



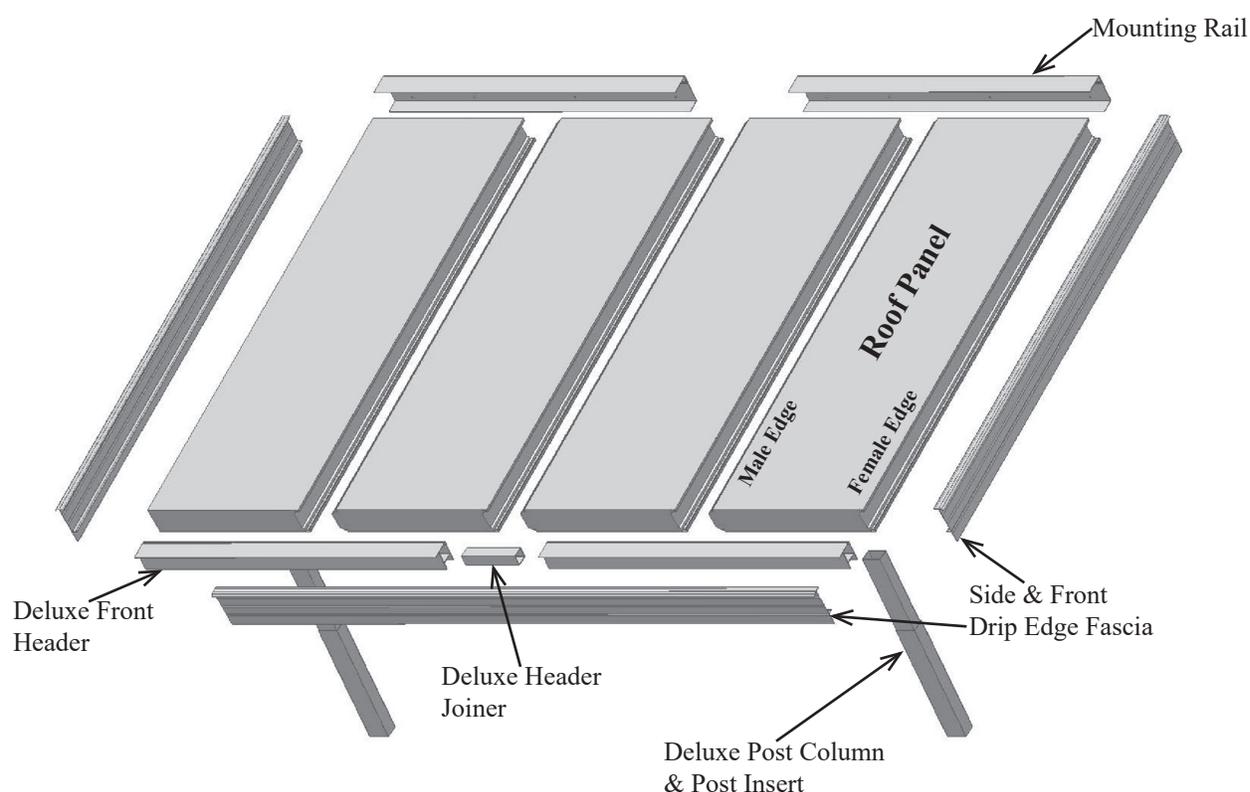
# Dura-Lock Roof System

## Assembly and Installation

### Instructions

Read the instructions before starting the job. They explain the steps required to produce a finished product that will meet factory specifications.

All references to "Left" and "Right" are while facing the home.



Check the material received.  
Match your shipment with the Bill of Materials.  
If there is a shortage or wrong material,  
call Dealer Service immediately.

