

12x12 Pavilion



Assembly Manual

12x12 Pavilion Assembly Manual

Congratulations on purchasing your new Pavilion. Thank You for your purchase and Welcome to the YardCraft Family.

This manual is designed to simplify the assembly process, however we recommend having an experienced carpenter involved in the project. Please read through the entire manual before starting!

The Pavilion put together for this manual was a 12x12 Pavilion. It took 2 men, approximately 6 hours using the tools shown. However, it may take you longer since it will be a new project for you.

Take a deep breath and get at it; the satisfaction and enjoyment of this pavilion is only a few hours away. Have fun!

You have purchased a product that consists of heavy, bulky pieces. With your purchase, you assume full responsibility to have the necessary manpower and/or equipment available to unload the items. You also agree that any damage that happens to the equipment, product, or individuals during the unloading process, or during the entire construction process, is your responsibility, and neither the seller, nor the manufacturer, will be held liable for any such damage.

Tools Required for Job (Not Provided)



6' & 10'
Step
Ladders



Rubber
Mallet



Hammer



Ratchet with
 $\frac{1}{16}$ " & $\frac{5}{8}$ "
Socket



Level



$\frac{1}{4}$ "x6" Drill
Bit



C- Clamp
or Vise Grip
Clamp



Cordless
Drill



25' Tape
Measure



Utility
Knife



2" Square
Drive and
 $\frac{1}{4}$ " Hex
Drive Bit

Also a
T 30
Stardrive
Bit



(4) 2x4x8' Long
(2) 2x4 Approx 4' Long
for bracing header assemblies

Parts List



2 1/2" Screws



2" Panhead Screws



1 1/4" Screws



3/8"x10 1/2" Bolts, Washers, and Nuts



3/8"x6" Lag Bolts



3 1/8" GRK Lags



3/8"x3 1/2" Threaded Rods with Washers & Acorn Nuts



3/8"x4" Bolts with Washers & Nuts



1" Pancake Screw



3/4" Rubber Washer Screws



1/2" Zip Screws



Rafter Brackets



Hip Rafter Brackets



Post Brackets



Fascia Corner Brackets



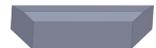
Roof Cap Assembly



Left Side Brace



Right Side Brace



Post Boot Piece without Notch

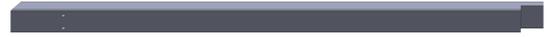


Post Boot Piece with Notch

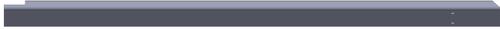
Parts List Continued



Post



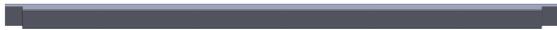
Left Outside Header Piece



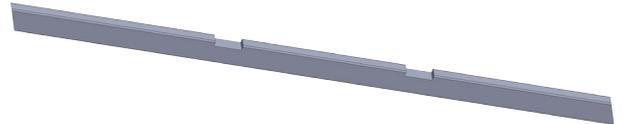
Right Outside Header Piece



Inside End Header Piece



Inside Center Header Piece



Center Rafter



Left Side Fascia Piece



Right Side Fascia Piece



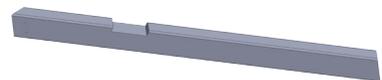
Left Side Hip Rafter



Right Side Hip Rafter



Left Side Jack Rafter



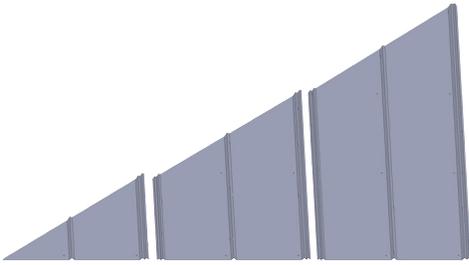
Right Side Jack Rafter



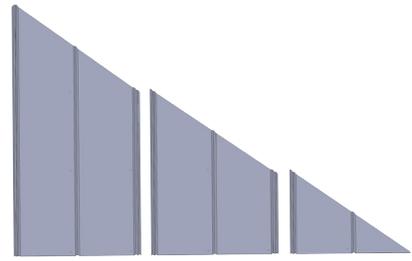
Long Purlin Piece



Short Purlin Piece



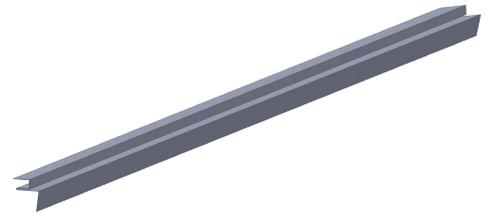
Left Side Metal Pieces



Right Side Metal Pieces



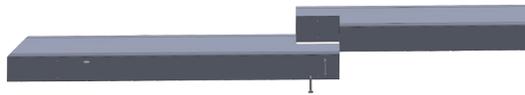
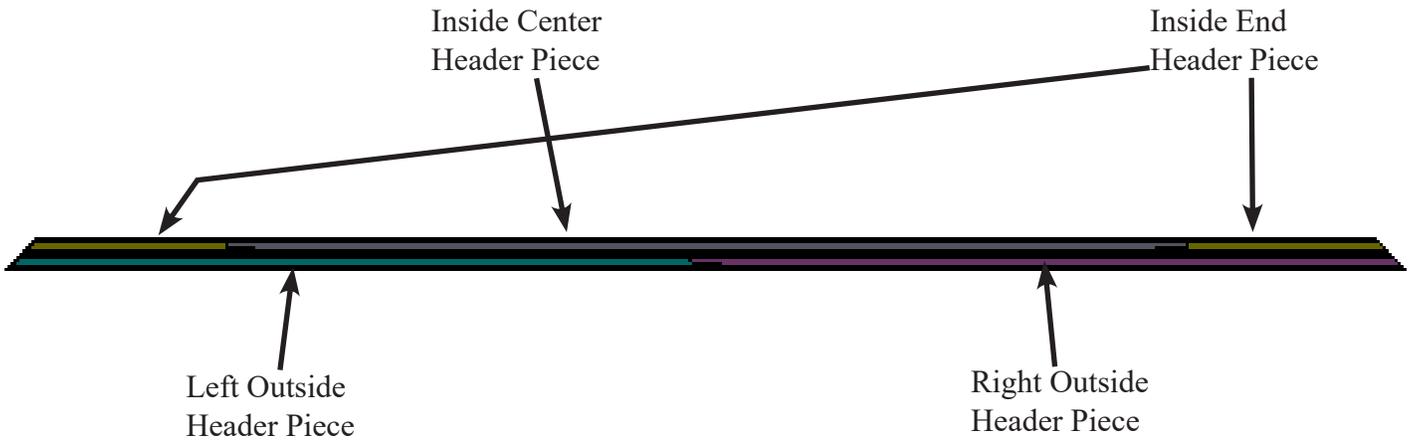
Drip Edge



Ridge Clip



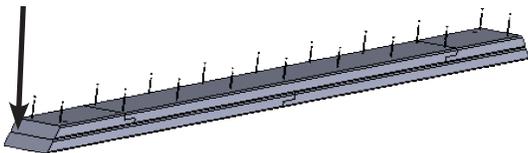
Ridge Cap



Fasten the Inside End Header Piece to each side of the Inside Center Header Piece with 1 1/4" Screws through Pre-Drilled Holes.

Fasten the Left Outside Header Piece to the Right Outside Header Piece with 1 1/4" Screws.

Align the 2 Pieces Here.



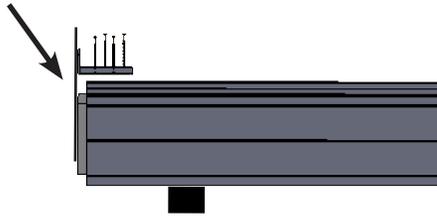
Align the 45 Degree cut on the assembled inside Header Ply and the assembled Outside Header Ply and make flush on both sides and Fasten together with 2 1/2" Screws.

The white block on one end of the post indicates the bottom of the post

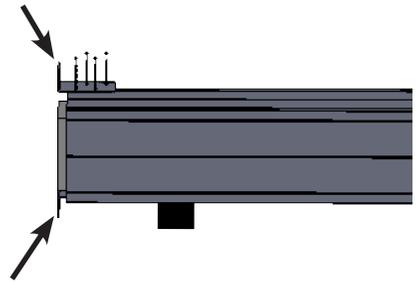


Lay the Post down. Be careful not to damage the post. Using your own material, create some 3" or 4" blocks to lay the post on.

Align the Post Bracket with the bottom of the Post



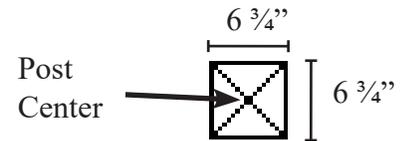
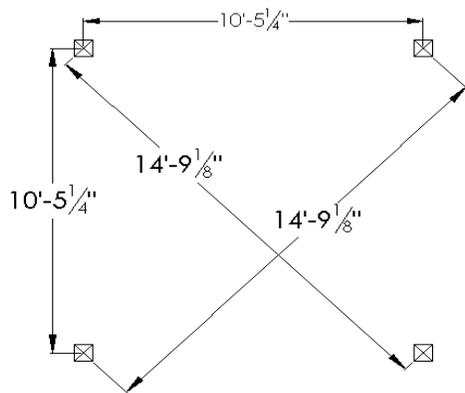
Second Post Bracket



First Post Bracket

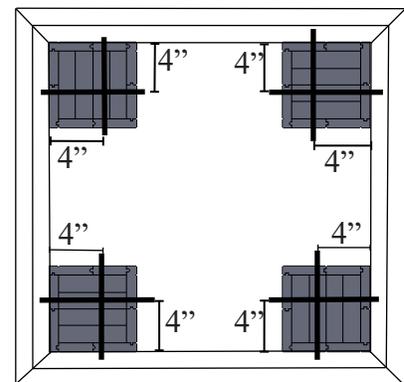
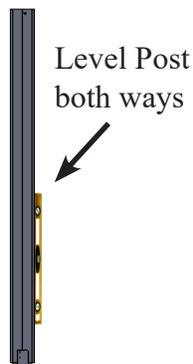
Install the Post Brackets on the bottom of the Post. Fasten with 2 1/2" Screws.

Turn the post around and install the second Post Bracket. Using previous steps, Install the Post Brackets on all (4) Post. Two (2 Brackets per Post)



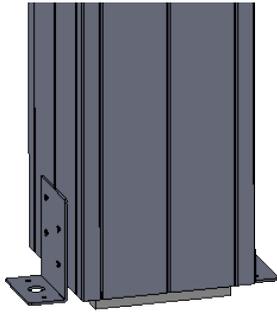
Mark the location of the Post. These Dimensions are center to center of Post.

