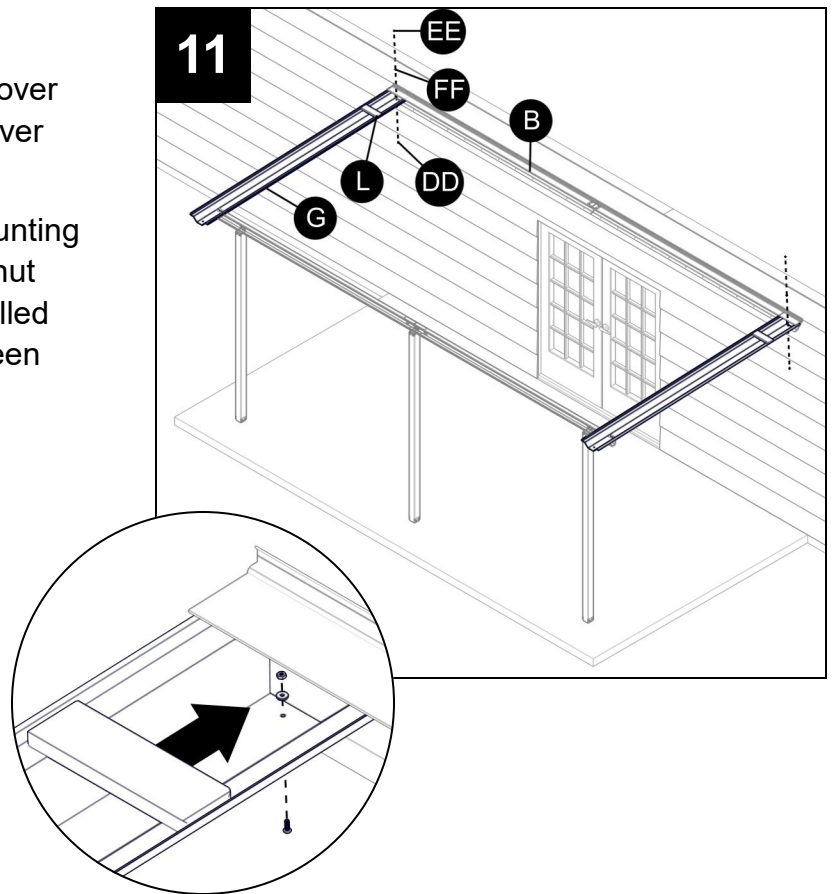
*8" flat style panel installation: Go to page 23*



## STEP 11 - 10" 'V' STYLE ROOF PANELS

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 #8 x 1/2" bolt (**DD**), #8 hex nut (**EE**), and 1/2" washer (**FF**) through the pre-drilled holes. Insert roof panel flashing plug (**L**) between the roof panel (**G**) and mounting channel (**B**).

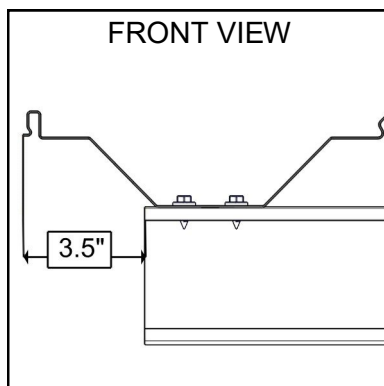
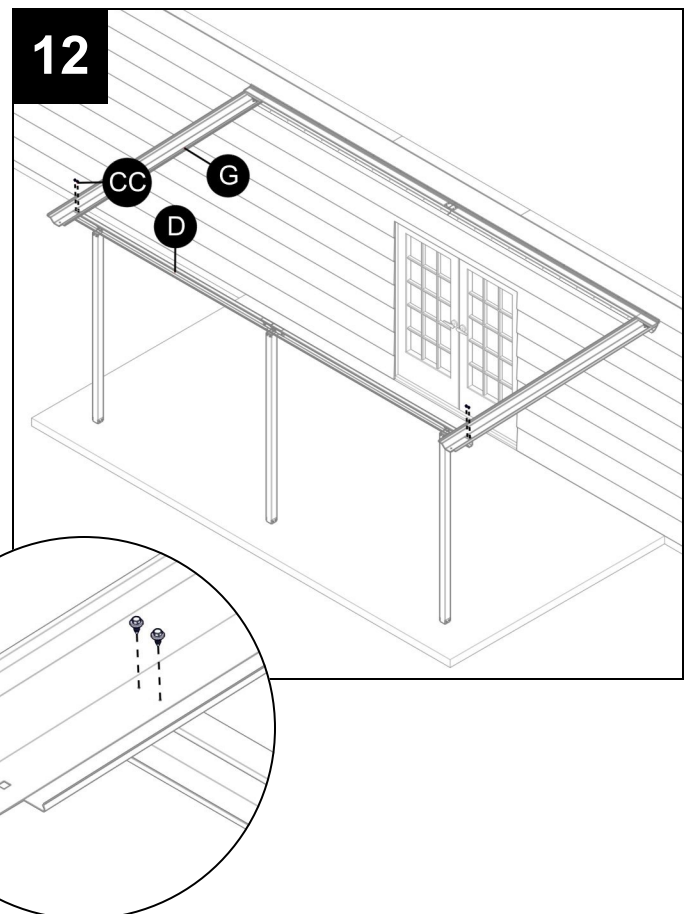


## STEP 12

Attach roof panel (**G**) to C Channel header (**D**) using (2) #14 x 3/4" SMS screws (**CC**) through the pre-drilled holes (typically set for 6" beam setback, or as specified). 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. This will also allow you to insert optional bird plugs (**X**), if ordered, see page 28.

*NOTE: If using optional 3" box beam header (**S**) or 3" x 8" header (**T**), attach roof panel (**G**) using #14 x 3/4" Tek screws (**JJ**).*

The first and last panels should overhang the ends of the header by approximately 3-1/2".