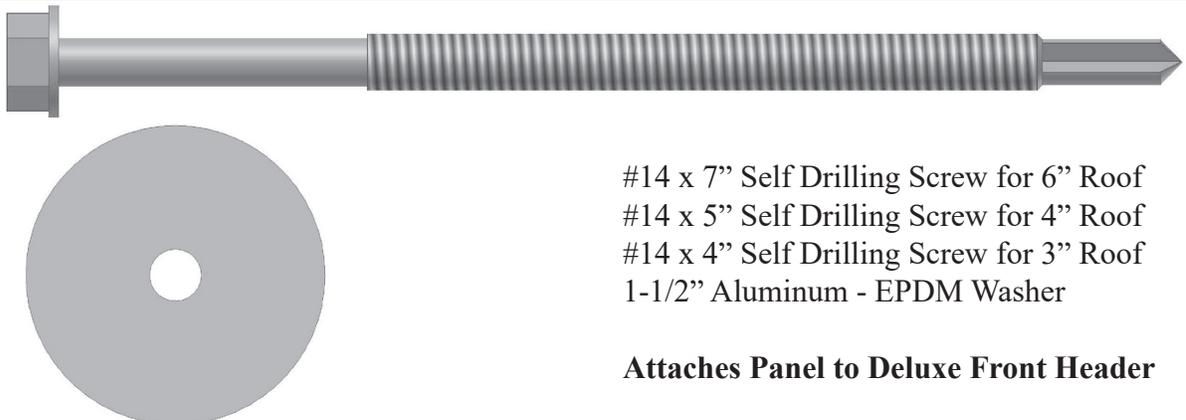
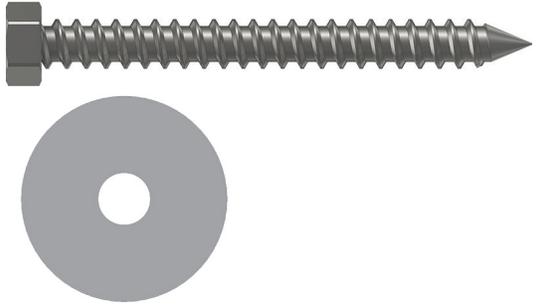
Safety is important!  
Wear Safety Glasses and Work Gloves.  
Follow all safety practices while assembling  
and installing this product.

Dura-Bilt Products, Inc. P.O. Box 188 Wellsburg, N.Y. 14894

*Dealer Service 570-596-2000 E-Mail [info@durabilt.com](mailto:info@durabilt.com)*

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## Fasteners

	<p>#14 x 7" Self Drilling Screw for 6" Roof #14 x 5" Self Drilling Screw for 4" Roof #14 x 4" Self Drilling Screw for 3" Roof 1-1/2" Aluminum - EPDM Washer</p> <p><b>Attaches Panel to Deluxe Front Header</b></p>
	<p>1/4" x 2-1/2" Lag Screw with Fender Washer</p> <p><b>Attaches Mounting Rail to Home</b></p> <p><b>Note: Be sure wall of home is thick enough to accommodate this screw without coming through inside wall.</b></p>
	<p>#12 x 3/4" Self Drilling Screw</p> <p><b>Fastens Post Insert to Deluxe Front Header, Post to Anchor Bracket and secures Post Insert to Post. Fastens Joiner to Deluxe Front Header.</b></p>
	<p>#12 x 3/4" Self Drilling Screw with EPDM Washer</p> <p><b>Attaches Mounting Rail to Panel, going down through top of mounting Rail and into Panel.</b></p>
	<p>#8 x 1/2" Self Drilling Screw</p> <p><b>Attaches Front and Side Fascia Trims to Panels.</b></p>
	<p>#14-10 x 2-1/2" Galvanized Hex Head SMS</p> <p><b>Attaches Anchor Bracket to Wooden Deck. (Full Embedment Required!!!)</b></p>