After marking the center of the Post Location, Draw a 6 3/4"x6 3/4" Square around the Center of the Mark as Shown.

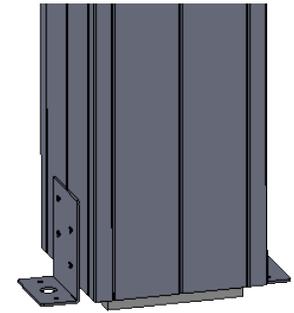


Place the Post in prepared locations. Ensure post are level, then anchor down using your choice of anchor bolts.

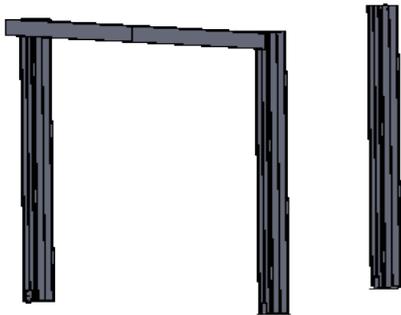
Take note of the proper orientation of the post. The lines indicate the holes that are pre-drilled in the post.



If Anchoring to Concrete, Use either (2) Tapcon Screws or (1) 1/2"x4" Powers Wedge Bolt. These are not Provided. Follow the Manufactures recommendations on installing these fasteners.

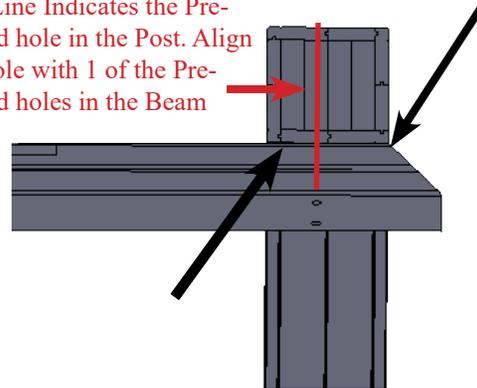


If Anchoring to Wood, Use either (2) 1/4" Screws or (1) 1/2"x4" Lag. These are not Provided. Follow the Manufactures recommendations on installing these fasteners.

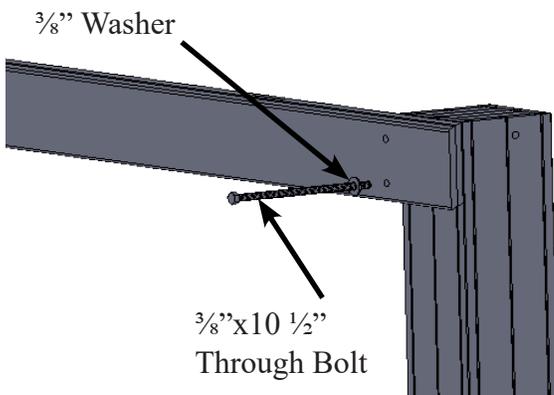


Lift the first Assembled Header in place.

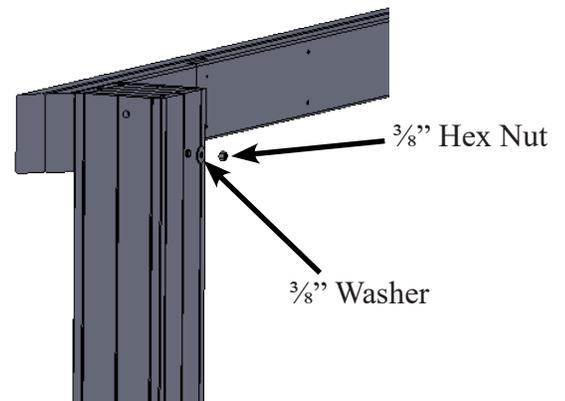
This Line Indicates the Pre-Drilled hole in the Post. Align this hole with 1 of the Pre-Drilled holes in the Beam



Make the Header flush with the top of the Post. Also the inside corner of the 45 Degree cut should be flush with the end of the Post.



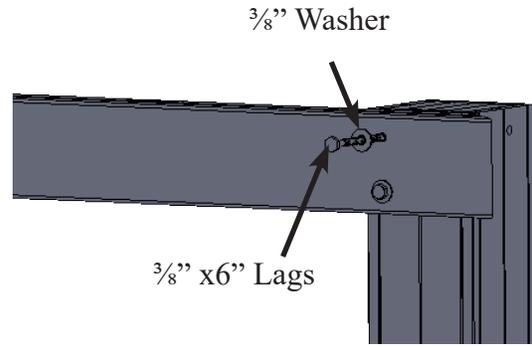
Insert the 3/8"x10 1/2" Through bolt, and a 3/8" Washer, through the post.



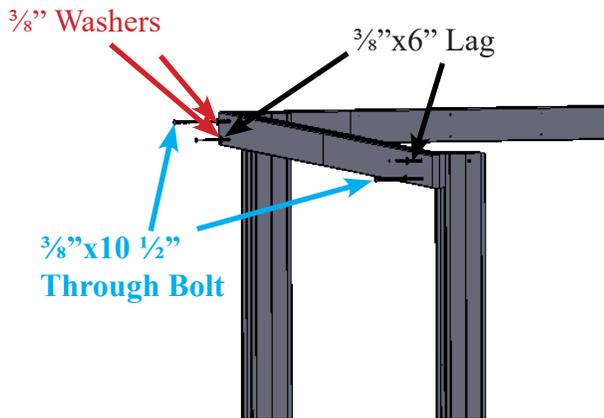
Place a 3/8" Washer on the other end of the Through bolt and Fasten a Hex nut to the bolt. Using a 9/16" Socket, tighten the through bolt. Repeat these steps on the opposite end of the Assembly Header.



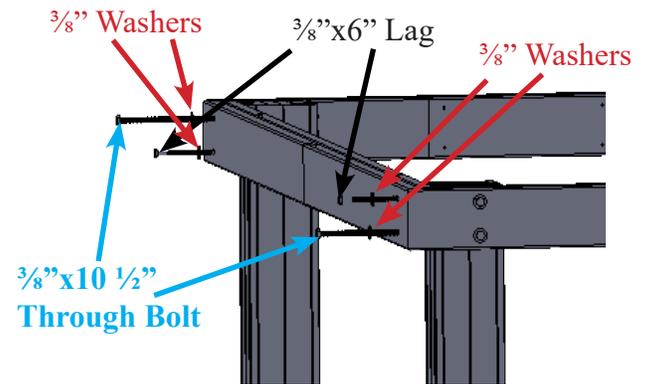
Using your own 1/4"x6" Drill Bit, Pre-Drill through the hole into the Post.



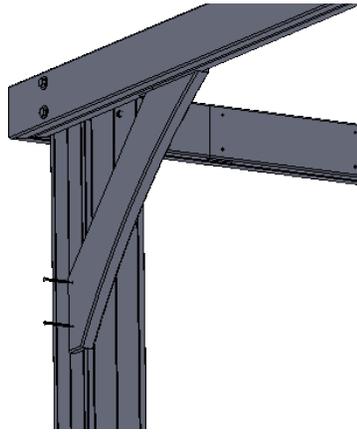
Using a 1/16" Socket, Turn the 3/8"x6" Lag Through the Pre-Drilled hole into the post. Repeat on the opposite side of the Header.



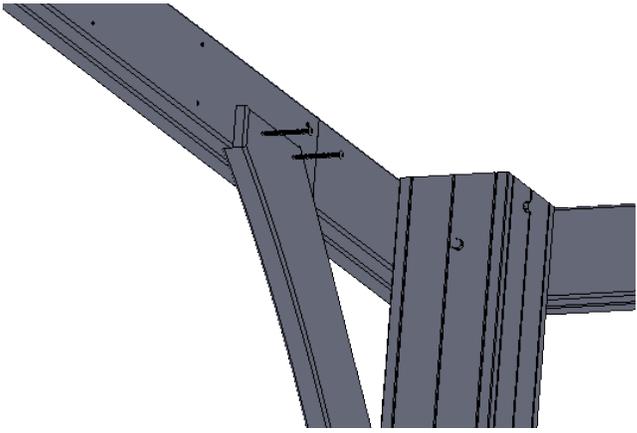
Lift the Second Header in Place. Install the 3/8"x10 1/2" Through bolts, and the 3/8"x6" Lags as shown in Previous Steps.



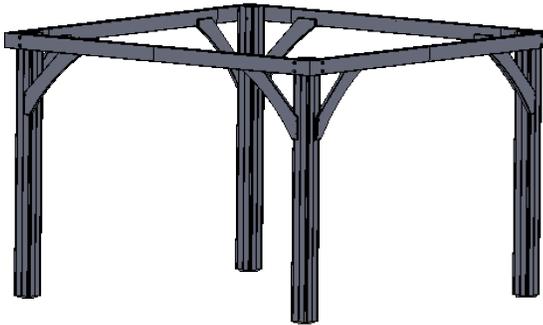
Install the third & fourth Header. Install the 3/8"x10 1/2" Through bolts, and the 3/8"x6" Lags as shown as shown in previous steps.



Install the Corner Braces. There are 4 Left Hand, and 4 Right Hand Braces. They are notched and made to fasten on the outside of the post, and the inside of the header as shown. Fasten with 3 1/8" GRK Lags into Pre-Drilled Holes.



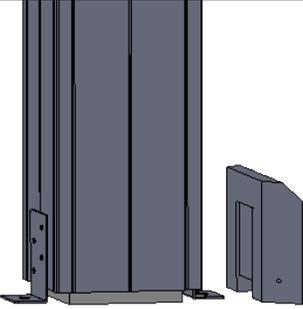
Fasten to the inside of the Header with 3 1/8" GRK Screws.



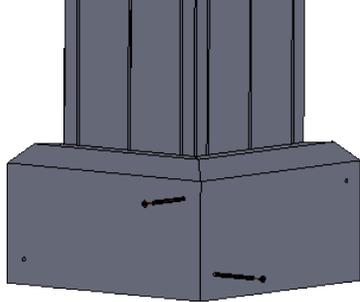
Install the remaining braces at all Post Locations.



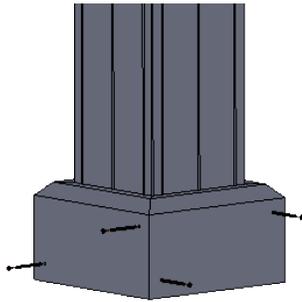
Locate the post boot pieces. There is some with notches and some without.



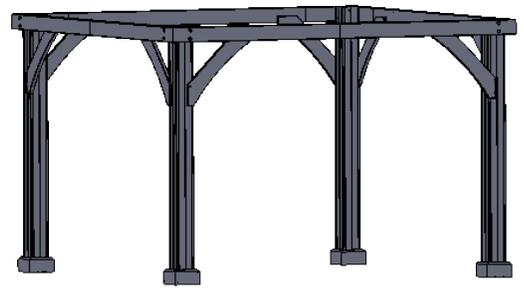
The piece with the notch goes on the side that the Anchor Brackets are attached to.



