



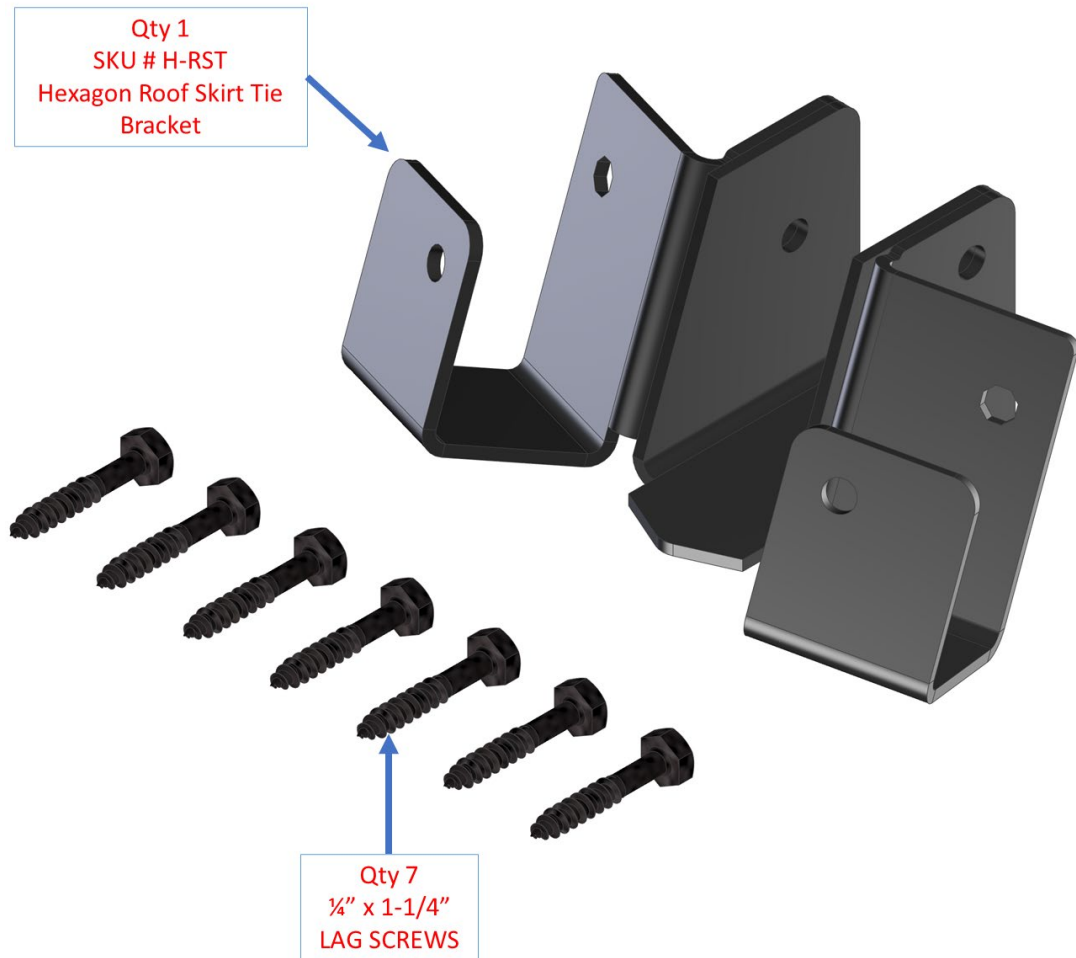
RioOutdoors.com

## #H-RST Installation Instructions

**WARNING:** If the information in these instructions is not followed exactly, weakening or failure of the erected structure may result causing property damage, personal injury, or loss of life.

All brackets designed and sold by RioOutdoors.com are to be used for building pergolas only and are not to be used for other structure construction purposes.

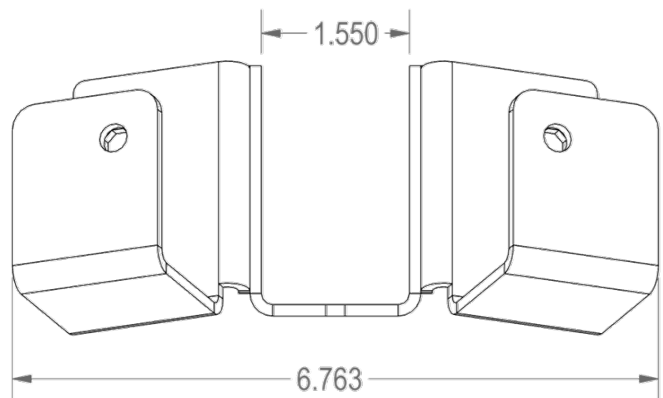
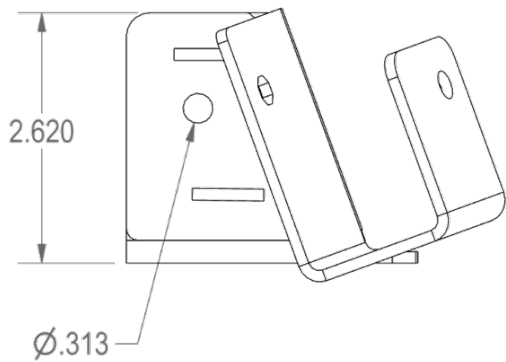
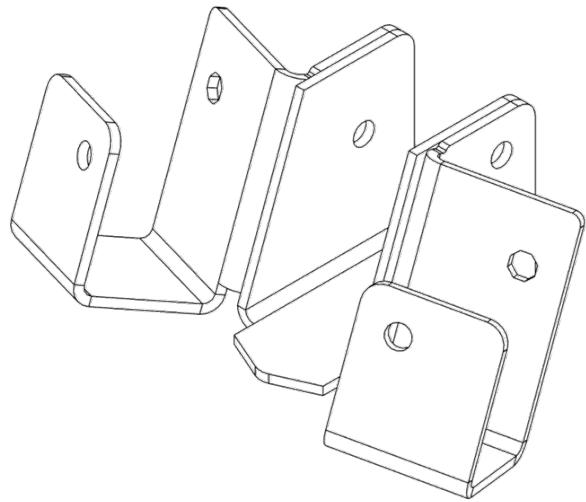
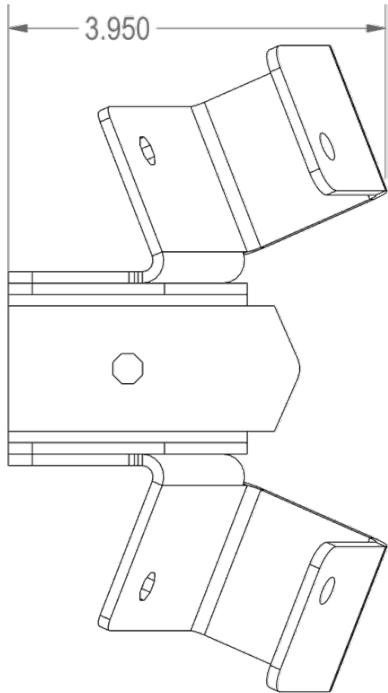
### #H-RST HEXAGON ROOF SKIRT TIE BRACKET