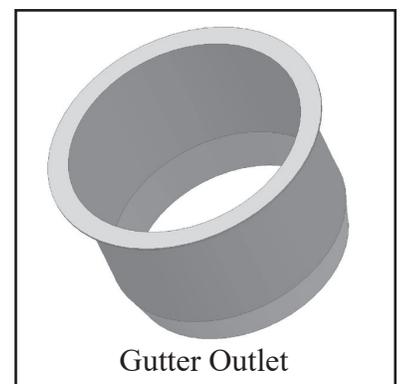
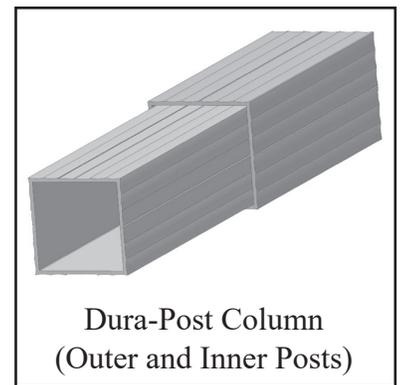
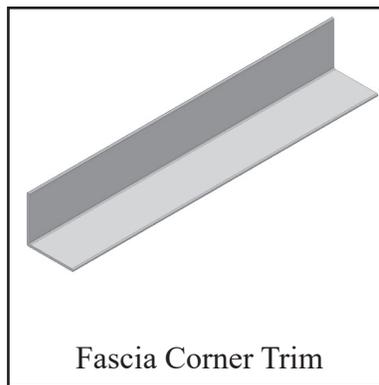
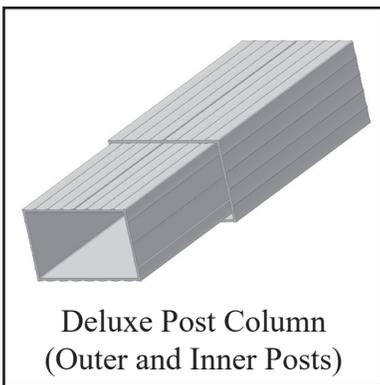
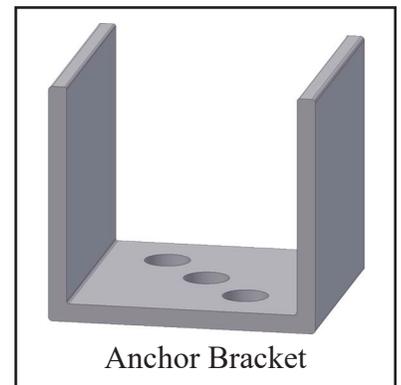
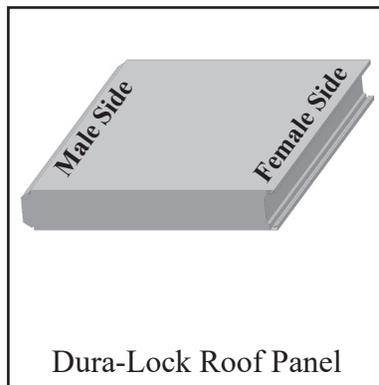
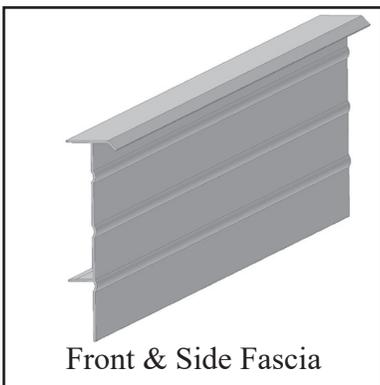
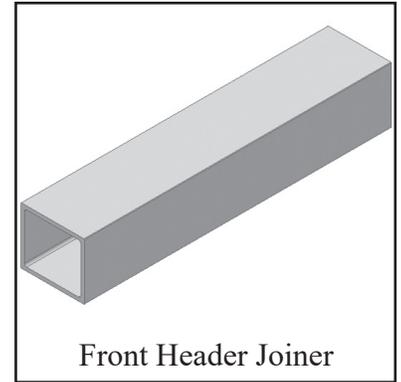
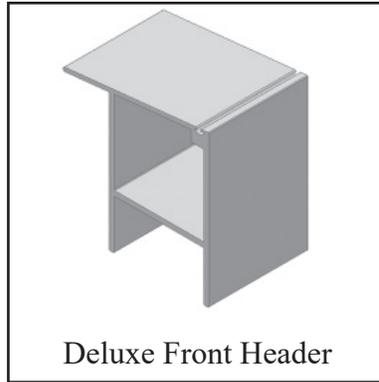
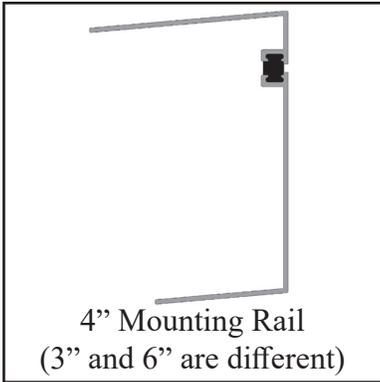
## **Tools Required**