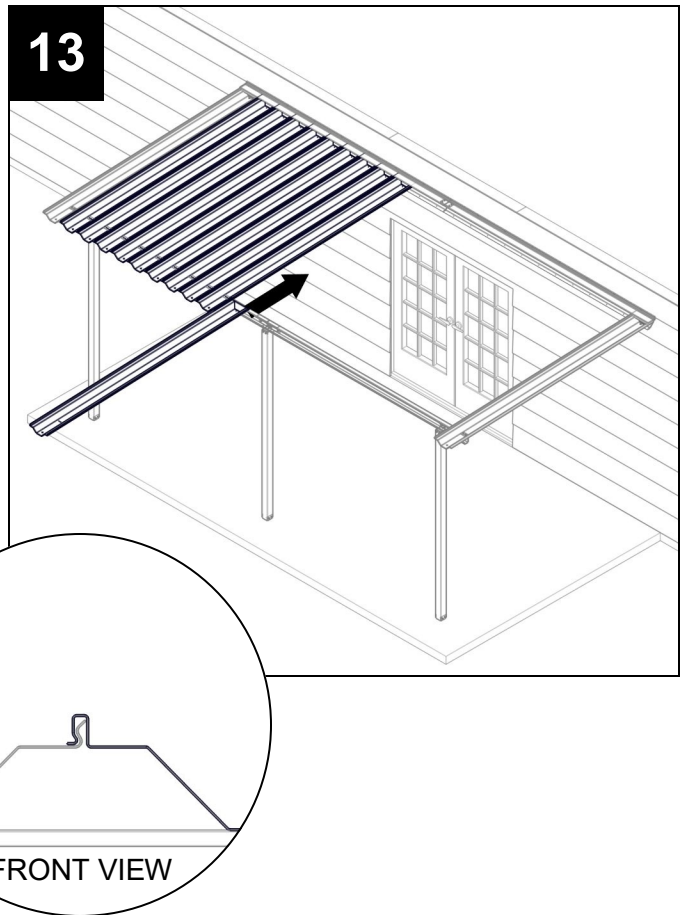
### STEP 13

Position the lock at the rear of the next roof panel (**G**) over the lock at the front of the previous panel. Slide the panel along the lock until the front end is flush with the previous panel. Repeat steps 11-12 on page 21 to attach roof panel (**G**) to mounting channel (**B**) and the header.

*NOTE: It is very important to maintain the 10" dimension between the center of the locks of each roof panel (**G**). Standard units come pre-drilled for easy installation. Line up the holes in the panels with the holes in mounting channel (**B**) and header (**D**).*

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.

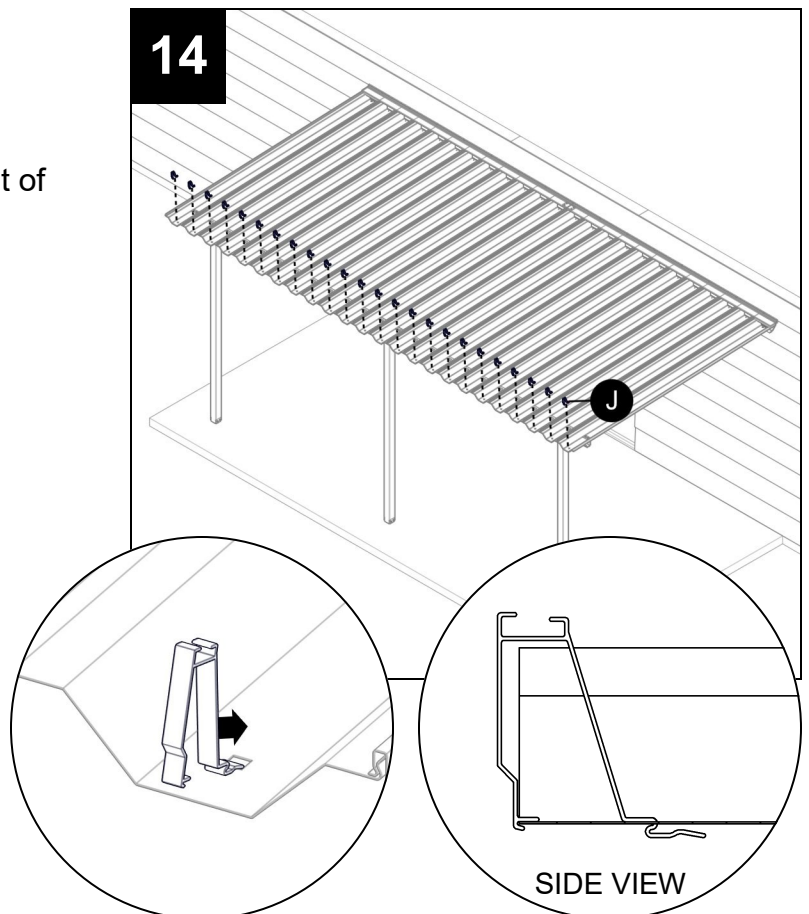
Once all roof panels (**G**) are installed, tighten all screws, bolts, and nuts at attachment points.



### STEP 14

Install a fascia clip (**J**) on each roof panel (**G**) through the pre-punched square hole at the front of the panel.

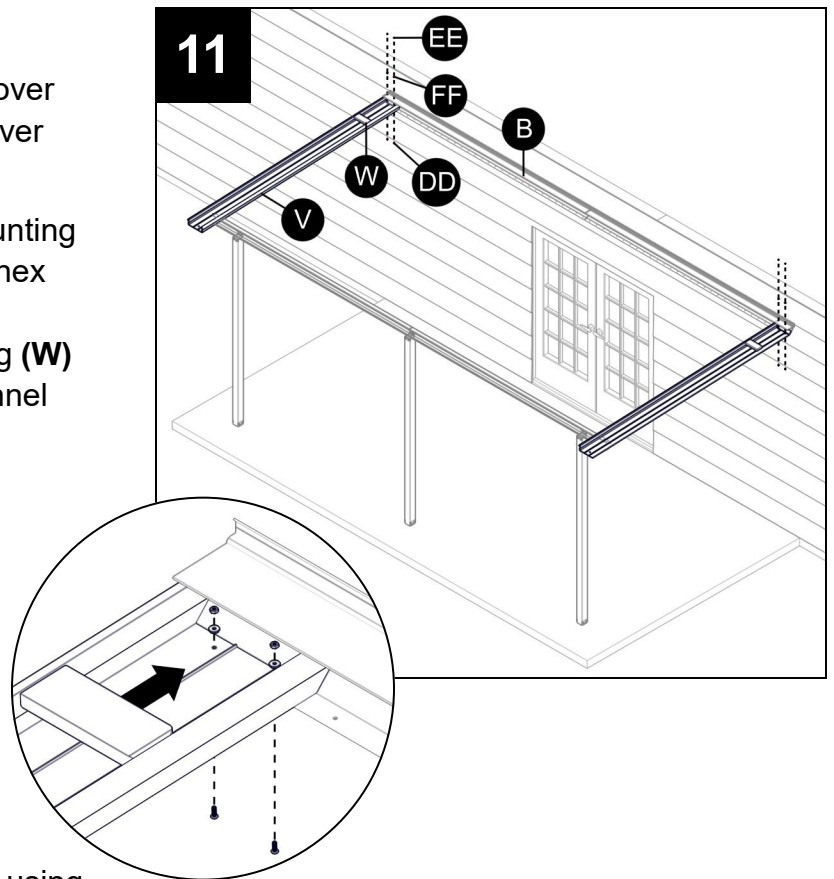
**Continue on page 25**



## STEP 11 - 8" FLAT STYLE ROOF PANELS

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

Attach the formed end of roof panel (**V**) 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 (**W**) between the roof panel (**V**) and mounting channel (**B**).