# 1 #H-RST SPECIFICATIONS

**Rafter Lumber Size: 2X Lumber only, 2x6 or 2x8**

**Roof Skirt Lumber Size: 2X Lumber only, 2x6 or 2x8**



## TABLE OF CONTENTS

<b>1</b>	<b>#H-RST SPECIFICATIONS</b>	<b>2</b>
<b>2</b>	<b>GENERAL INFORMATION</b>	<b>4</b>
2.1	SAFETY INFORMATION .....	4
2.2	TOOLS REQUIRED.....	4
2.3	CONTENTS OF BRACKET # H-RST.....	5
<b>3</b>	<b>INSTALLATION INSTRUCTIONS</b>	<b>6</b>
3.1	ADDING ROOF SKIRT TIE BRACKETS TO THE END OF RAFTERS.....	6
3.2	INSTALLING THE ROOF SKIRTS, ITEM #F.....	10

**Proper pilot hole diameter and depth for various lag screws and wood types**

Lag Screw Type	Wood Type	Pilot hole drill diameter and depth
1/4" X 1-1/4" Lag Screw	Soft Wood	3/32" drill bit diam., 1-1/4" depth
	Hard Wood	3/16" drill bit diam., 1-1/4" depth
3/8" X 3" Lag Screw	Soft Wood	11/64" drill bit diam., 3" depth
	Hard Wood	1/4" drill bit diam., 3" depth

## 2 GENERAL INFORMATION


### 2.1 SAFETY INFORMATION

**CAUTION:** Adhere to all safety requirements. Wear safety glasses/goggles when working. Wear safety gloves when handling brackets, hardware, and lumber. Wear hearing protection when using a circular saw, miter saw, table saw, or hammer drill.

**INSTALLER:** Leave this manual with the consumer. **CONSUMER:** Retain this manual for future reference.

### 2.2 TOOLS REQUIRED

Listed below, are common tools required for pergola projects. These tools are not included in this kit. Your pergola project may not require all tools. Select and acquire the tools for your project from the "Required for" column in this table.

Description	Tool Purpose	Required for	Reference Image
Tape Measure	Measure and verify lengths.	All pergola types	
Framing Level	Verify Level/Plumb	All pergola types	
Hammer Drill	Drill holes in concrete pads or concrete footing for securing floor anchor brackets. Drill pilot holes for lag screws.	All pergola types	
Ratchet Socket Driver	Drive lag screws into Pergola lumber members.	All pergola types	
7/16" Hex Socket	Drive 1/4" X 1-1/4" Hex Hd. lag screws.	All pergola types	
3/32" Drill Bit	Drill pilot holes for 1/4" lag screws in soft wood.	All pergola types	
1/2" X 4" Masonry Drill Bit	Drill 1/2" X 2" deep holes in concrete pads or concrete footings.	Surface Mount styled pergola	
Circular Saw/Miter Saw	Cut headers to length; cut rafters to length.	All pergola types	
Crescent Wrench	Tighten down nut on concrete anchors.	Surface Mount Pergolas	Image not available.
Hammer	Various.	All pergola types.	

## 2.3 CONTENTS OF BRACKET # H-RST

The contents of this Bracket are shown in the table, below.

Before you begin your project, take an inventory of all items that you received from us. If any items are missing, contact us directly via email at [info@RioOutdoors.com](mailto:info@RioOutdoors.com). Include your name and shipping address and your order number, if available. We will respond within 24 hours with a resolution to your problem.

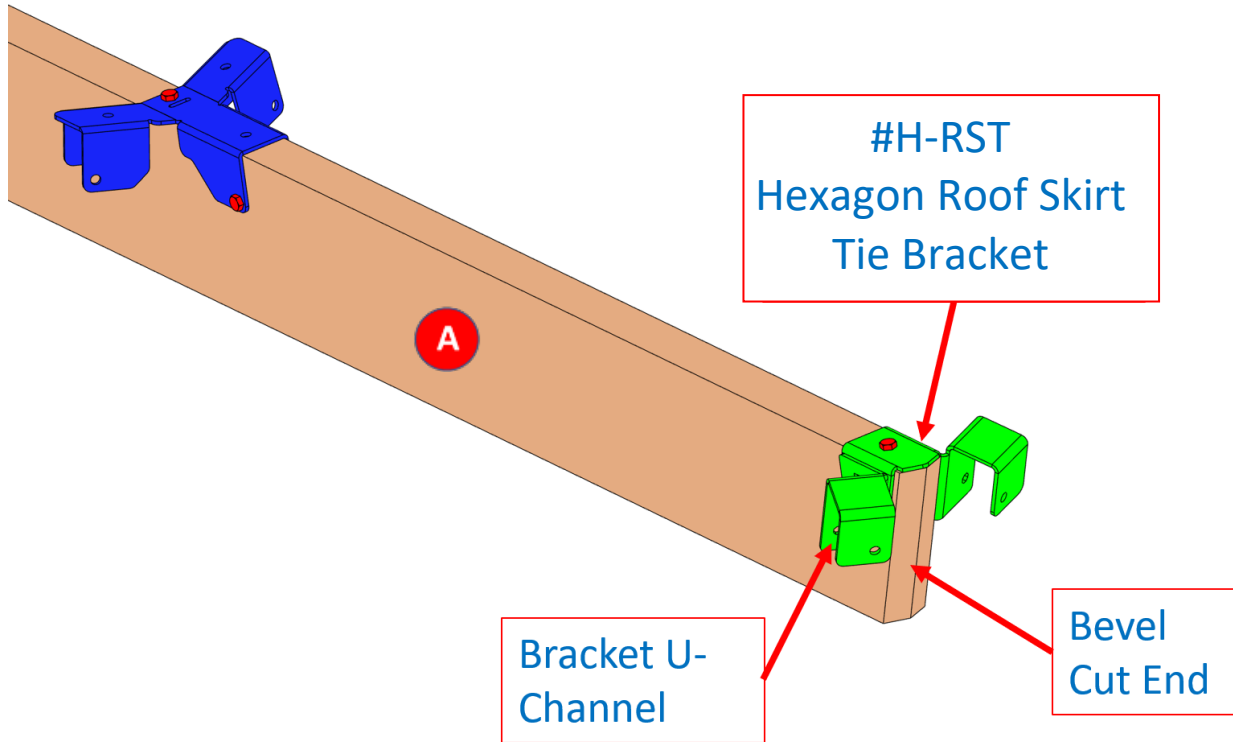
Please note that the bracket parts you receive may appear slightly different than those depicted in these instructions. We perform continuous improvements in our designs and update our current products accordingly. The parts you receive will contain our most-recent improvements and features.