Drill   Tape Measure   Metal Saw   Level   Chalk Line   Clamps

Hammer   Screw Gun   Pop Rivet Tool   Caulk Gun

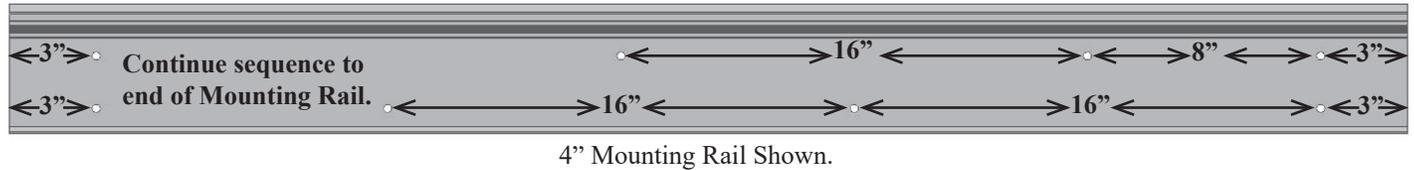
Nut Driver Bits with Magnetic Head: 1/4" - 5/16" - 3/8" - 7/16"   Drill Bits: 1/8", 1/4", 9/32" - 1/2" Masonry

# Component Descriptions

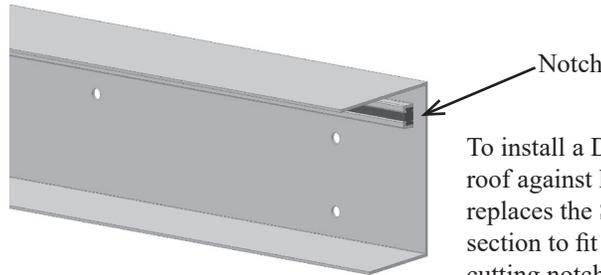


# Installation Instructions

1. Determine proper height and location for Mounting Rail. See Page 5 for 3-Season Room Enclosure, Deluxe Screen Room and Full Screen Room. See page 6 for All Season Room Enclosure.



Avoid causing a 'weak link' by fastening the Mounting Rail into studs or rafters of the home. Each installation is unique. Start by locating the framing members in the home that you can use to attach the Mounting Rail. Don't attach to fascia boards or other less substantial materials. See examples in drawings on page 4.

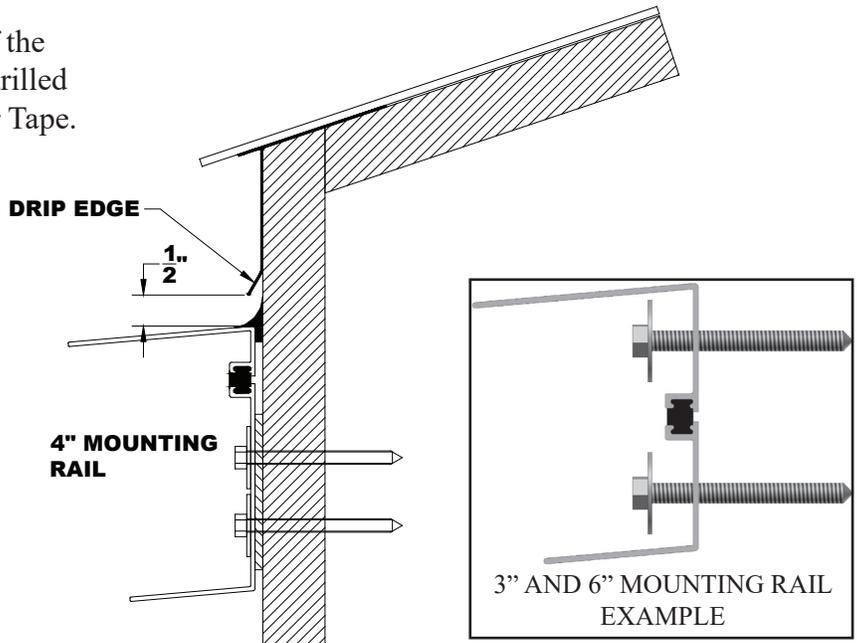


To install a Dura-Lock Roof with one side of the roof against home, a section of Mounting Rail replaces the Side Fascia Trim. Prepare this section to fit next to back Mounting Rail by cutting notch at thermal barrier for snug fit against Back Mounting Rail. See drawing.