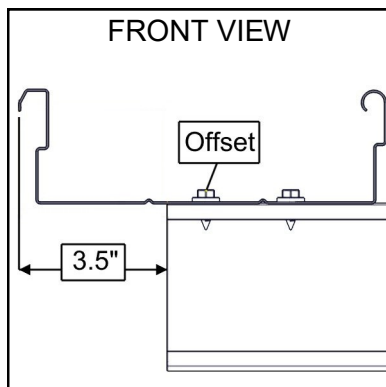
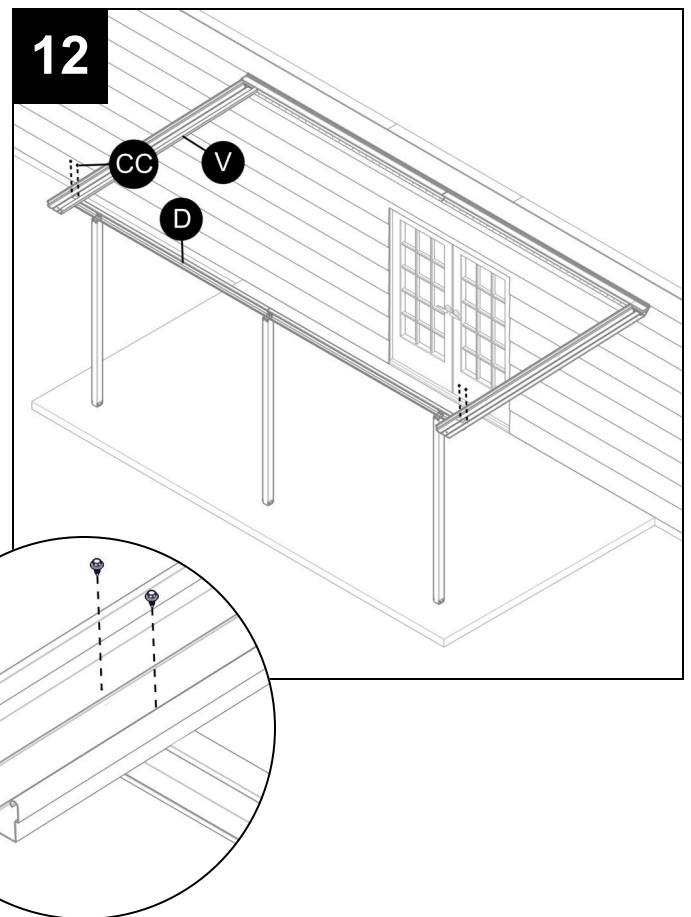


## STEP 12

Attach roof panel (**V**) to C Channel header (**D**) using (2) #14 x 3/4" SMS screws (**CC**) through the pre-drilled holes (typically set for 6" beam setback, or as specified). 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 3" box beam header (**S**) or 3" x 8" header (**T**), attach roof panel (**V**) using #14 x 3/4" Tek screws (**JJ**).*

The first and last panels should overhang the ends of the header by approximately 3-1/2". Accordingly, the first and last screws must be offset slightly to reach the header.



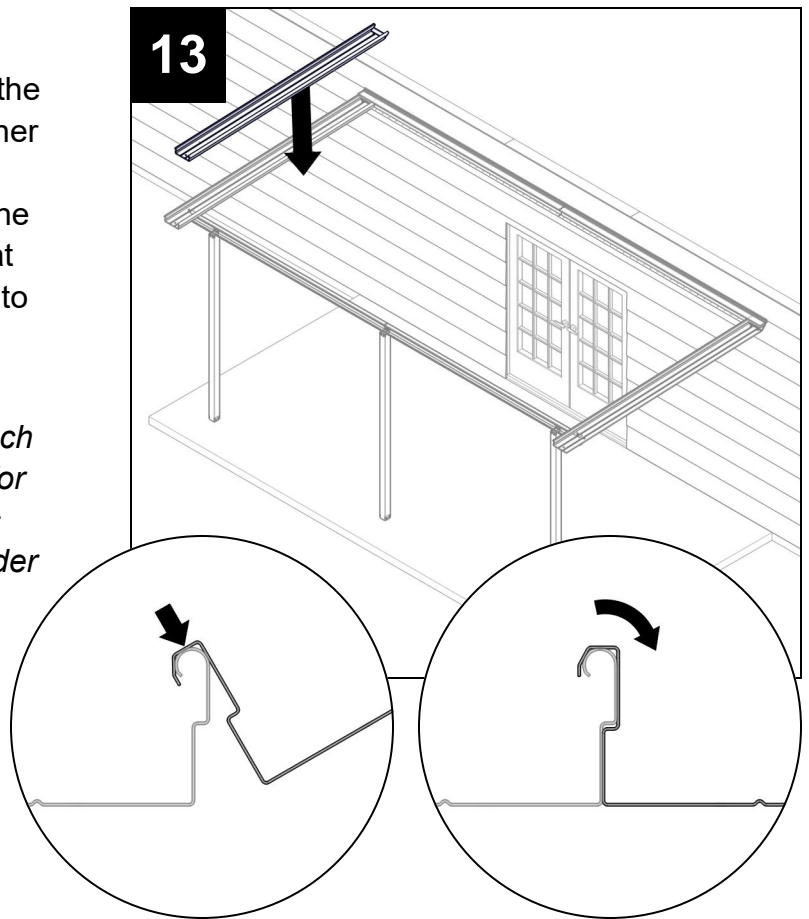
### STEP 13

Position the lock of the next roof panel (**V**) over the lock of the previous panel. Snap the locks together by hooking the locks and rolling the panel down. Slide the panel into mounting channel (**B**) until the front end is flush with the previous panel. Repeat steps 11-12 on page 23 to attach roof panel (**V**) to mounting channel (**B**) and the header.

*NOTE: It is very important to maintain the 8" dimension between the center of the locks of each roof panel (**V**). Standard units come pre-drilled for easy installation. Line up the holes in the panels with the holes in mounting channel (**B**) and header (**D**).*

Repeat for all remaining roof panels (**V**). 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.