Item SKU #, Description	Item Qty	Item Image
<p data-bbox="256 642 597 716"><b>Hexagon Roof Skirt Tie Bracket</b> <b>SKU# H-RST</b></p>	<p data-bbox="834 667 850 695"><b>1</b></p>	 A 3D rendering of a black metal bracket with a hexagonal base and a curved top section, designed for roof skirt tie.
<p data-bbox="310 905 537 932"><b>¼ x 1-1/4" Lag Screw</b></p>	<p data-bbox="834 905 850 932"><b>7</b></p>	 A 3D rendering of a silver metal lag screw with a hexagonal head and a threaded shaft.

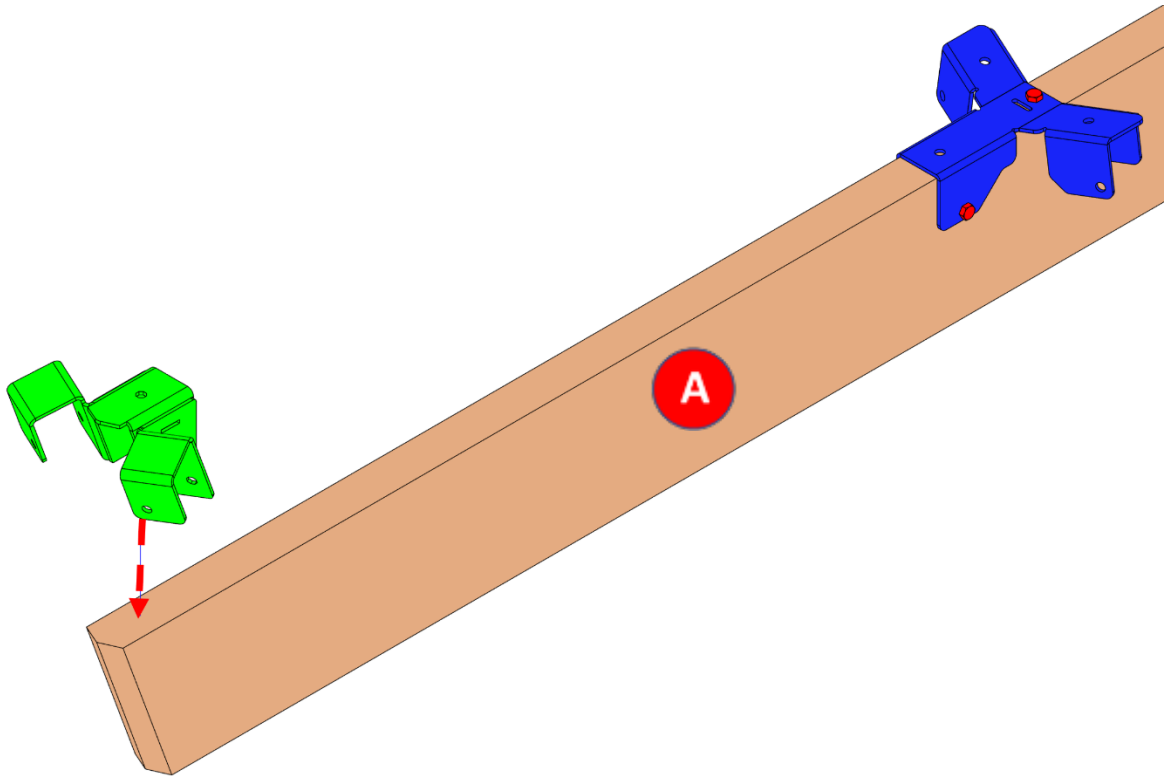