2. Drill 9/32" holes, starting three (3) inches in from each end. Drill two holes through the back of the Mounting Rail at each end of the sections. The remaining two rows should have holes staggered 16" on center. Space the second hole in the top row at 8" on center and the second hole in the bottom row at 16" on center. The rest of the holes in both rows spaced at 16". (This will give the desired staggered screw placement.)

3. Apply Gray Tar Tape to the **back side** of the Mounting Rail, Make sure to cover the drilled holes. Then remove wax paper from Tar Tape.

4. Place Mounting Rail into position.
- A.) Keep a minimum of 1/2" clearance between top of Mounting Rail and bottom of Roof Drip Edge on fascia application.
  - B.) Position Mounting Rail, taking into account its built-in roof pitch of 1" per foot. The Deluxe Front Header has the same built-in pitch angle.



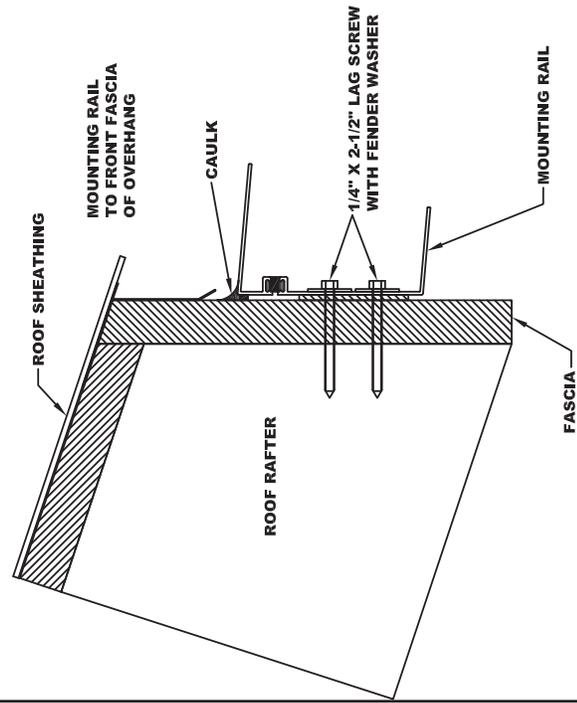
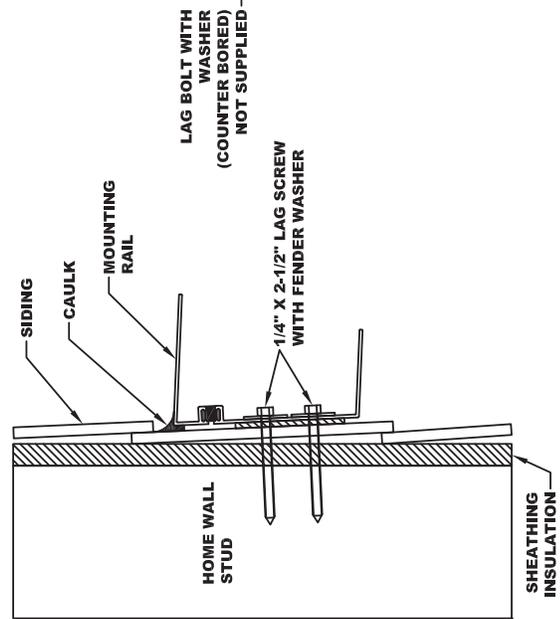
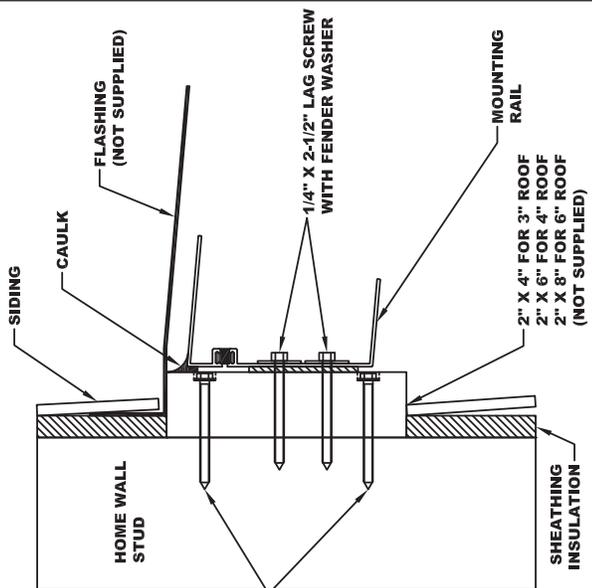
5. Secure Mounting Rail to wall using 1/4" x 2-1/2" Lag Screws with Fender Washer.