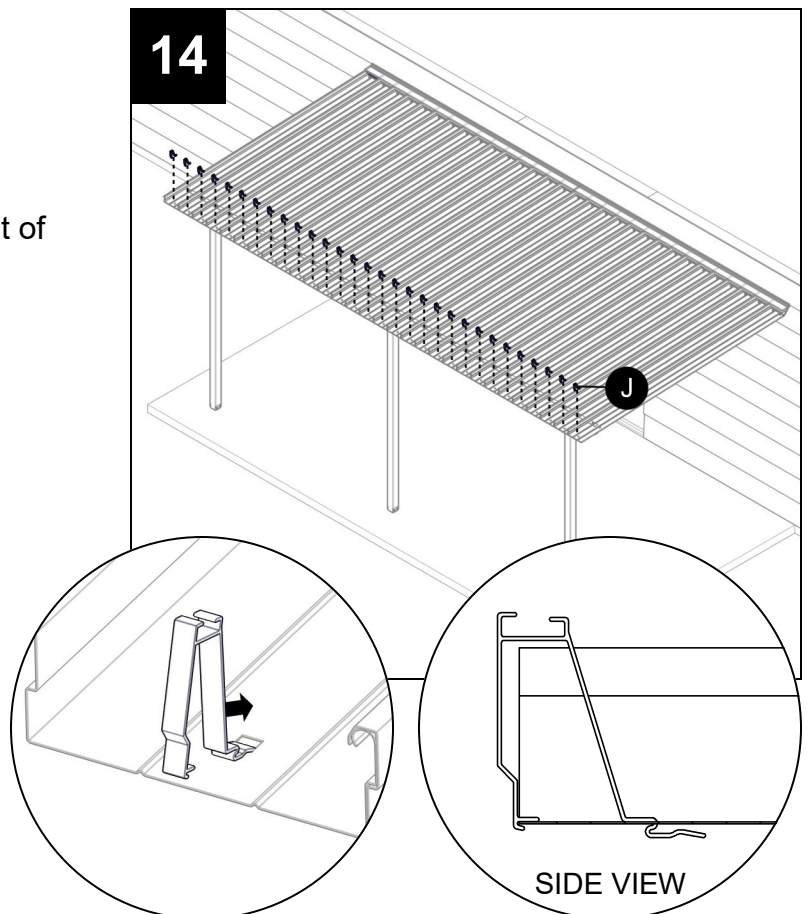
Once all roof panels (**V**) are installed, tighten all screws, bolts, and nuts at attachment points.



### STEP 14

Install a fascia clip (**J**) on each roof panel (**V**) through the pre-punched square hole at the front of the panel.

**Continue on page 25**





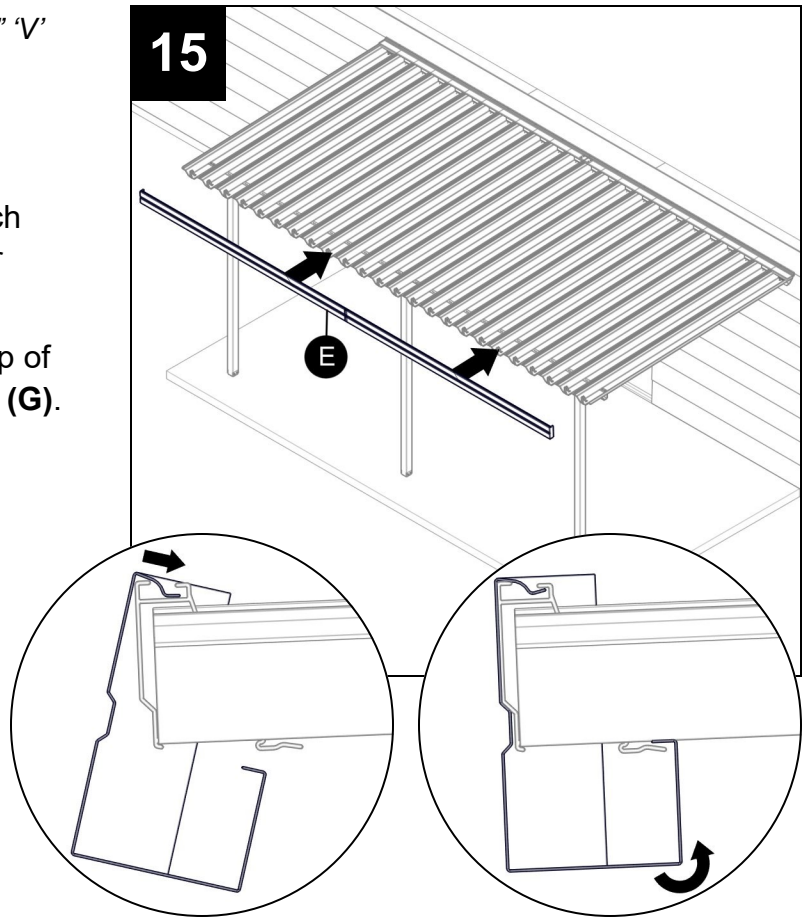
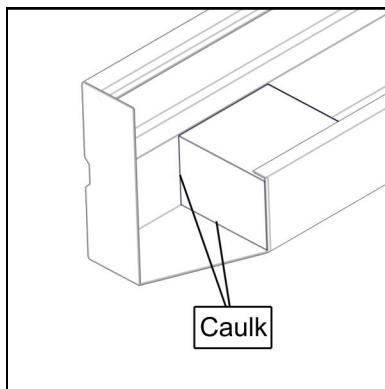
The remaining steps are completed the same for 10" 'V' style roof panels (G) and 8" flat style roof panels (V). 10" 'V' style roof panels are shown.

## STEP 15

Starting at one end, install front gutter (E) to each fascia clip (J) by fitting the upper lip of the gutter into the slot at the top of the clip.

Roll front gutter (E) forward and lock the lower lip of the gutter between fascia clip (J) and roof panel (G).

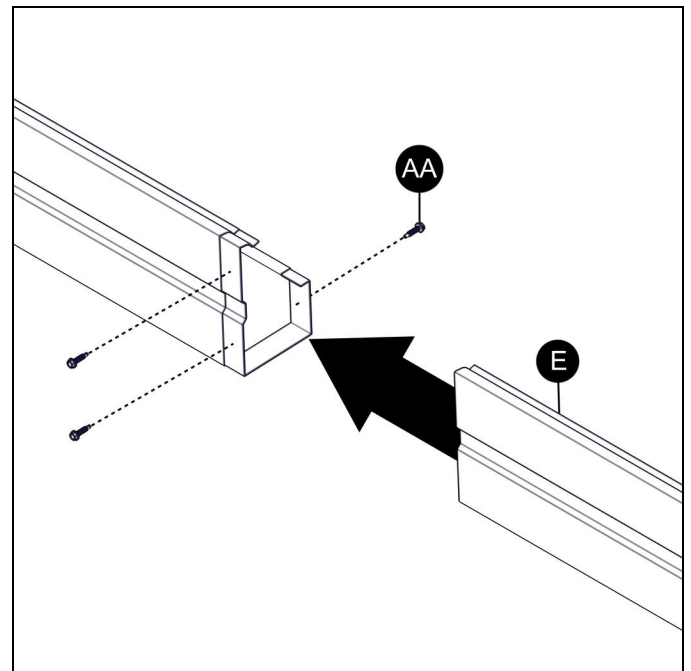
Caulk the exposed edges of the flashing plug in front gutter (E) to prevent sliding and leaks.