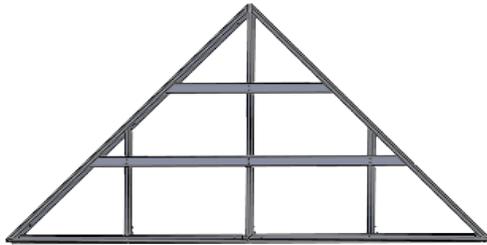
Place the post boots against the post as shown. Fasten together with 2 1/2" Screws into Pre-Drilled Holes.



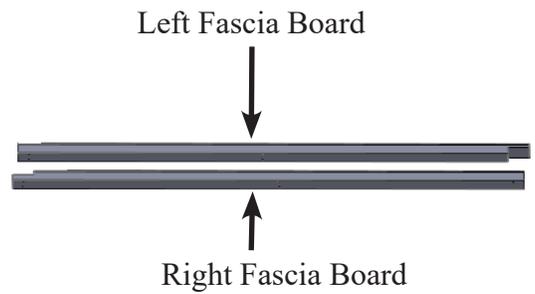
Install the last 2 Post Boot Pieces as shown.



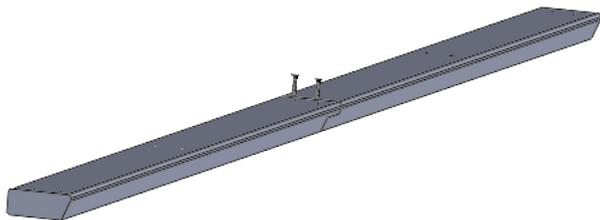
Using Previous steps, Install the Post boots on all the remaining Posts, as shown in previous steps.



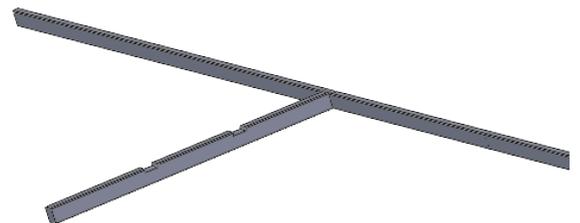
You are now ready to assemble the roof Panel.



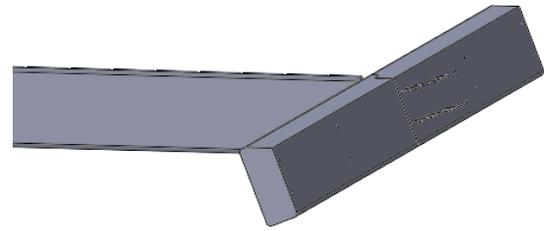
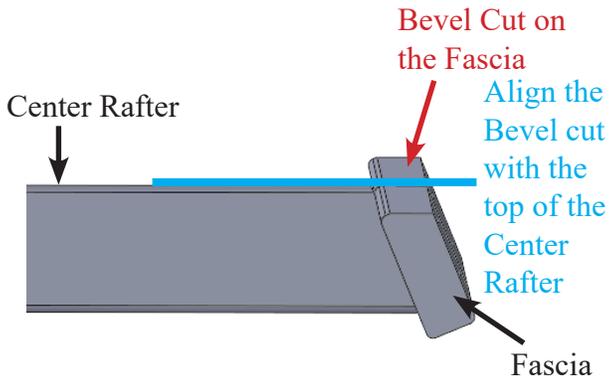
Start by Locating one (1) Left and one (1) Right Fascia Board.



Fasten the Left Fascia Board to the Right Fascia Board with 1 1/4" Screws through Pre-Drilled Holes. Repeat this step to assemble all Fascia Boards.

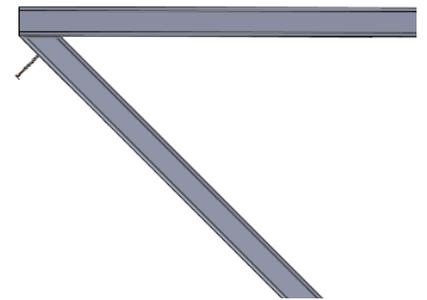
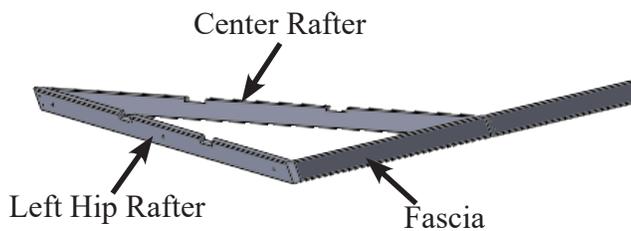


Locate the Center Rafter. Place the Center Rafter against the assembled Fascia Board.



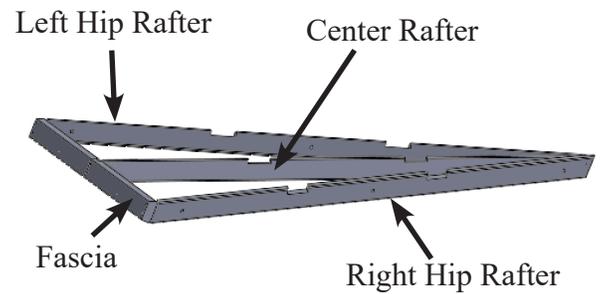
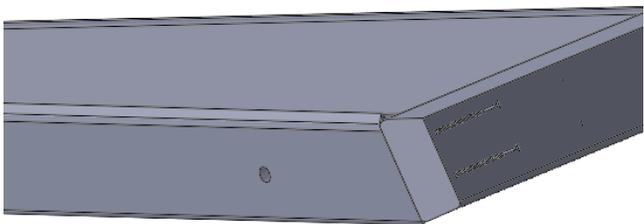
Be sure to align the Bevel cut on the Fascia with the top of the Center Rafter as shown above.

Measure from the Center Rafter out to the end of the Fascia Boards. You will need to have the same Distance on each side. Then fasten with 2 1/2" Screws through the Fascia into the Rafter through the Pre-Drilled Holes.



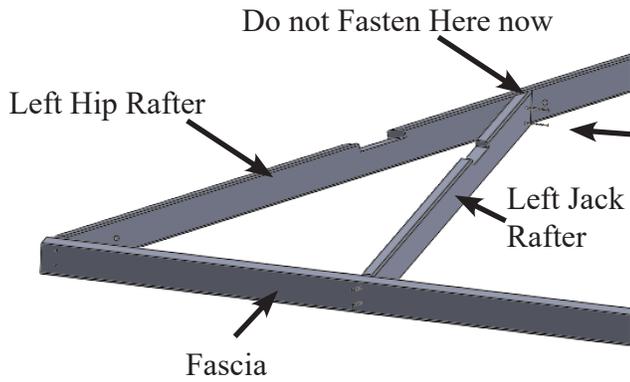
Next install the Left Hip Rafter.

Align the Left Hip rafter with the end of Center Rafter and fasten with 2 1/2" Screws through Pre-rilled Holes.

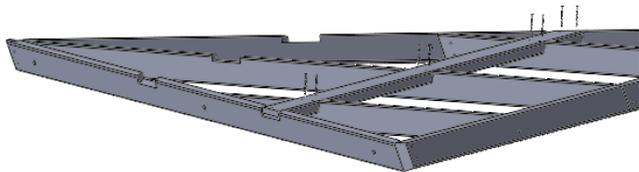


Align the other end of the Left Hip Rafter to the end of the Fascia and fasten with 2 1/2" Screws.

Install the Right Hip Rafter the same way as shown in the previous steps for the Left Hip Rafter.



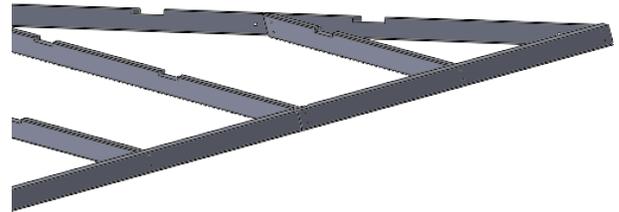
Install the Left Jack Rafter. Center the Jack Rafter on the Pre-Drilled Holes in the Fascia and fasten with 2 1/2" Screws.



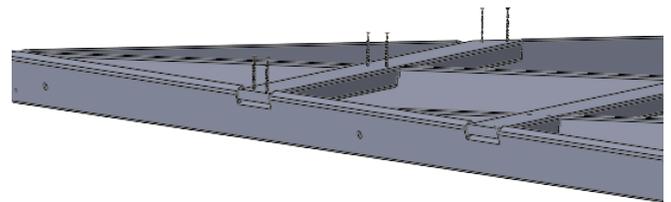
Install the Long Purlin Piece in the Notches as shown and fasten with 2 1/2" Screws.



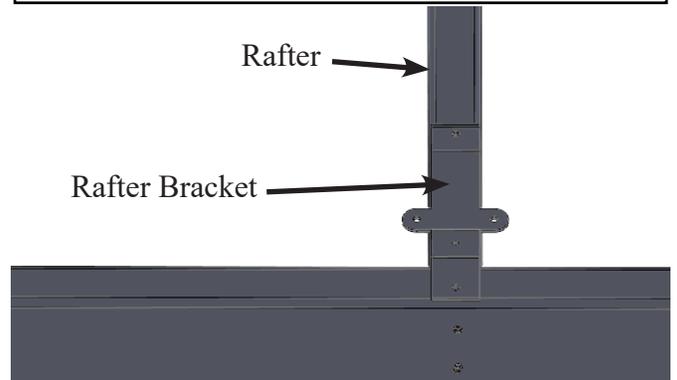
Flip the Roof Panel around.



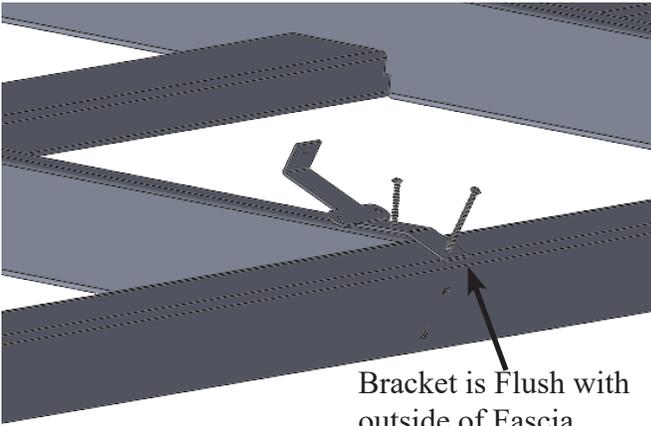
Install the Right Jack Rafter the same way as shown in the previous steps for the Left Jack Rafter.