6. Caulk joint between Mounting Rail and wall. Also caulk all joints in Mounting Rail.

7. If Mounting Rail is to be attached to any material other than wood, attach Mounting Rail to meet local building codes.

**See Next Page For Some Mounting Examples.**

# Mounting Examples



## Mounting Rail Height

**In the event you are planning a Room Enclosure Installation:**

**Use this chart to determine Mounting Rail Height for the 3-Season Room Enclosure, Deluxe Screen Room or Full Screen Room**

Front Wall Height											
		76-1/2"		82"		90"		96"		102"	
Height to Bottom of Mounting Rail											
Room Width	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
8'	86-1/2"	88-1/2"	92"	94"	100"	102"	106"	108"	112"	114"	
9'	87-1/2"	89-7/8"	93"	95-3/8"	101"	103-3/8"	107"	109-3/8"	113"	115-3/8"	
10'	88-1/2"	91-1/8"	94"	96-5/8"	102"	104-5/8"	108"	110-5/8"	114"	116-5/8"	
11'	89-1/2"	92-3/8"	95"	97-7/8"	103"	105-7/8"	109"	111-7/8"	115"	117-7/8"	
12'	90-1/2"	93-5/8"	96"	99-1/8"	104"	107-1/8"	110"	113-1/8"	116"	119-1/8"	
13'	91-1/2"	94-7/8"	97"	100-3/8"	105"	108-3/8"	111"	114-3/8"	117"	120-3/8"	
14'	92-1/2"	96-1/8"	98"	101-5/8"	106"	109-5/8"	112"	115-5/8"	118"	121-5/8"	
15'	93-1/2"	97-3/8"	99"	102-7/8"	107"	110-7/8"	113"	116-7/8"	119"	122-7/8"	
16'	94-1/2"	98-1/2"	100"	104"	108"	112"	114"	118"	120"	124"	

Note: Actual Front Wall Height at the Deluxe Front Header will be 2" higher when measured from Deck or Patio to underside of Roof as listed in the Wall Height Chart. (Example: 76-1/2" + 2" = 78-1/2")

**The minimum and maximum Mounting Rail heights given in the chart above are calculated to bracket the six degree pitch built into the Mounting Rail and Front Header. In theory, there should be no gaps between the roof and the Front Header and/or the Mounting Rail. However, there may be installations where gaps may still occur due to local installation conditions.**

## Mounting Rail Height

**In the event you are planning an All Season Room Enclosure Installation:  
Use this chart to determine Mounting Rail Height for the All Season Room Enclosure**