## GUTTER SPLICE - OPTIONAL

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

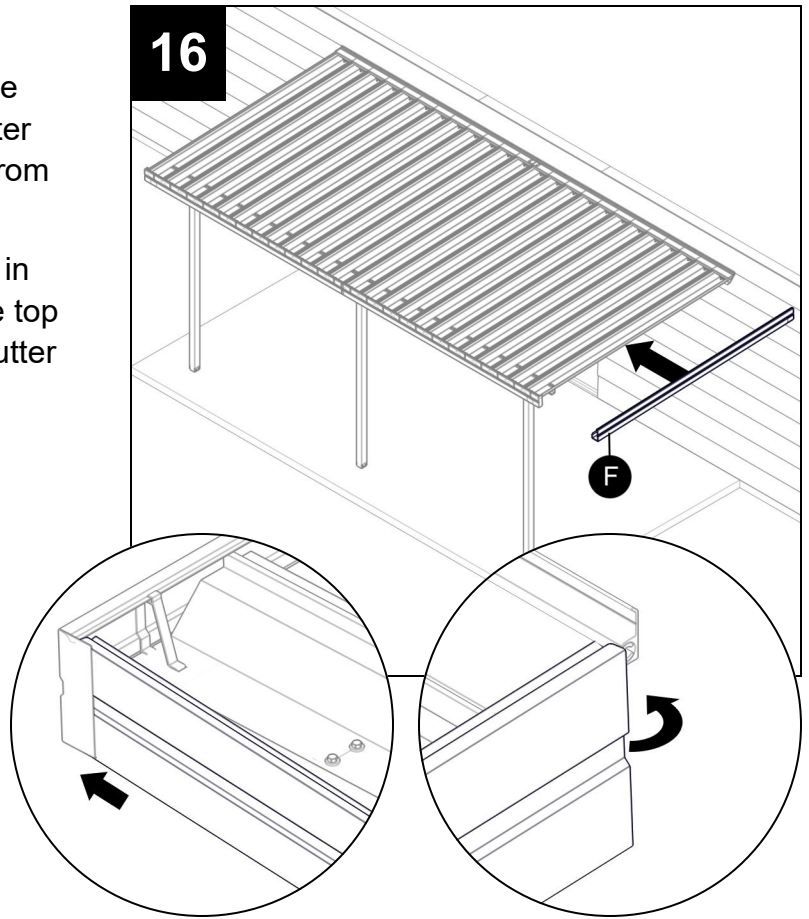
Apply a generous amount of caulk around the crimped end of front gutter (E). Insert the crimped end into the square end of another piece of front gutter and attach using (3) #8 x 3/4" screws (AA).



## STEP 16

Fit the front of side gutter (**F**) (the end without the bird block) into the fabricated corner of front gutter (**E**) by angling the back of side gutter (**F**) away from mounting channel (**B**).

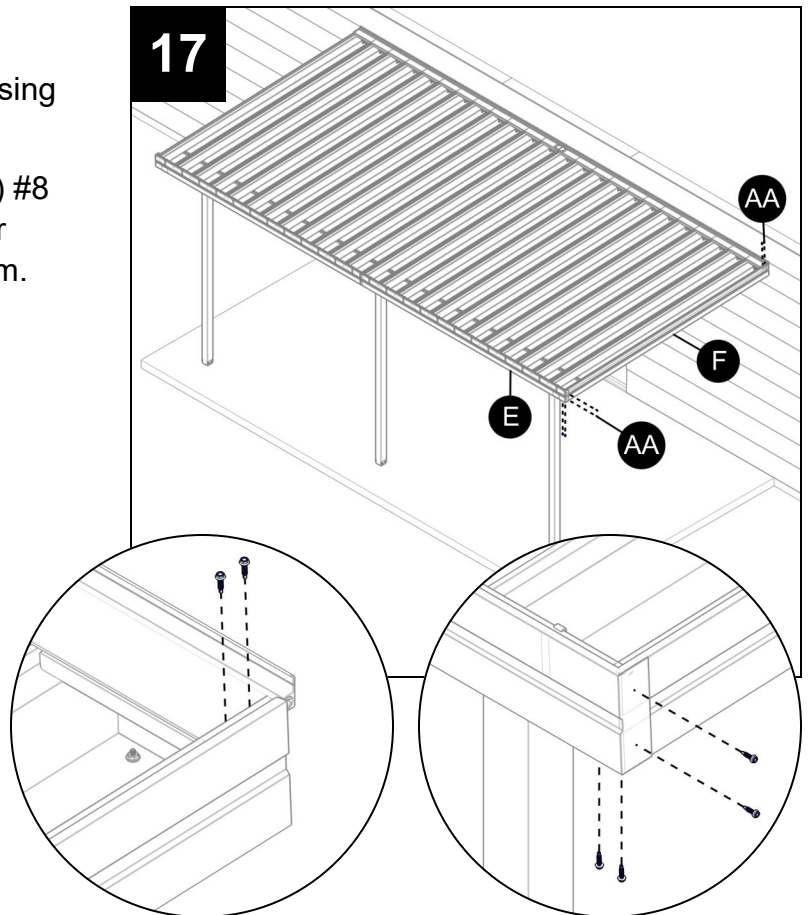
Have assistance hold the front of side gutter (**F**) in place. Fit the upper lip of side gutter (**F**) over the top of mounting channel (**B**). The lower lip of side gutter (**F**) should fit below mounting channel (**B**).



## STEP 17

Attach side gutter (**F**) to mounting channel (**B**) using (2) #8 x 3/4" screws (**AA**) through the upper lip.