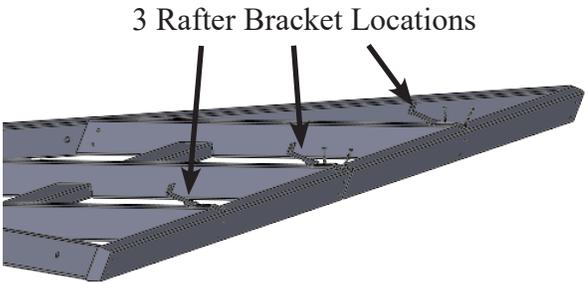
Install the Short Purlin Piece in the Notches as shown and fasten with 2 1/2" Screws. You are now ready to fasten the Left & Right Jack Rafter to the Hip Rafters.



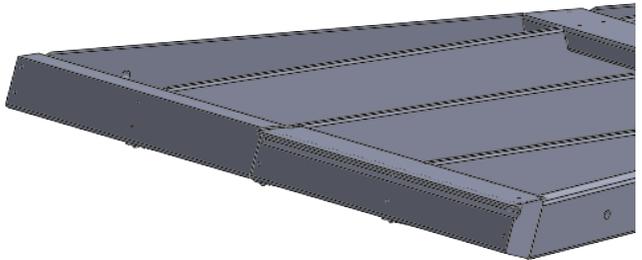
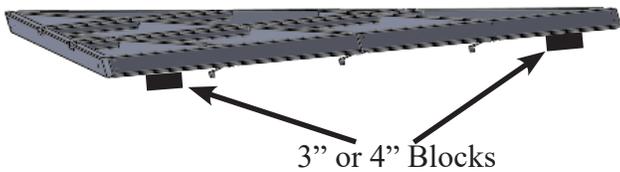
Center the Rafter Bracket on to the Rafter.



Fasten the Rafter Bracket to the Fascia and Rafter with 2" Pan Head Screws.

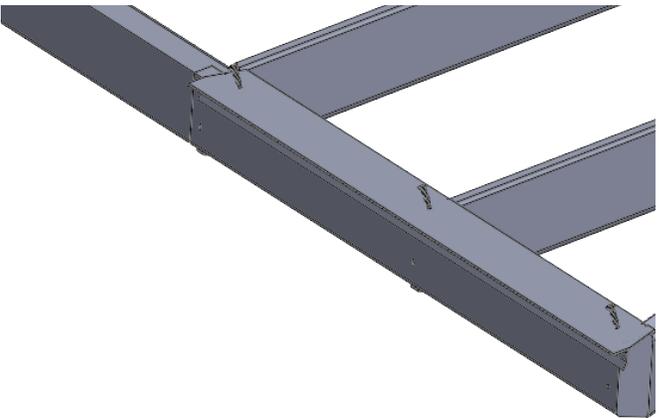


Install the rest of the Rafter Brackets at the Center Rafter and Jack Rafter Locations.



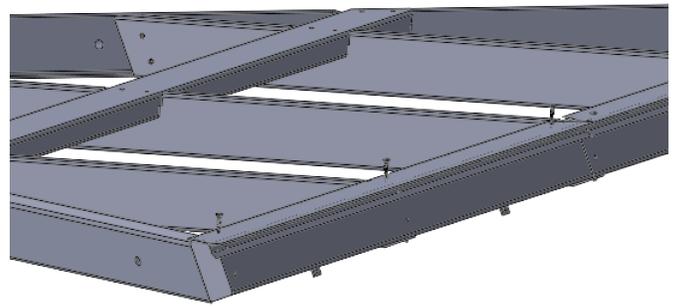
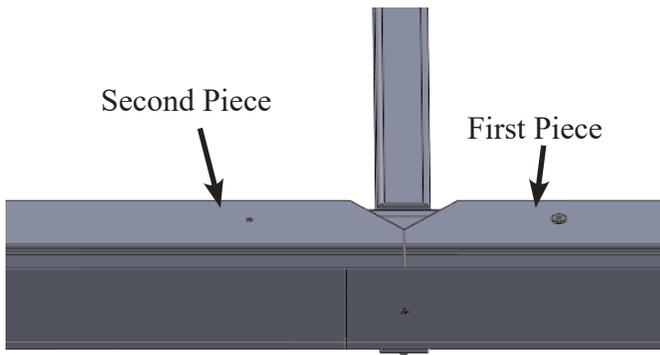
Flip the Roof Panel around. Set the Fascia on 3" or 4" Blocks to protect the Rafter Bracket.

Locate and place the Drip Edge onto the Fascia Board.



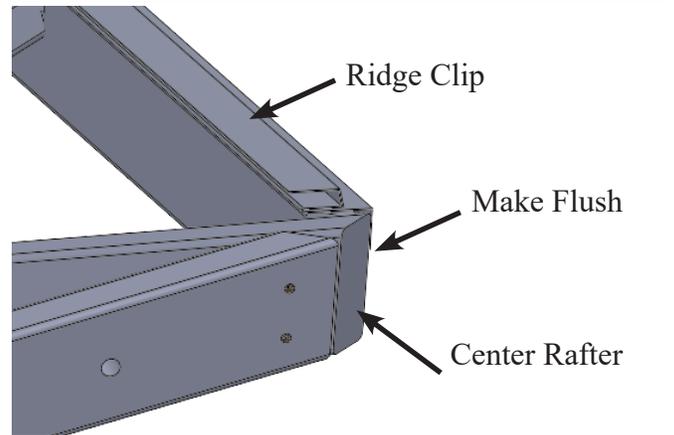
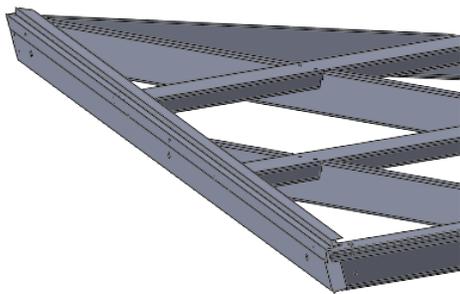
Align the end of the Drip Edge with the Center of the Center Rafter.

Secure the Drip edge against the Fascia and fasten with 1" Pancake Screws through Pre-Drilled Holes.



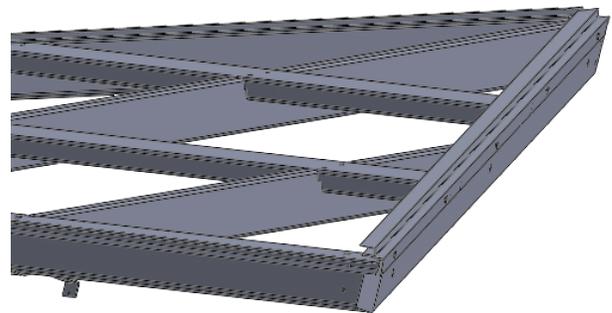
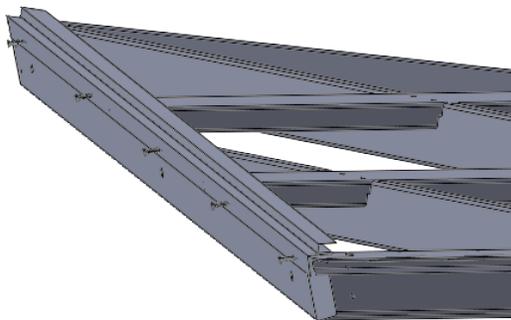
Install the second Drip Edge. Push against the first Drip Edge as shown.

Fasten the second Drip Edge Piece with 1" Pancake Screws through Pre-Drilled Holes.



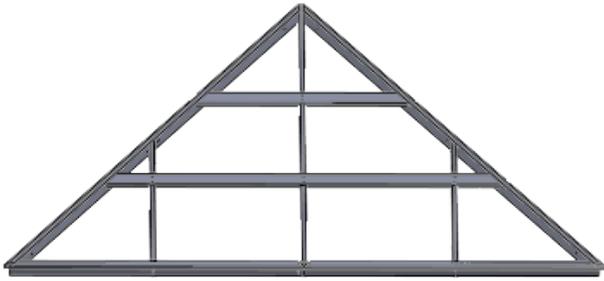
Locate and place the Ridge Clip onto the Hip Rafter.

Make the Ridge Clip flush with the end of the Center Rafter.



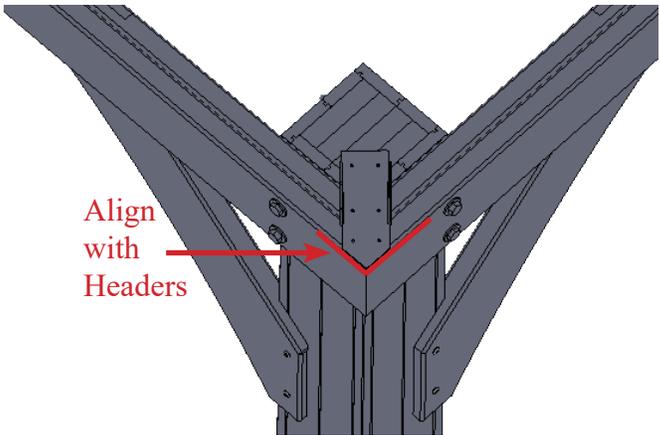
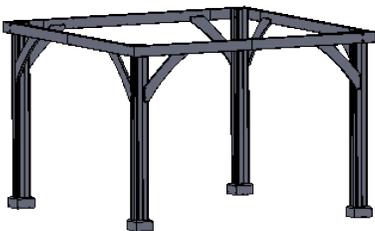
Push Ridge Clip Against the Hip Rafter and fasten with 1" Pancake Screws through Pre-Drilled Holes.

Repeat the previous steps to install the opposite side Ridge Clip.



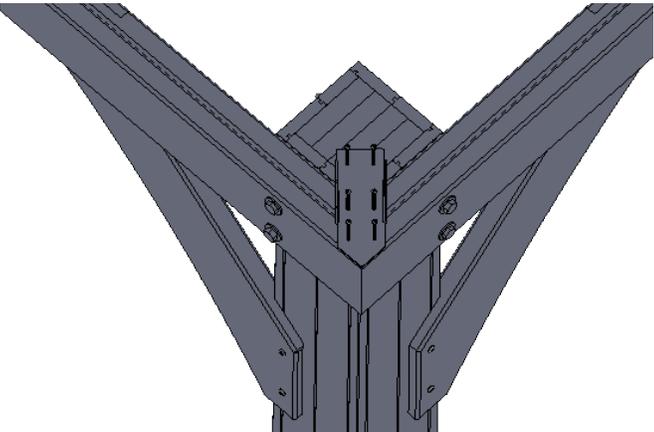
After all 4 Roof Panels are assembled, You are ready to install the Roof Panels on top of the Header and Post assembly.