### 3 INSTALLATION INSTRUCTIONS

#### 3.1 ADDING ROOF SKIRT TIE BRACKETS TO THE END OF RAFTERS

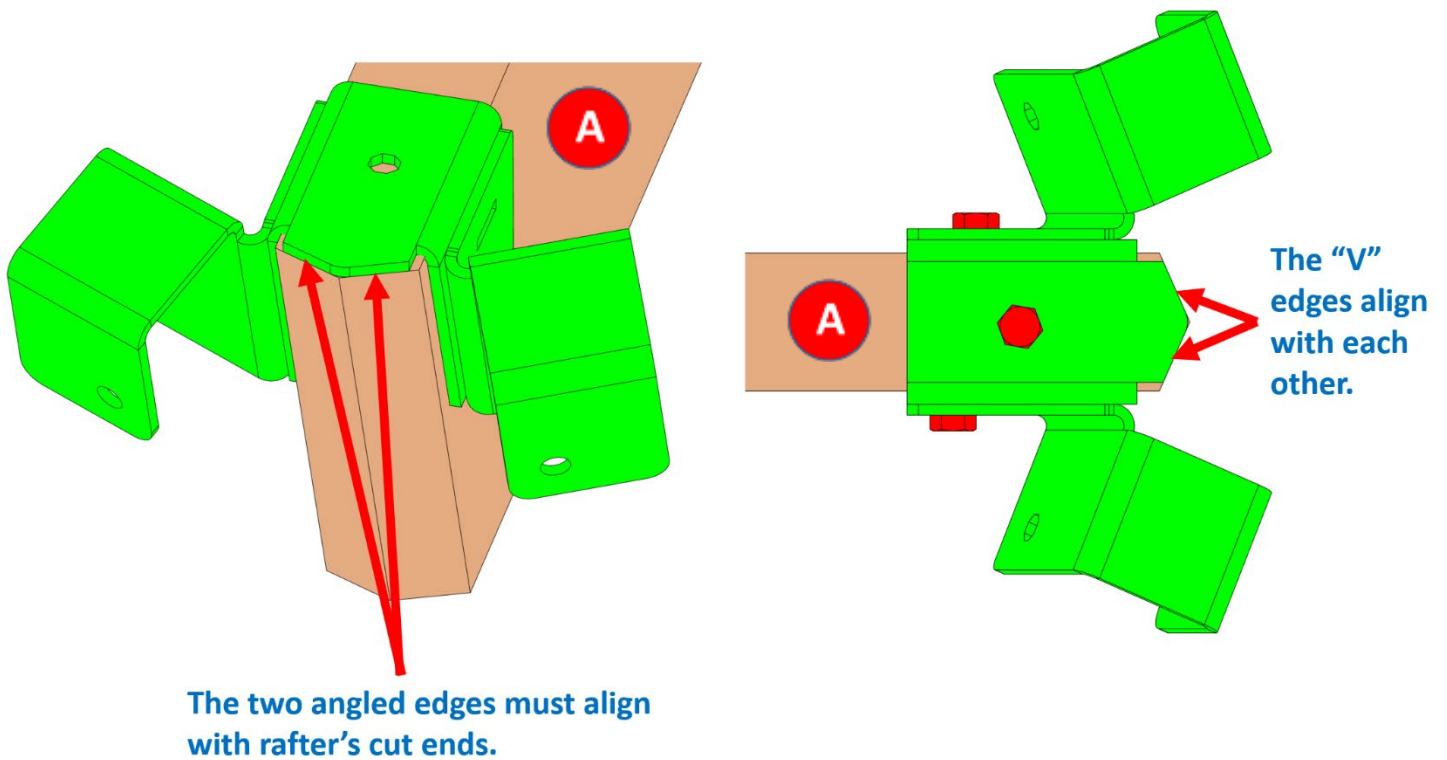
- The roof skirt tie bracket attaches to the bevel cut end of the rafters and provides two U-channels to hold the roof skirt members and makes it very easy to secure the roof skirt to the rafter ends.
- The roof skirt tie bracket mounts on the same side of the rafter as the cross tie brackets.



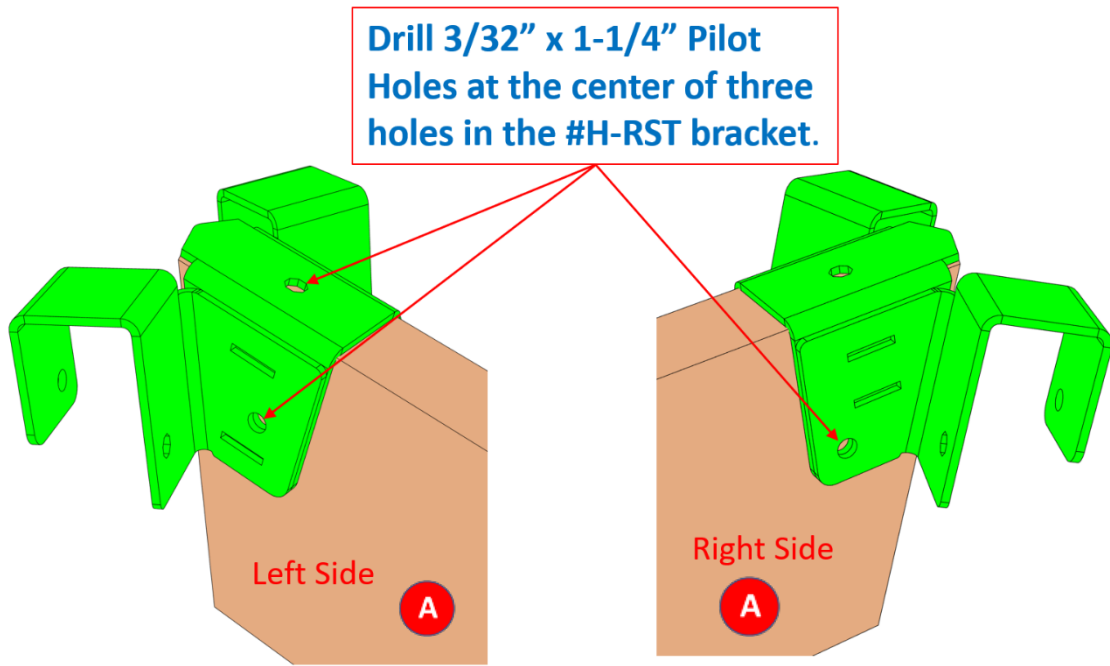
1. Place one #H-RST bracket on the bevel cut end of a rafter member, as shown.