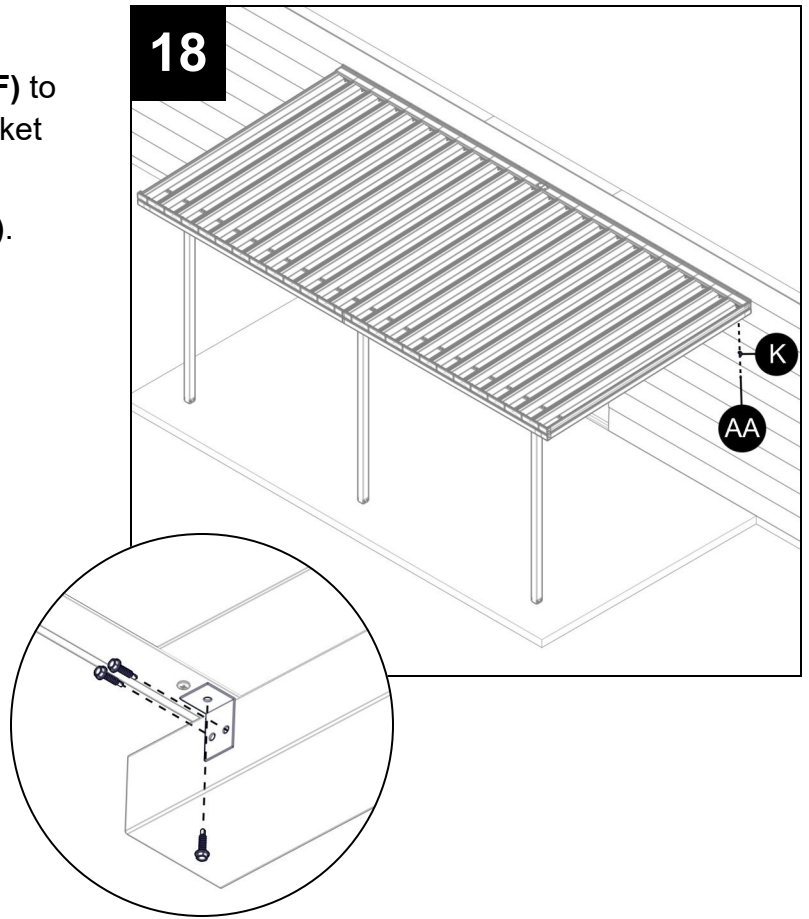
Attach side gutter (**F**) to front gutter (**E**) using (2) #8 x 3/4" screws (**AA**) through the fabricated corner and (2) #8 x 3/4" screws (**AA**) through the bottom.



## STEP 18

From underneath the cover, attach side gutter (**F**) to mounting channel (**B**) using fascia hanging bracket (**K**) and (3) #8 x 3/4" screws (**AA**).

Repeat steps 16-18 for remaining side gutter (**F**).



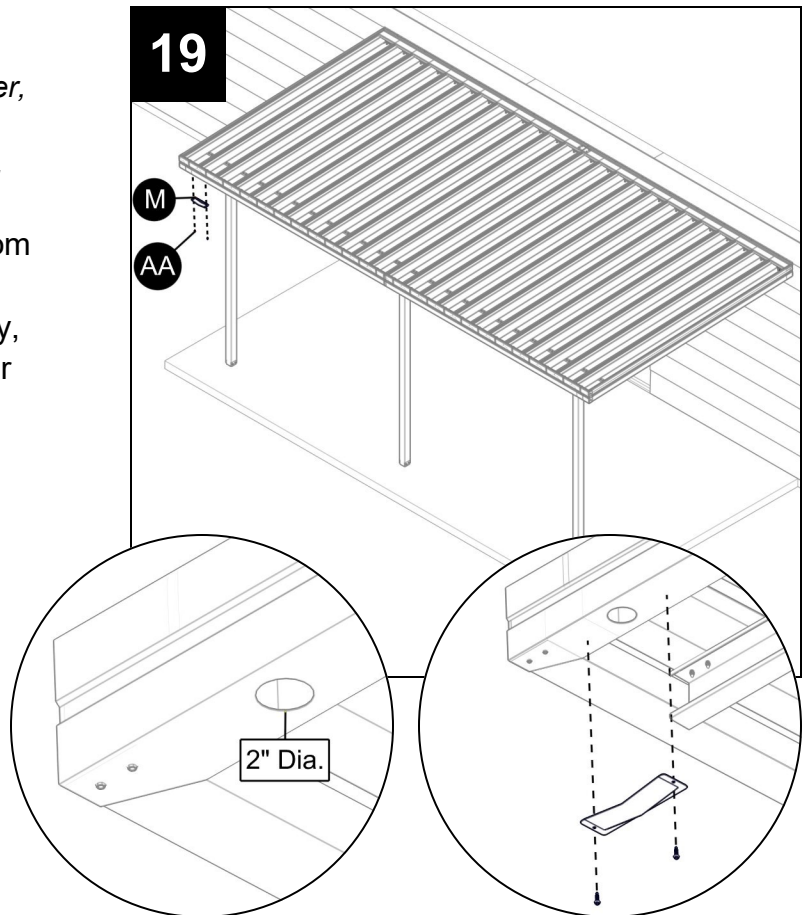
## STEP 19 - SCUPPER INSTALLATION

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

Determine the desired location to drain water from front 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 (**M**). Attach the scupper to front gutter (**E**) using (2) #8 x 3/4" screws (**AA**).

Repeat for any remaining scuppers (**M**).