Assembly three (3) more Roof Panels, using the previous steps shown.



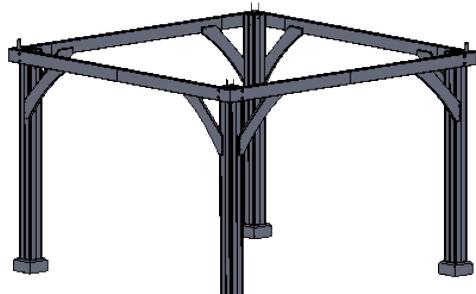
First Install the Hip Rafter Brackets. Place on top of the Post and Header. Align the Hip Rafter Bracket with the Headers both ways.

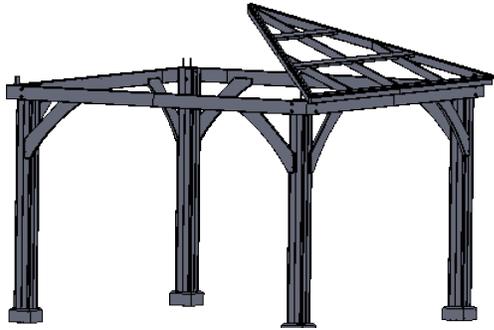
This is how your Pavilion should look with the Headers and Post Assembled.



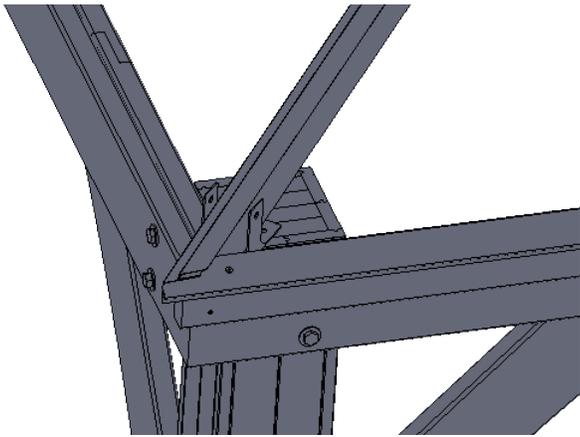
Fasten Hip Rafter Bracket with 2" Panhead Screws into all Pre-Drilled Holes.

Install the Hip Rafter Bracket at each corner, as shown in previous steps.

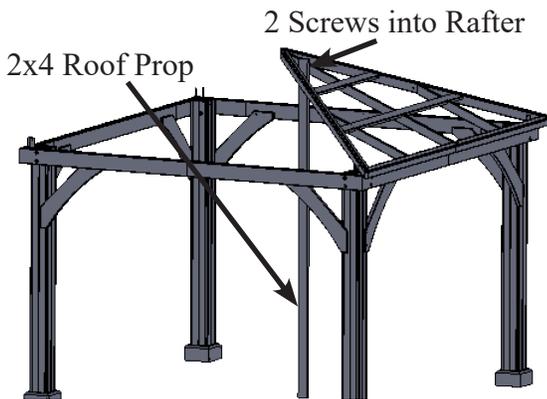




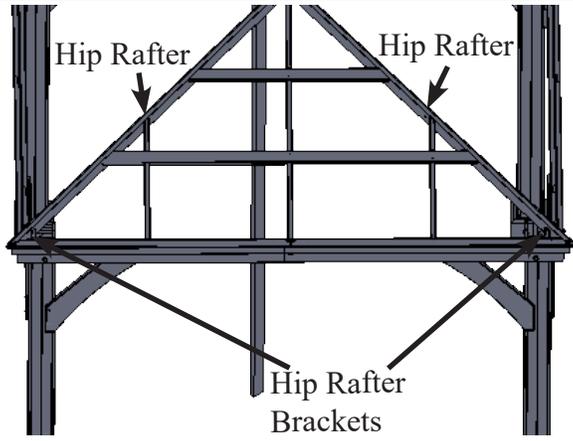
Lift the first Roof Panel in Place.



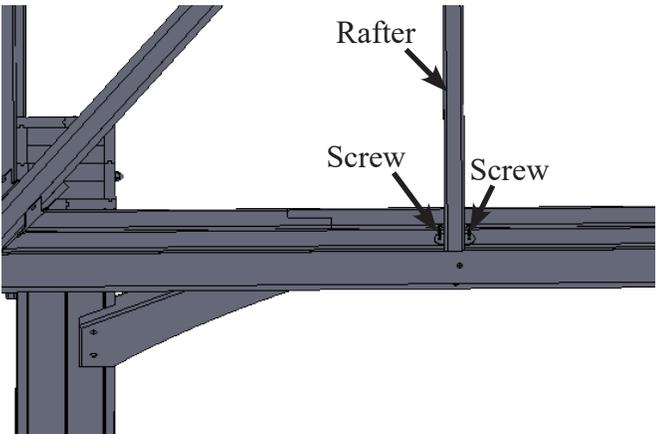
Place the Hip Rafter of the Roof Panel into the Hip Rafter Bracket.



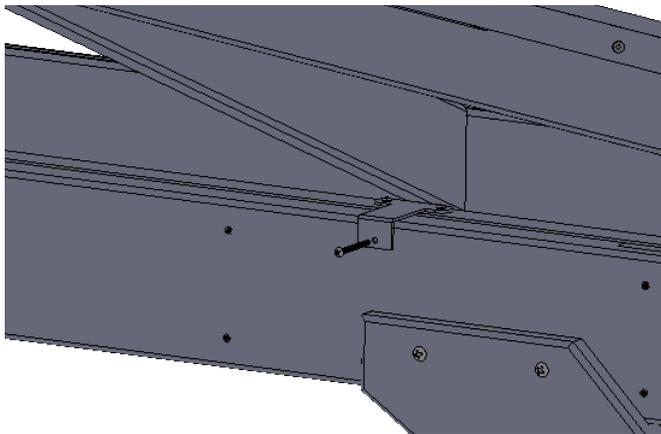
Fasten your own 2x4 into the Center Rafter with 2 1/2" Screws to create a Temporary prop for the Roof Panel.



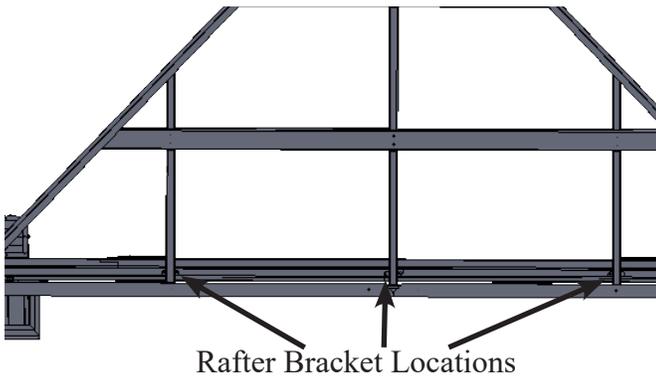
Place both Hip Rafters Against the Hip Rafter Brackets.



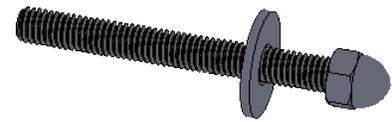
Fasten the Rafter Brackets to the Header with two (2) 2" Panhead Screws. One (1) on each side of the Rafter.v



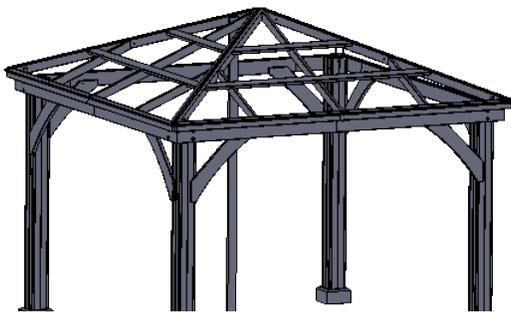
Also fasten one (1) Screw into the side of the Header.



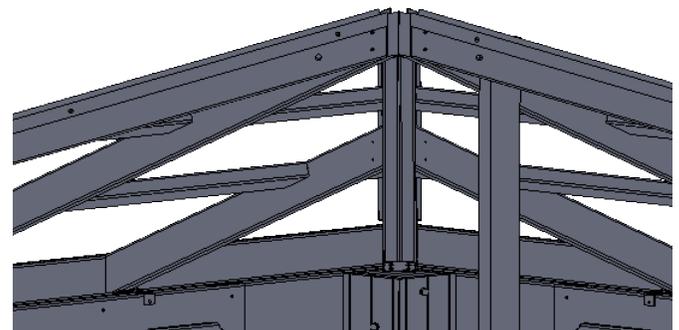
Fasten the rest of the Rafter Brackets to the Header with 2" Panhead Screws.



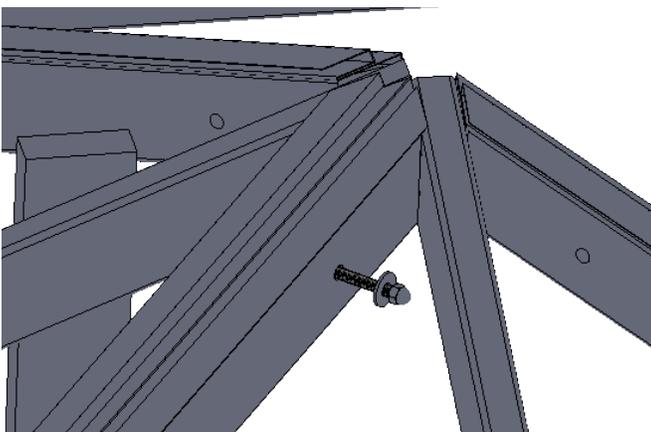
Prepare the 3 1/2" Threaded Rods. Place a 3/8" Washer and one (1) Acorn Nut on one end of the 3 1/2" Threaded Rod. Prepare all the 3 1/2" Threaded Rods before going to the next step.



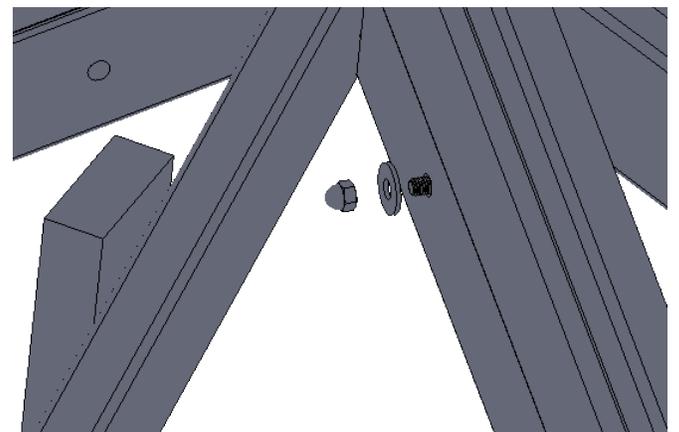
Lift the Second Roof Panel in Place.