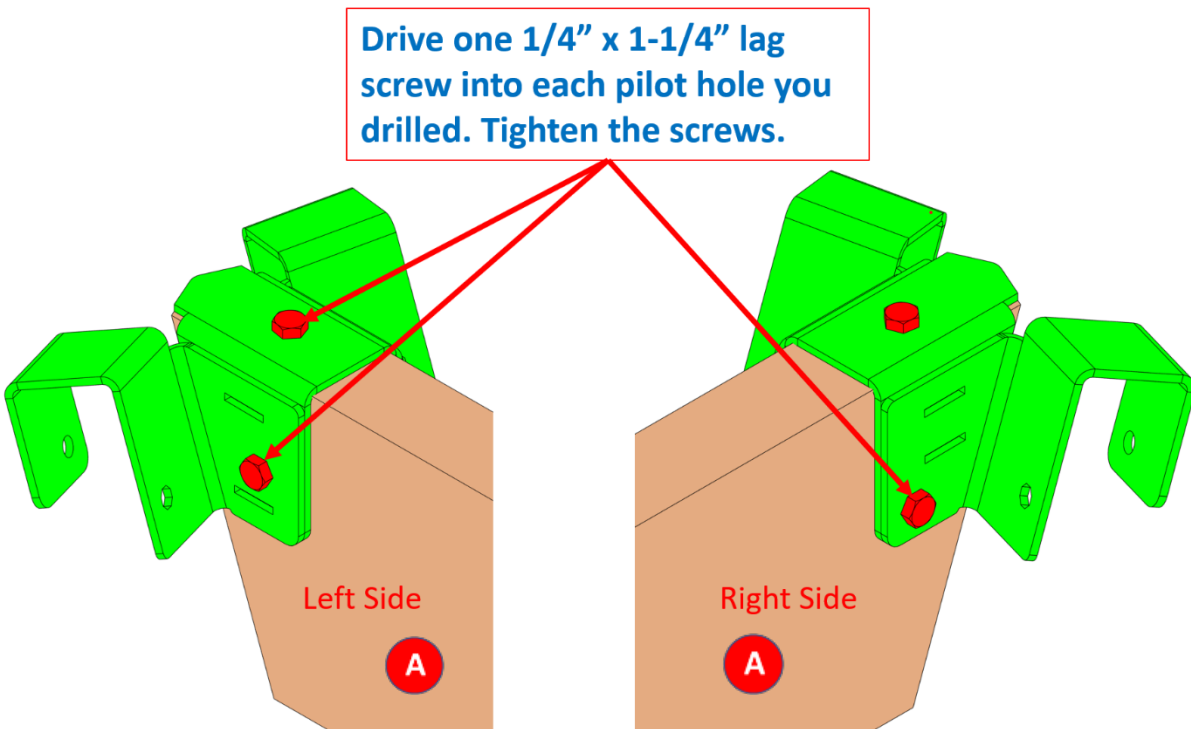
2. Position the #H-RST bracket with its V-shaped end aligned with the V-shaped edges of the bevel cuts.



3. Drill pilot holes at the center of three holes in the #H-RST bracket (one on top and one each side face).



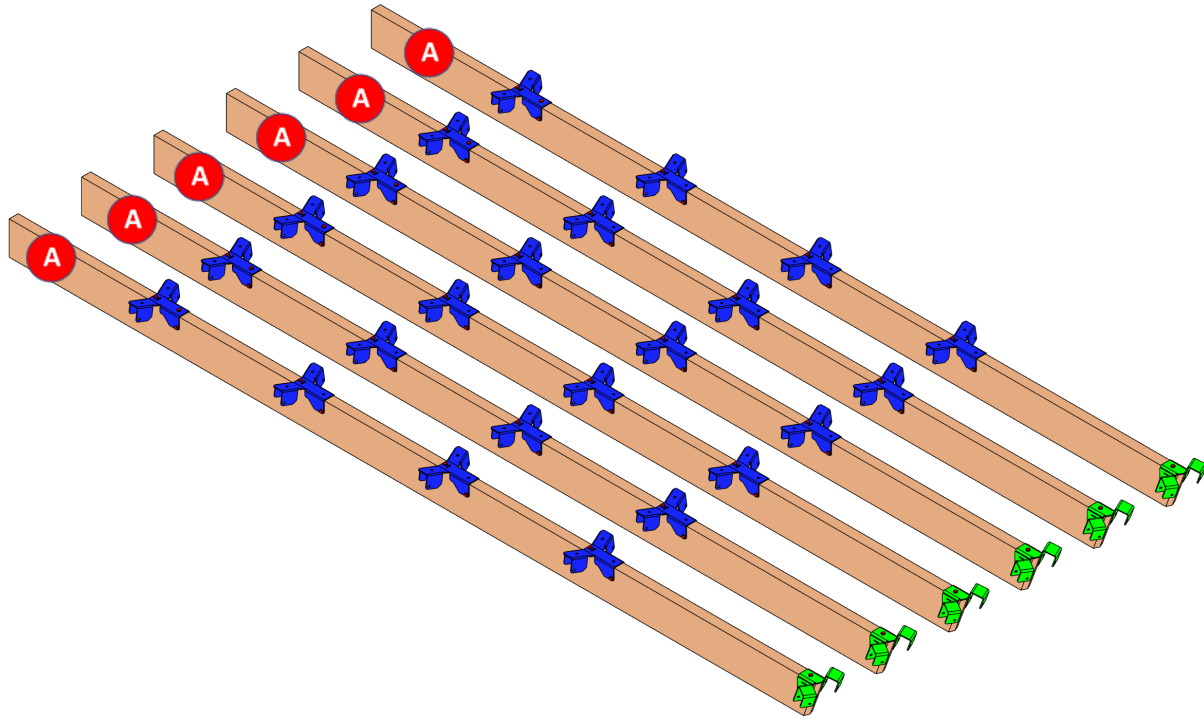
4. Drive 1/4" x 1-1/4" lag screws into the three pilot holes you drilled in step 3.



5. Tighten the lag screws.



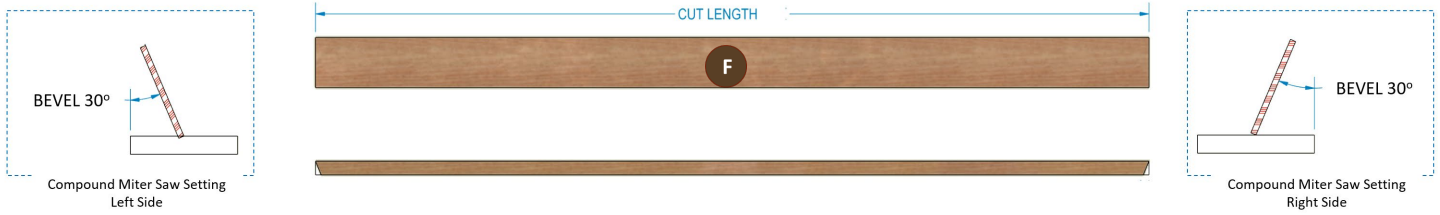
6. Use the same procedure to add one #H-RST Hexagon Roof Skirt Tie bracket to the bevel cut end of all rafter members. Full Hexagon solid roofs require six (6) rafter assemblies and Partial Hexagon solid roofs require three (3) rafter assemblies.