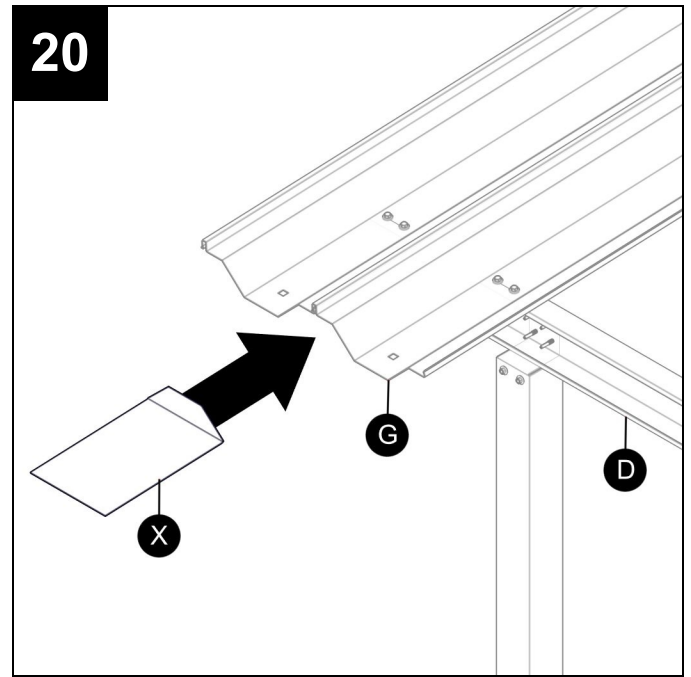


## OPTIONAL BIRD PLUG INSTALLATION

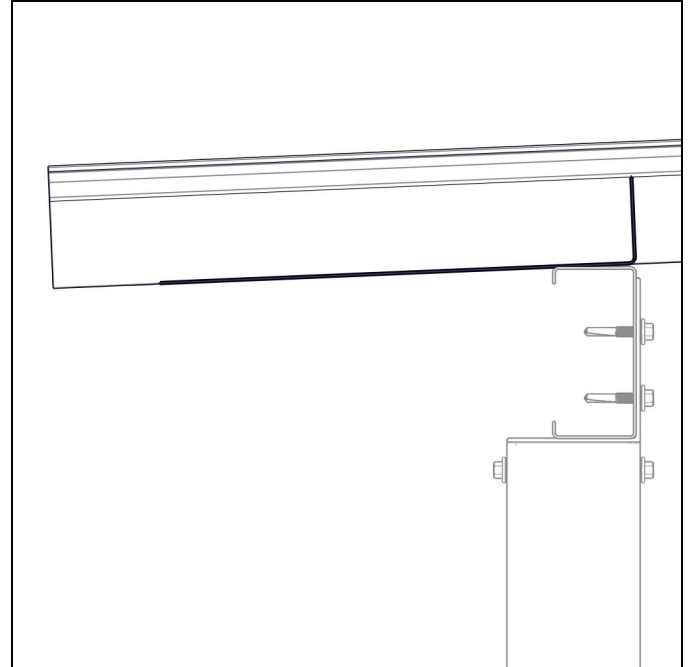
**Note:** When installing bird plugs while installing roof panels, it is important *NOT* to completely tighten the screws attaching to the header. This will make it significantly easier to install the bird plugs. If installing bird plugs with the roof already completed, it may be necessary to loosen the screws attaching the roof panels to the header.

Install (2) roof panels (**G**) according to the instructions on pages 21-22. Insert a bird plug (**X**) between the roof panels and header (**D**). Slide the plug toward the front of the cover until the back of the plug is flush with the back of the header.

Repeat this step and the steps on pages 21-22 until all roof panels are installed. Then, tighten all screws and make sure bird plugs (**X**) are held firmly in place.



SIDE VIEW



## Care and Maintenance

Every 12 months your shade structure should be inspected and maintained by:

- Tightening loose nuts and bolts at all connections.
- Repairing damage to the finish to prevent corrosion.
- Replacing lost or damaged fasteners, brackets, and other parts.
- Replacing brittle or cracked sealer to prevent leaks.
- Removing obstructions and miscellaneous build-up from gutters, eaves, and downspouts.



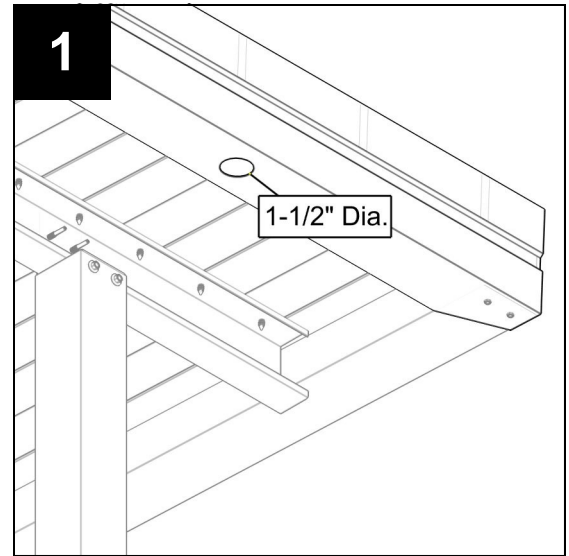


**DOWNSPOUT ASSEMBLY**  
**INSTALLATION INSTRUCTIONS**  
**FOR PATIO COVERS AND CARPORTS**

Contact us at:  
888-330-3115 or  
[www.generalawnings.com](http://www.generalawnings.com)

**STEP 1**

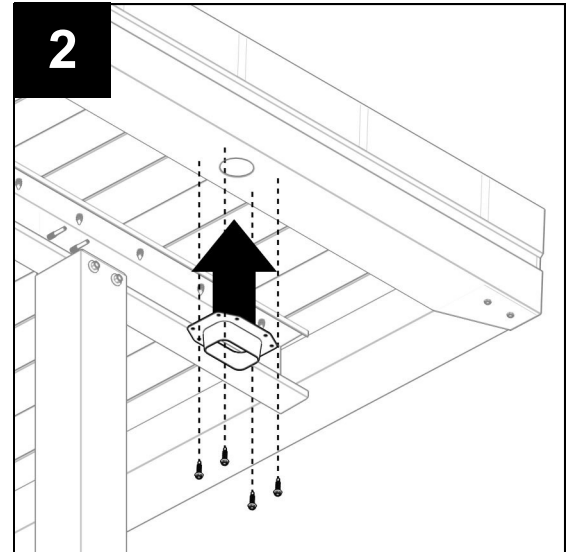
Determine the desired location to drain water from the front gutter of the shade structure. The downspout is best positioned next to or in front of a post. Cut a hole no bigger than 1-1/2" diameter in the bottom of the gutter. Alternatively, you may drill several small holes in a rectangular pattern no bigger than 1-1/2" x 2-1/2".



**STEP 2**

Apply a generous bead of caulk around the flange of the downspout outlet.

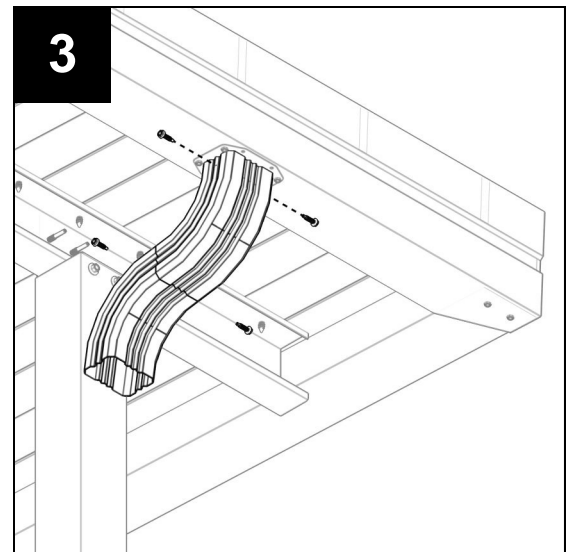
Attach the outlet to the gutter over the hole using (4) #8 x 3/4" screws.



**STEP 3**

Attach a downspout elbow to the outlet facing toward the post using (2) #8 x 3/4" screws.