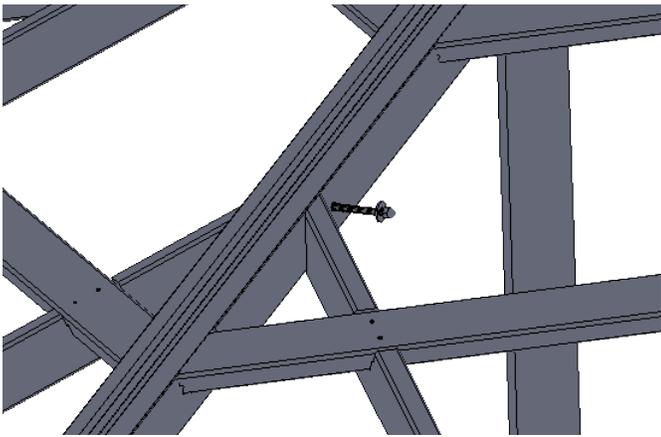
Align the 2 Hip Rafters. You may need to adjust the Roof Prop so the Hip Rafters are Aligned. You may need a C-Clamp to clamp the 2 Hip Rafters together.



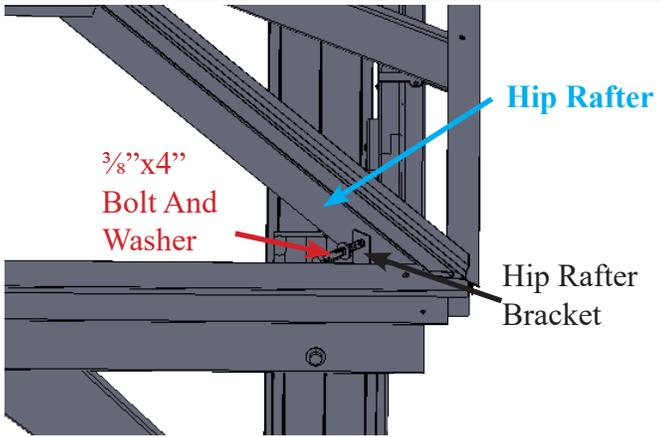
Insert the Prepared 3 1/2" Threaded Rod into the Pre-Drilled Holes in the Hip Rafters.



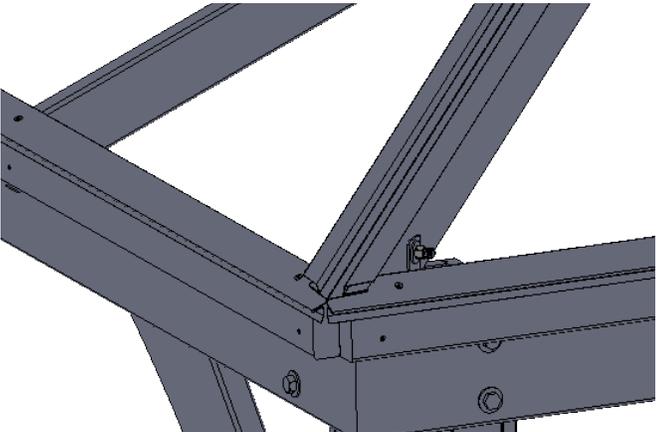
Place another 3/8" Washer and Acorn Nut onto the opposite end of the 3 1/2" Threaded Rod. Tighten both ends using the correct size Socket or Wrench.



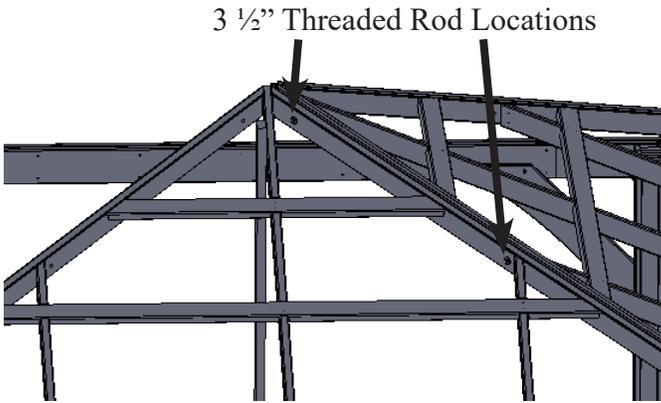
Insert another 3 1/2" Threaded Rod into the other Pre-Drilled Hole in the Hip Rafters, as shown in previous step.



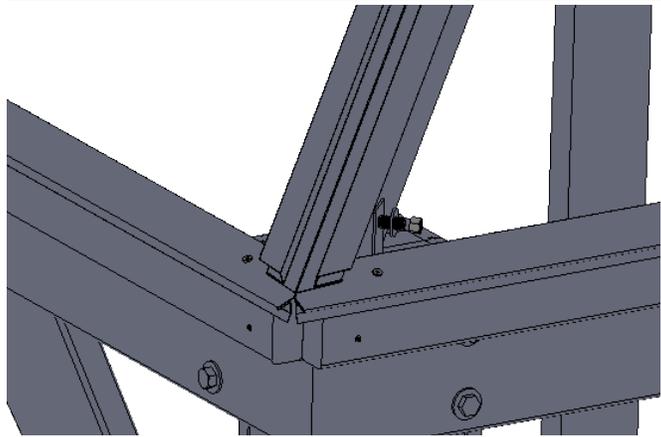
Insert a 3/8"x4" Bolt with a 3/8" Washer into the Hip Rafter Bracket Through the Hip Rafter.



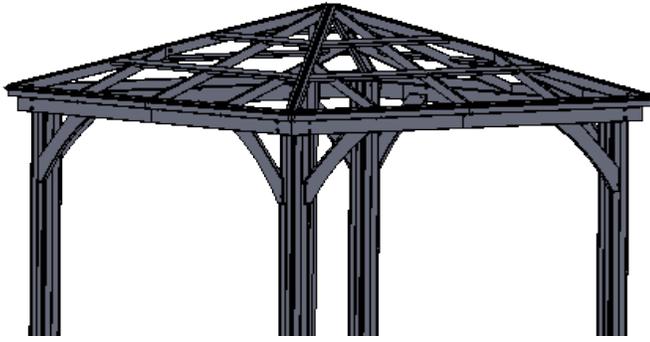
Tighten the 3/8" Nut with the correct size Socket or Wrench.



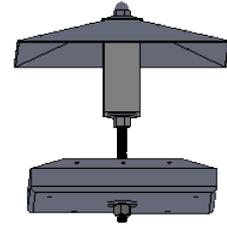
3 1/2" Threaded Rod Locations



Place a 3/8" Washer and Nut on the other end of the 3/8"x4" Bolt.



Install the rest of the Roof Panels using the fasteners as shown in the previous steps.



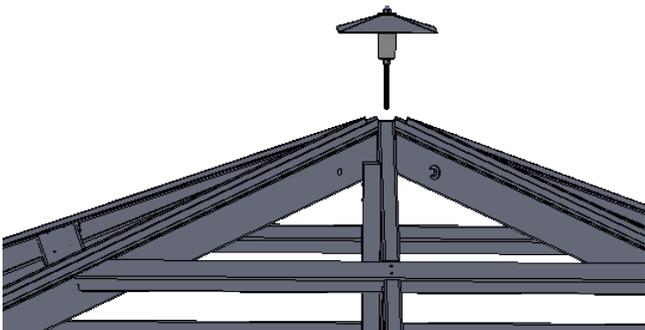
Locate the Roof Cap Assembly.



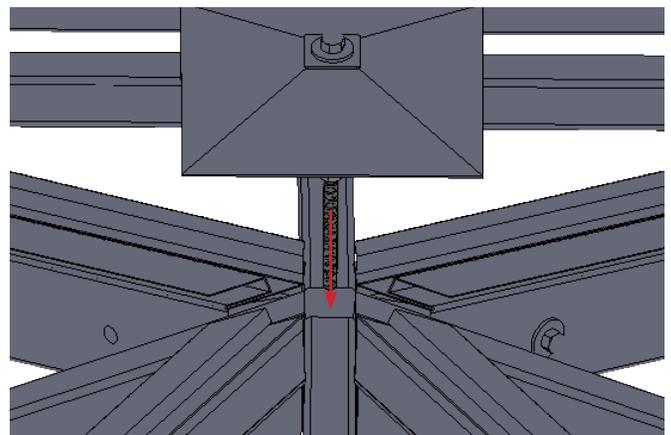
Remove the 3/8" Nut and Washer.



Also Remove the Wood Block.

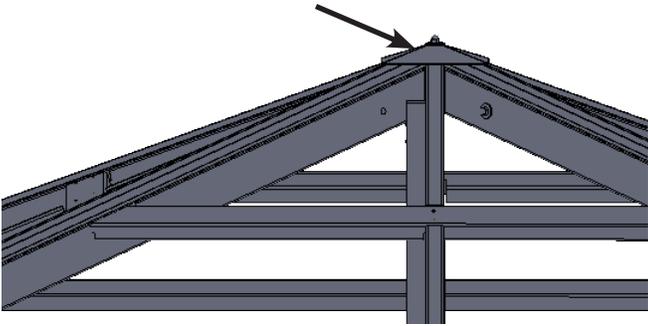


Install the Roof Cap Assembly in through the peak of the Roof Panels.

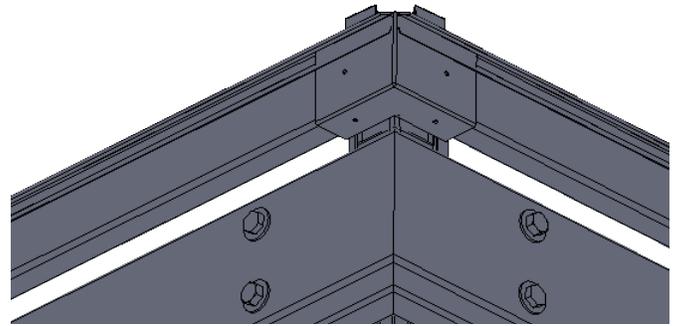


Slide the Roof Cap through the hole between the Rafters.