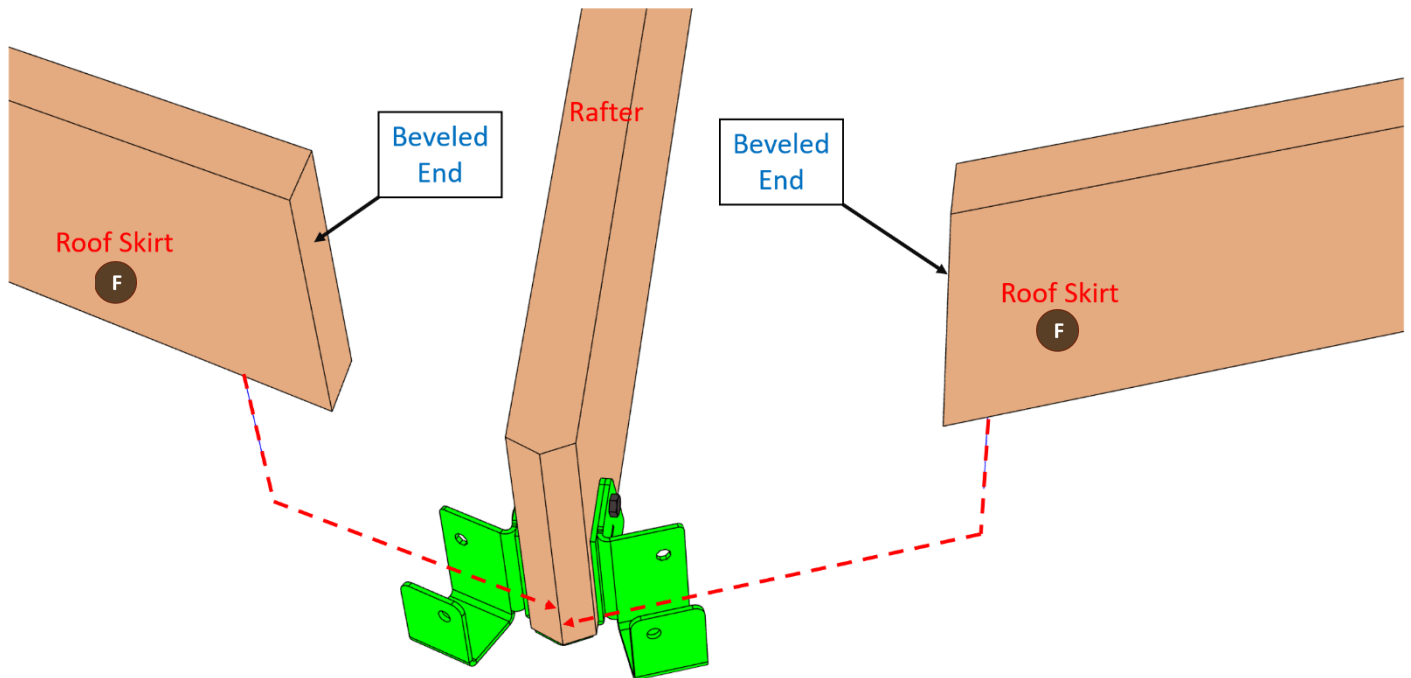
### 3.2 INSTALLING THE ROOF SKIRTS, ITEM #F

The roof skirt boards cap off the outer perimeter of the roof structure and provide support for the outer edges of the roof deck plywood/OSB boards and nailing support for gutters.

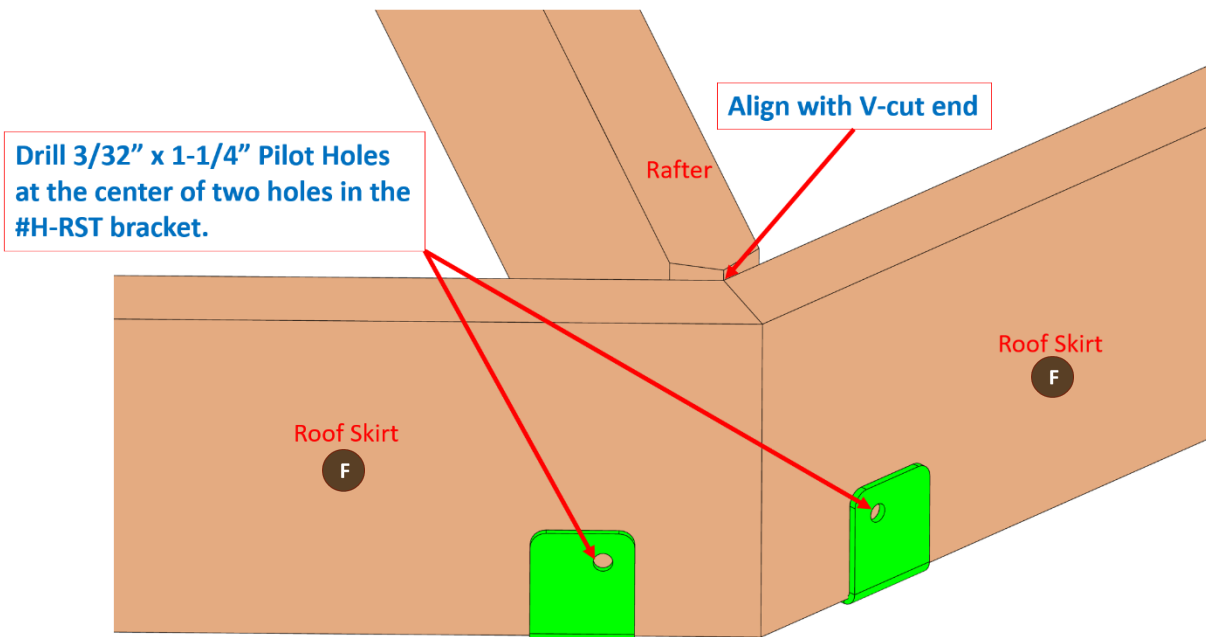
Roof Skirts, item #F, should be cut and prepared as shown, here:



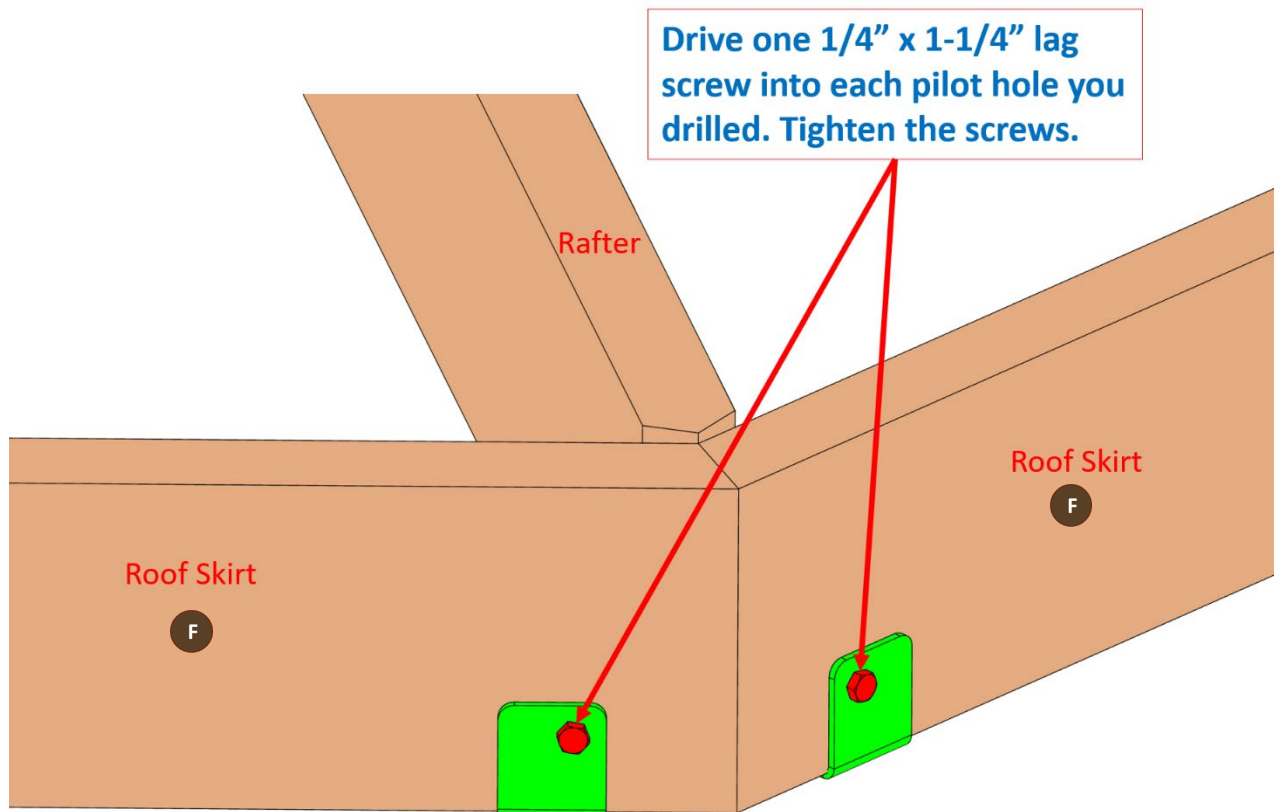
1. Lift and place one Roof Skirt member on the right side and one on the left side of the rafter. The Roof Skirt members must be long enough to extend to the adjacent rafter ends and sit on their Roof Skirt Tie U-channels.



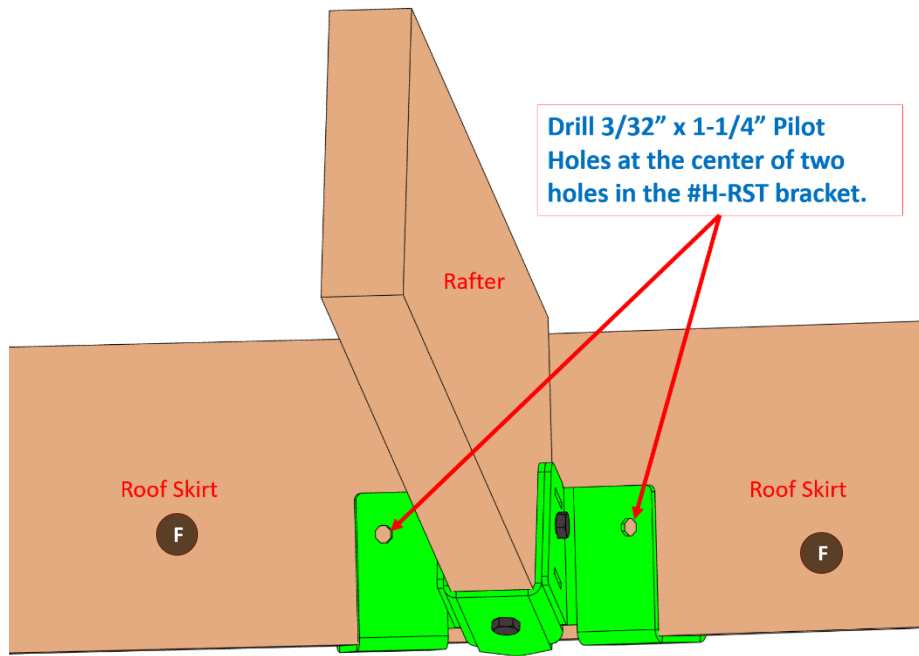
- Slide the Roof Skirt members until their bevel edges mate together and are aligned with the tip of the V-cut end of the rafter.
- Drill  $\frac{3}{32}$ " x  $1\text{-}1/4$ " pilot holes in the center of two holes, shown below.