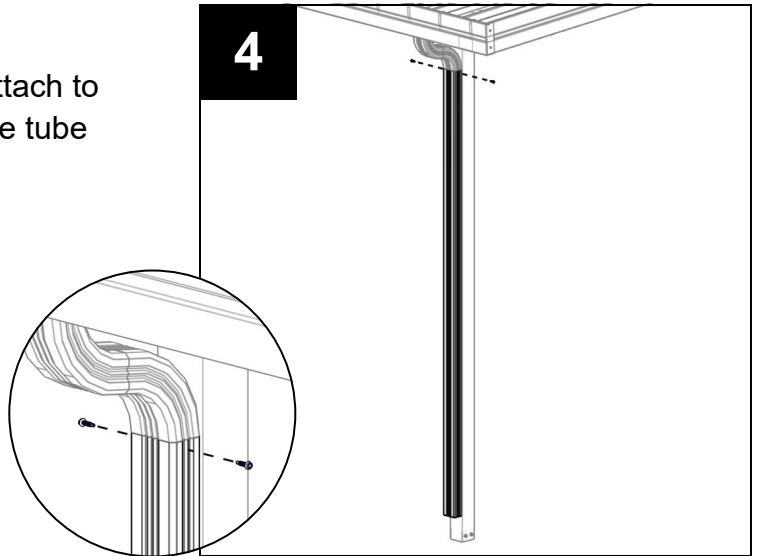
Attach a second elbow to the first facing toward the ground using (2) #8 x 3/4" screws. The second elbow should end positioned next to or in front of the post. Cut off a short length of the downspout tube if necessary.



DOWNSPOUT ASSEMBLY  
INSTALLATION INSTRUCTIONS  
FOR PATIO COVERS AND CARPORTS

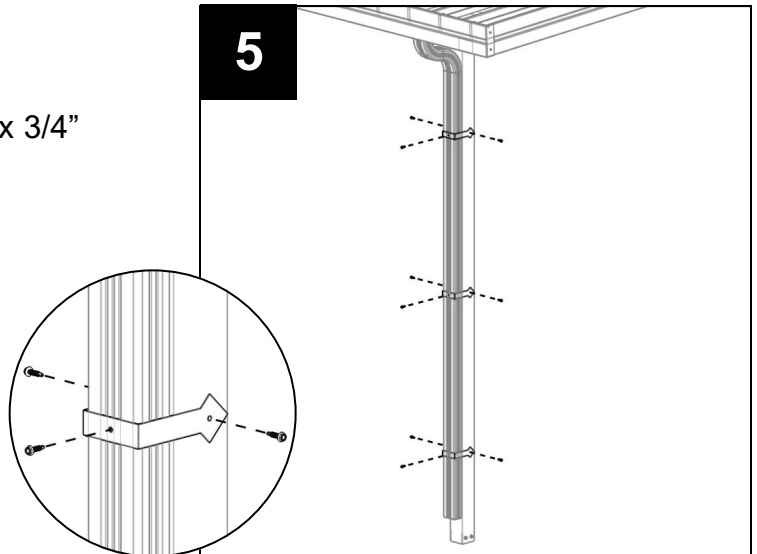
STEP 4

Cut the downspout tube to the desired length. Attach to the second elbow using (2) #8 x 3/4" screws. The tube should end approximately 6" from the ground.



STEP 5

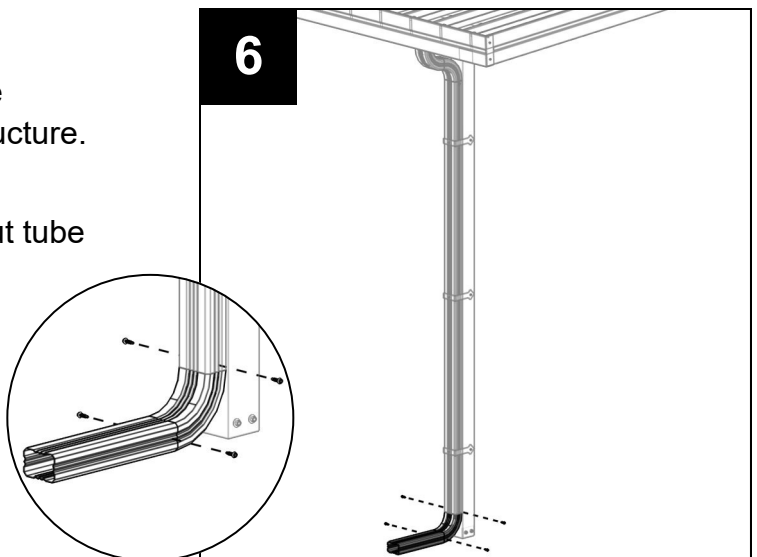
Evenly space the downspout straps along the downspout tube. Attach to the post using (3) #8 x 3/4" screws per strap.



STEP 6

Attach a third downspout elbow to the end of the downspout tube facing away from the shade structure. Attach using (2) #8 x 3/4" screws.

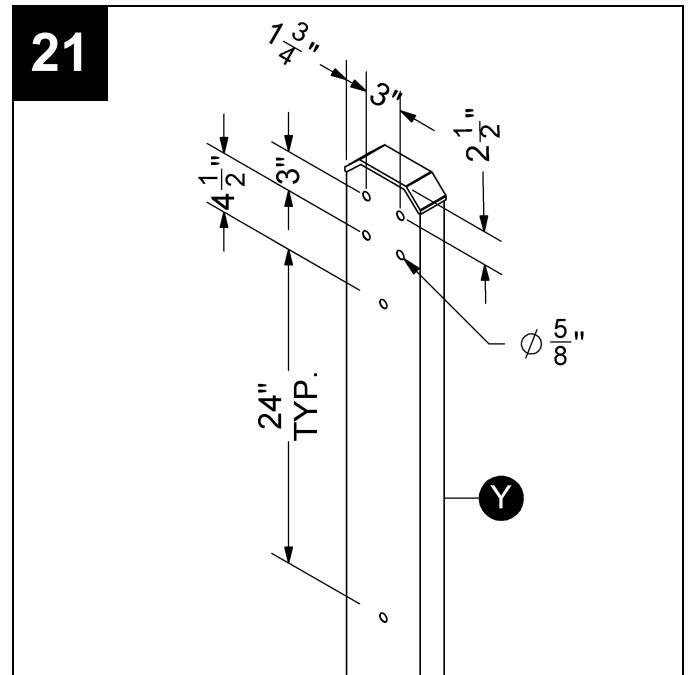
If desired, attach the remainder of the downspout tube to the third elbow using (2) #8 x 3/4" screws.





## STEP 22 - OPTIONAL SIDE PLATE INSTALLATION

If not pre-drilled, use a 5/8" bit to drill holes through one side of side plate (Y) according to the dimensions shown.



## STEP 23

Center (2) side plates (Y) next to post (C). Attach side plate (Y) to post (C) and header (T) using #12 x 1-1/4" screws (BB) through each hole. Insert a 5/8" hole plug (OO) into all holes.

Repeat for each post (C).