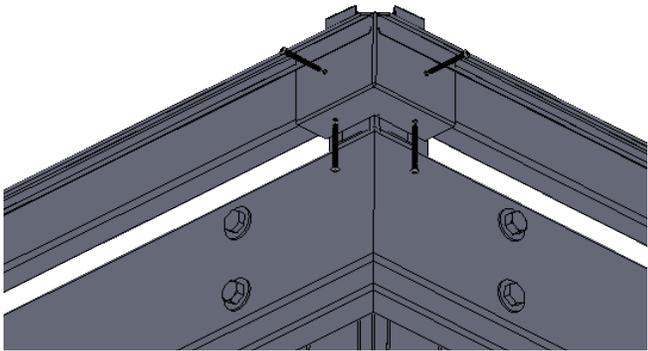
Roof Cap



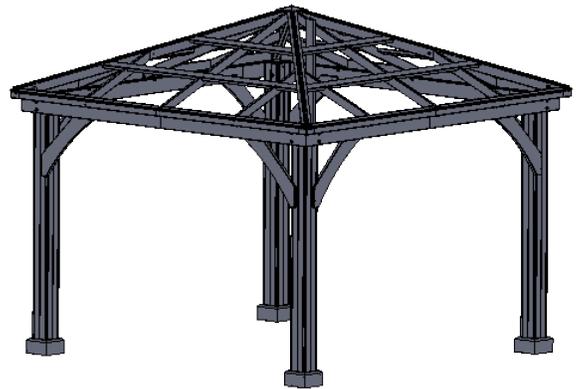
This is what your Roof Cap should look like at this point.



Install the Fascia Corner Brackets.

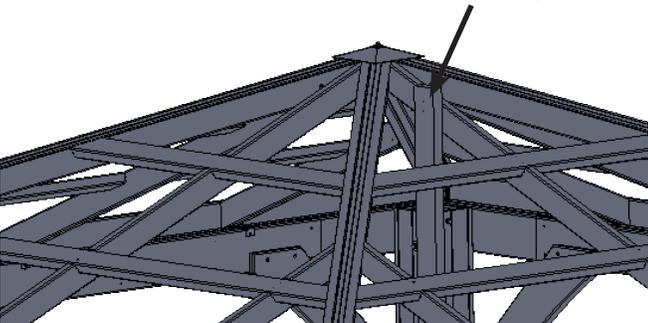


Push the Fascia Corner Brackets against the Fascia both ways. Slide it in between the Fascia and the Drip edge, and up against the bottom of the Fascia. Fasten with 2" Panhead Screws at four (4) Locations as shown.

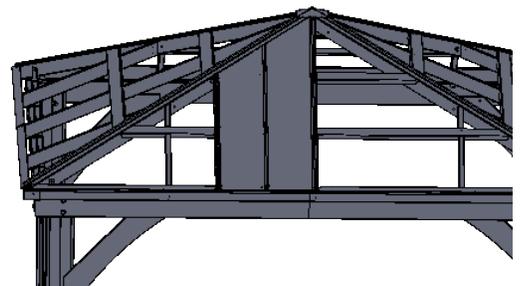


Install the Fascia Corner Brackets on each Corner, as shown in previous steps.

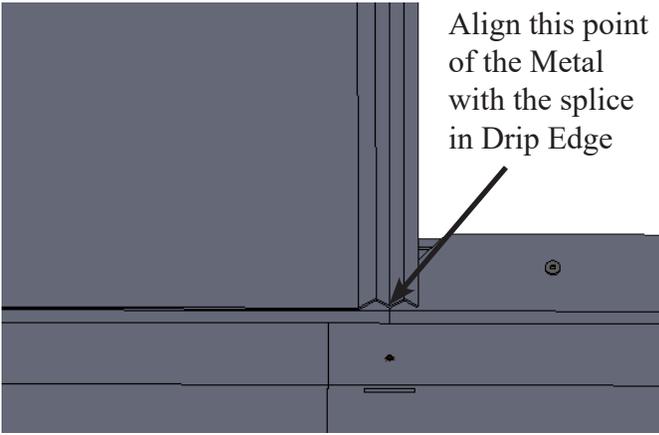
Roof Prop



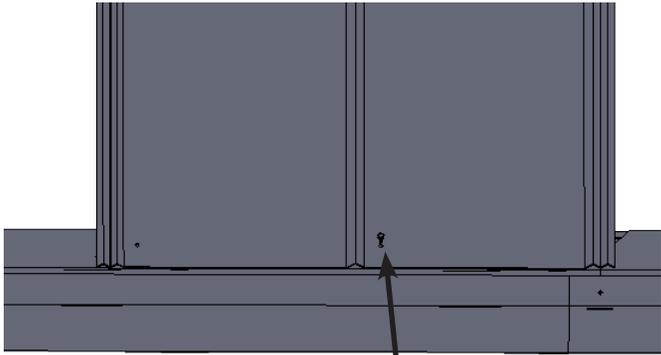
Remove the Temporary Roof Prop.



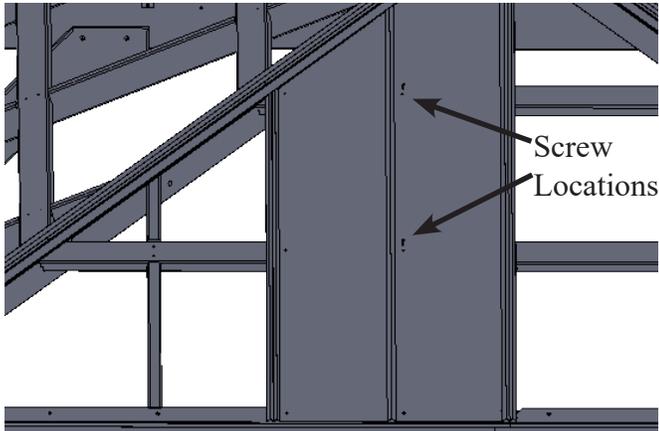
Locate the Longest of the Left Side Metal Pieces. Lift onto the Roof Panel.



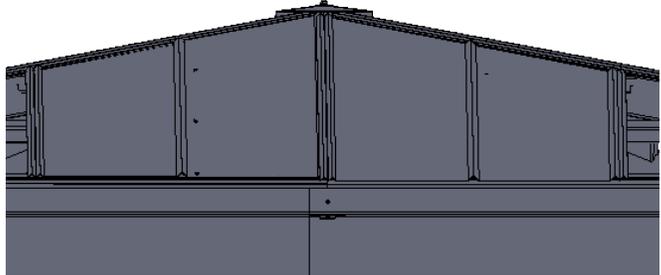
Align the metal with the splice in the Drip Edge as shown here.



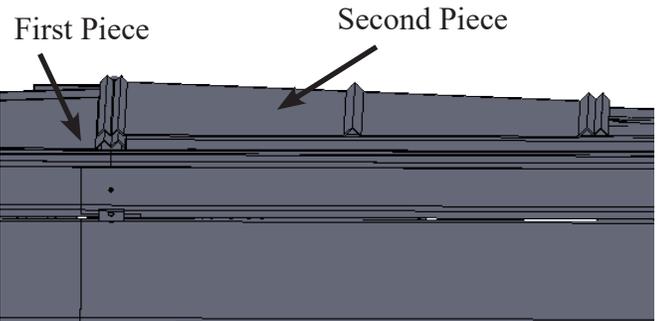
Align the Metal With the Drip Edge. Fasten into Pre-Drilled Holes with 3/4" Rubber Washer Screws.



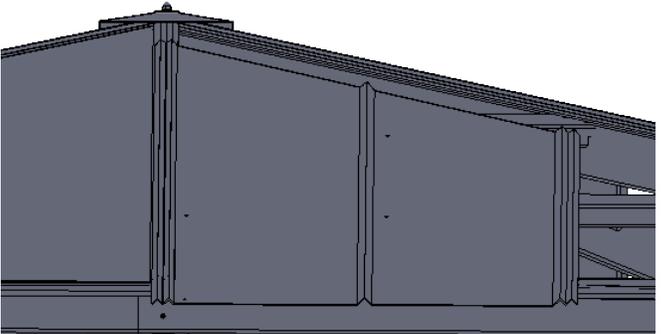
Keeping the Metal Aligned with the Drip Edge, put 2 more 3/4" Rubber Washer Screws into the Pre-Drilled Holes. The top of the Metal Panel will be in the Ridge Clip channel.



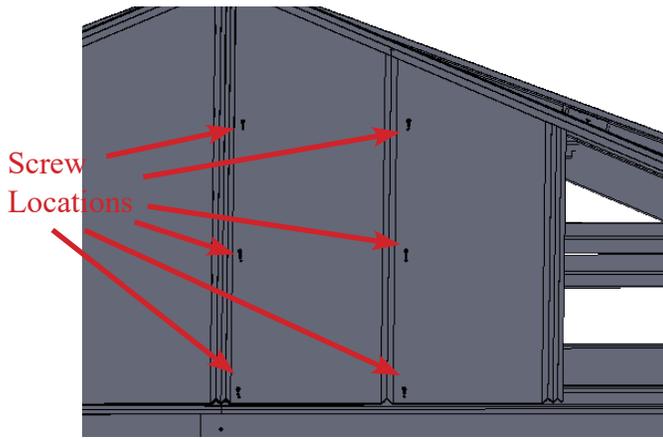
Locate the longest of the Right Side Metal Pieces.



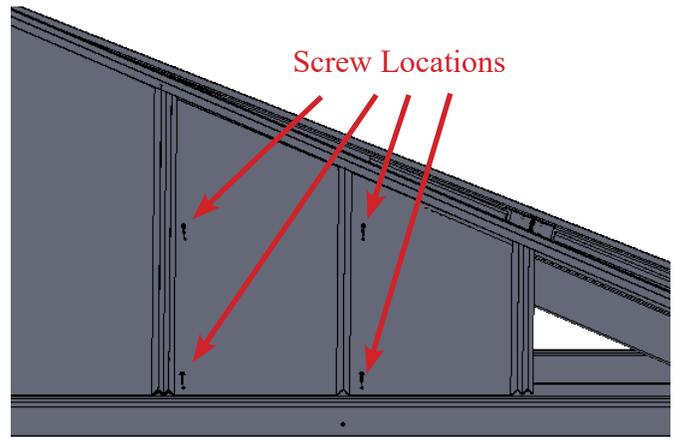
Overlap the second piece onto the first piece.



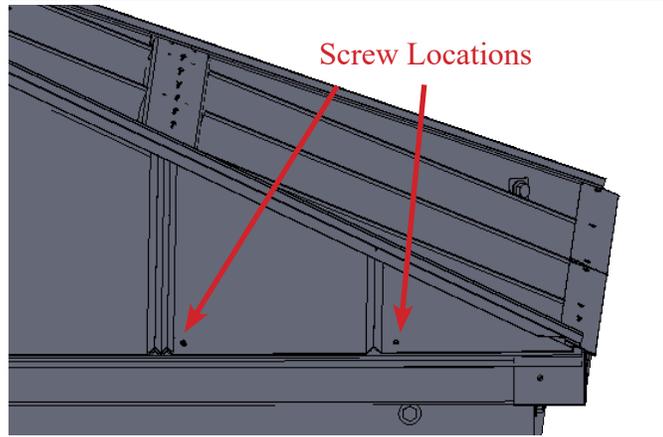
Slide up into place.