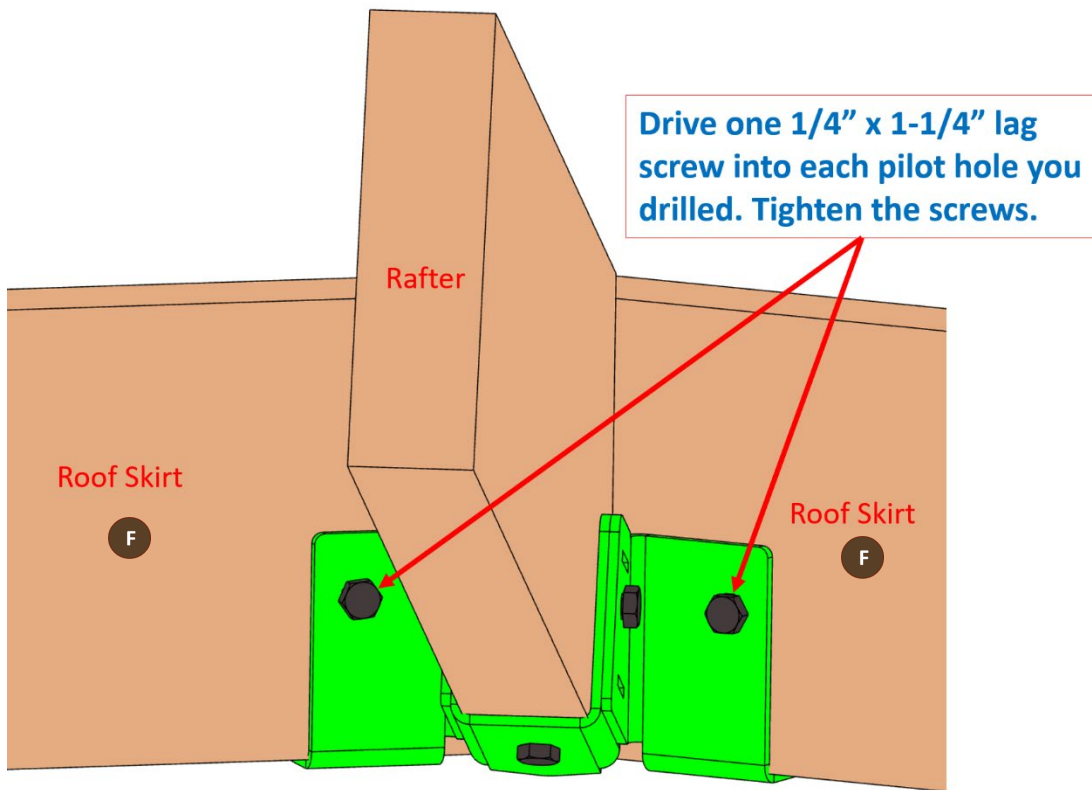
- Drive one  $\frac{1}{4}$ " x  $1\text{-}1/4$ " lag screw into each pilot hole you drill in step 3. Tighten the lag screws.



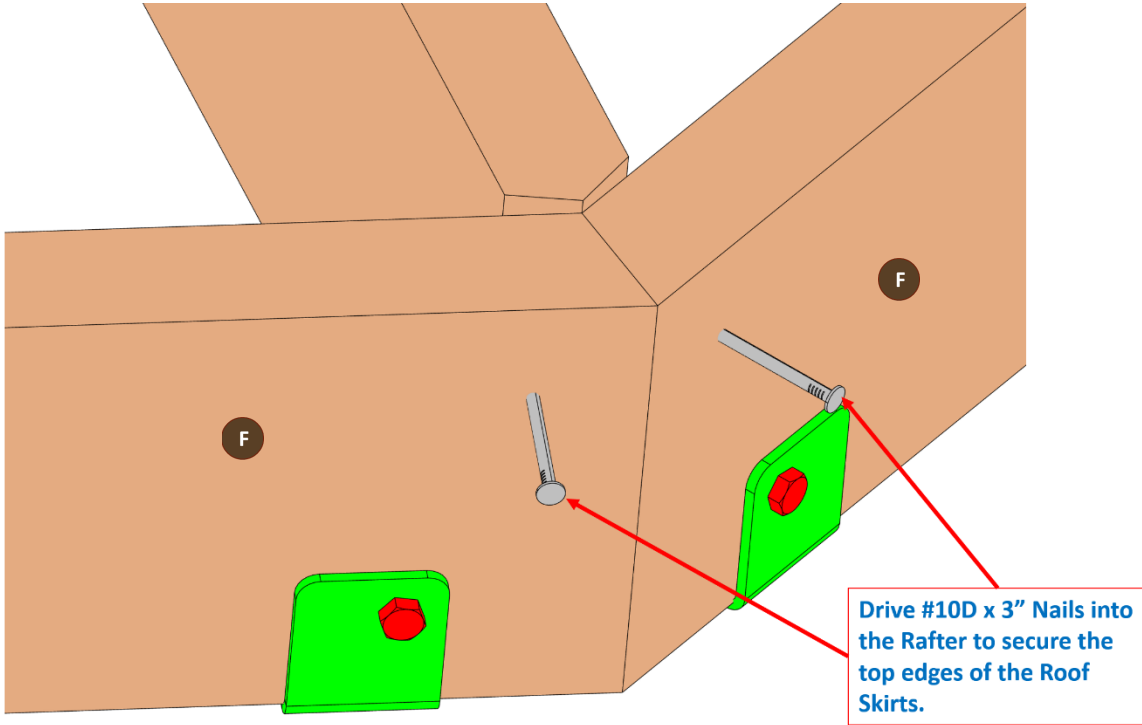
5. On the inside surface of the Roof Skirt member, identify two holes, as shown, below. Drill  $3/32$ " x  $1-1/4$ " pilot holes in the center of these two holes. Note: Extend the drill bit out as far as possible in the drill gun. Drill holes upward at a slight angle.



6. Drive one  $1/4$ " x  $1-1/4$ " lag screw into each pilot hole you drill in step 5. Tighten the lag screws.



7. Hammer in one 10D x 3" nails through each roof skirt member, approximately 1" below the top edge, and into the rafter end to secure the top end of the roof skirts to the rafter.



8. Repeat steps 1 to 7 and add the remaining roof skirt members.