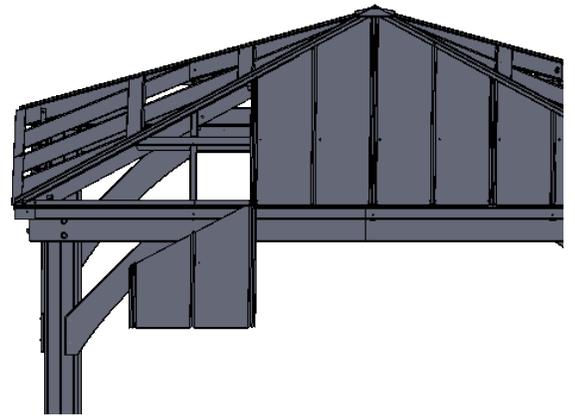
Align the Metal Piece with the Drip Edge and Fasten through Pre-Drilled holes with $\frac{3}{4}$ " Rubber Washer Screws.



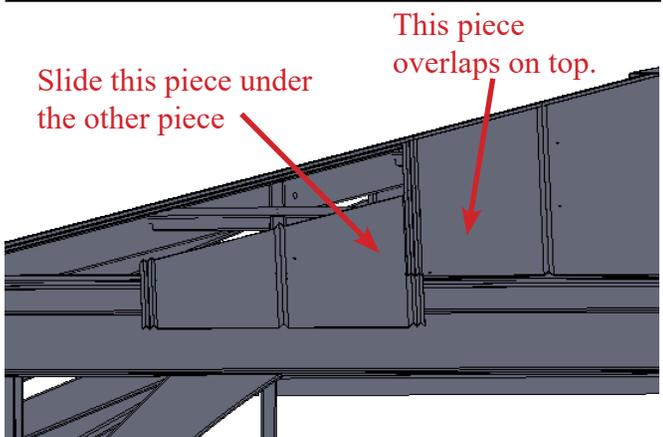
Install the next Right Side Metal piece as shown in the previous steps



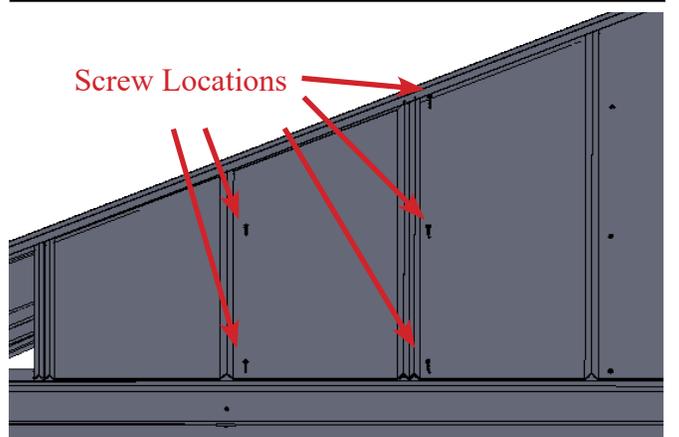
Install the Smallest Right Side Metal Piece.



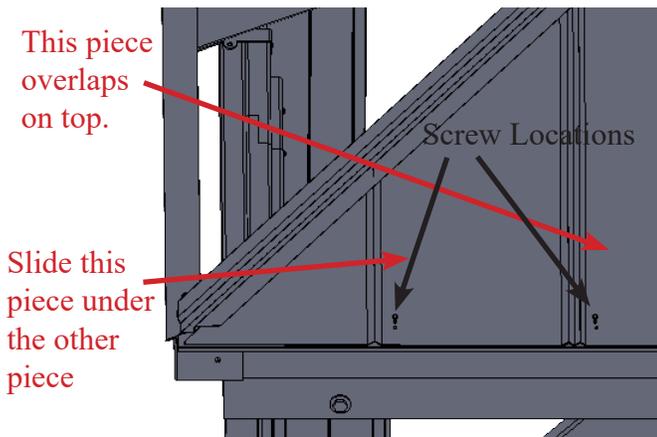
Install the next Left Side Metal Piece. You will need to slide this side under the first Metal Piece that was installed, as shown in next step.



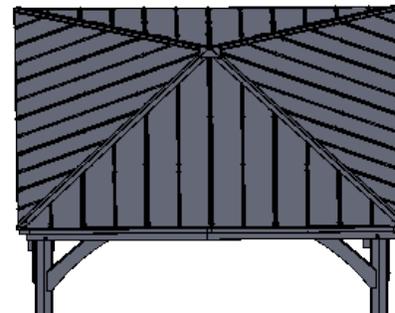
Slide this piece up through until it is aligned with the Drip Edge.



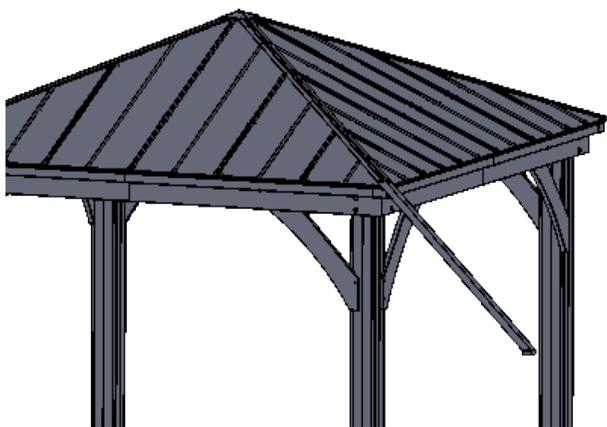
Fasten with $\frac{3}{4}$ " Rubber Washer Screws as shown in previous steps.



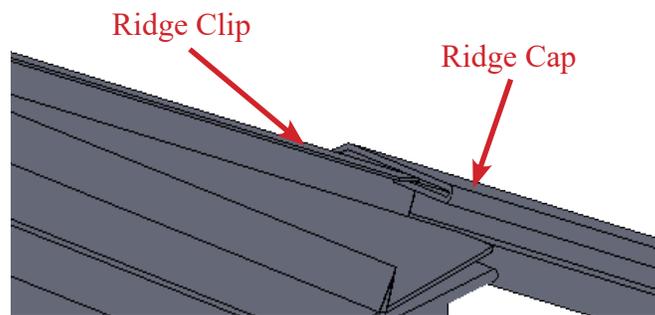
Slide the smallest Left Side Metal Piece into place, as shown in the previous steps.



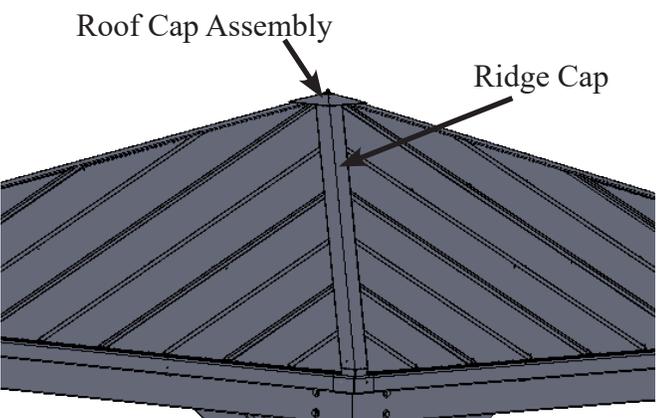
Install the Metal on the remaining 3 sides, as shown in the previous steps.



Locate the Ridge Cap. Starting at the bottom, slide into the Ridge Clip.

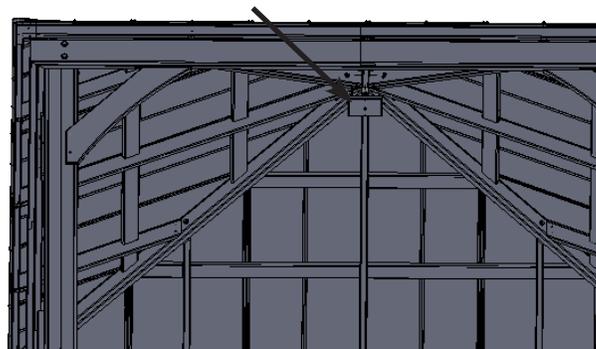


Slide the Ridge Cap into the Ridge Clip as shown.

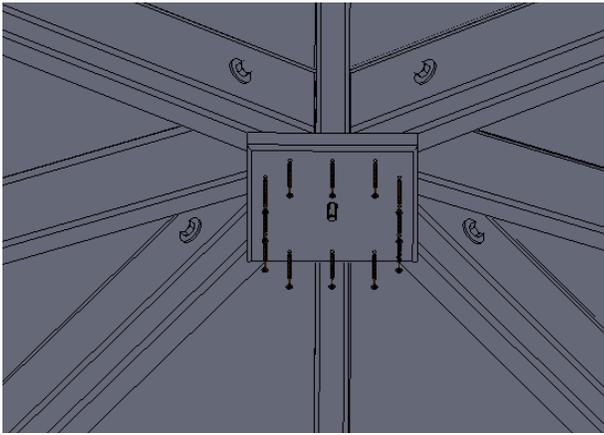


Slide the Ridge Cap all the way to the top, until it is against the Metal Roof. You may need to lift the Roof Cap Assembly up so you can slide the Ridge Cap underneath the Roof Cap Assembly.

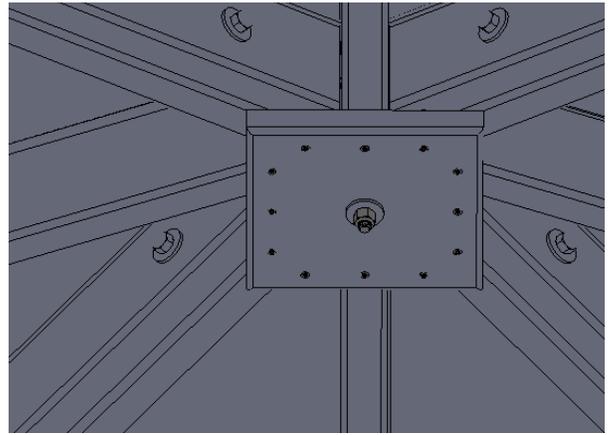
Replace Block



You are now ready to replace the block that you took off of the Roof Cap Assembly. It goes inside the pavilion underneath the peak of the roof.



Fasten the block to each Rafter with 2 1/2" Screws.



Place the 3/8" Washer and 3/8" Lock Nut onto the Bolt. Tighten just enough to pull the Roof Cap snug against the Metal Roof on top.



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