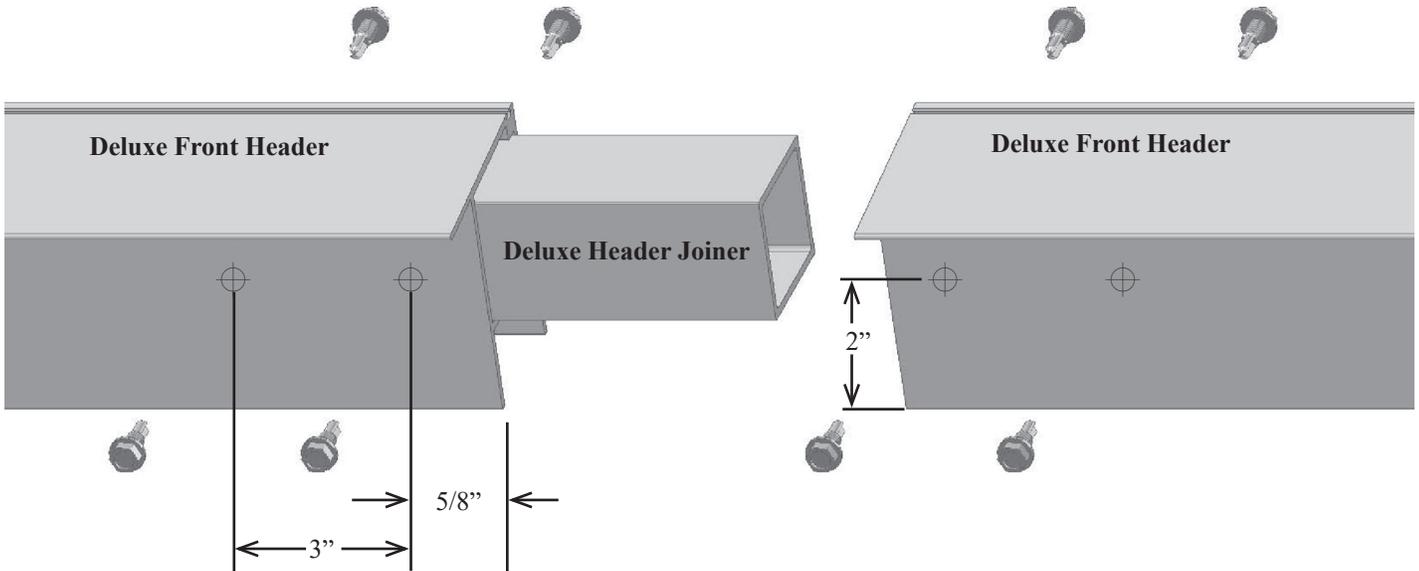
Front Wall Height											
76-3/4"		82-3/16"		90"		96"		102"			
Height to Bottom of Mounting Rail											
Room Width	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	
8'	85-1/2"	87-5/8"	91"	93-1/8"	98-3/4"	100-7/8"	104-3/4"	106-7/8"	110-3/4"	112-7/8"	
9'	86-1/2"	88-7/8"	92"	94-3/8"	99-3/4"	102-1/8"	105-3/4"	108-1/8"	111-3/4"	114-1/8"	
10'	87-1/2"	90-1/8"	93"	95-5/8"	100-3/4"	103-3/8"	106-3/4"	109-3/8"	112-3/4"	115-3/8"	
11'	88-1/2"	91-3/8"	94"	96-7/8"	101-3/4"	104-5/8"	107-3/4"	110-5/8"	113-3/4"	116-5/8"	
12'	89-1/2"	92-3/4"	95"	98-1/8"	102-3/4"	106"	108-3/4"	112"	114-3/4"	118"	
13'	90-1/2"	94"	96"	99-3/8"	103-3/4"	107-1/4"	109-3/4"	113-1/4"	115-3/4"	119-1/4"	
14'	91-1/2"	95-1/4"	97"	100-5/8"	104-3/4"	108-1/2"	110-3/4"	114-1/2"	116-3/4"	120-1/2"	
15'	92-1/2"	96-1/2"	98"	101-7/8"	105-3/4"	109-3/4"	111-3/4"	115-3/4"	117-3/4"	121-3/4"	
16'	93-1/2"	97-3/4"	99"	103-1/8"	106-3/4"	111"	112-3/4"	117"	118-3/4"	123"	

Note: Actual Front Wall Height at the Front Beam will be 3/4" higher when measured from Deck or Patio to underside of Roof as listed in the Wall Height Chart. (Example: 76-3/4" + 3/4" = 77-1/2")

**The minimum and maximum Mounting Rail heights given in the chart above are calculated to bracket the six degree pitch built into the Mounting Rail and Front Beam. In theory, there should be no gaps between the roof and the Front Beam and/or the Mounting Rail. However, there may be installations where gaps may still occur due to local installation conditions.**

# Deluxe Front Header

1. Layout the Deluxe Front Header Section(s) on the ground.

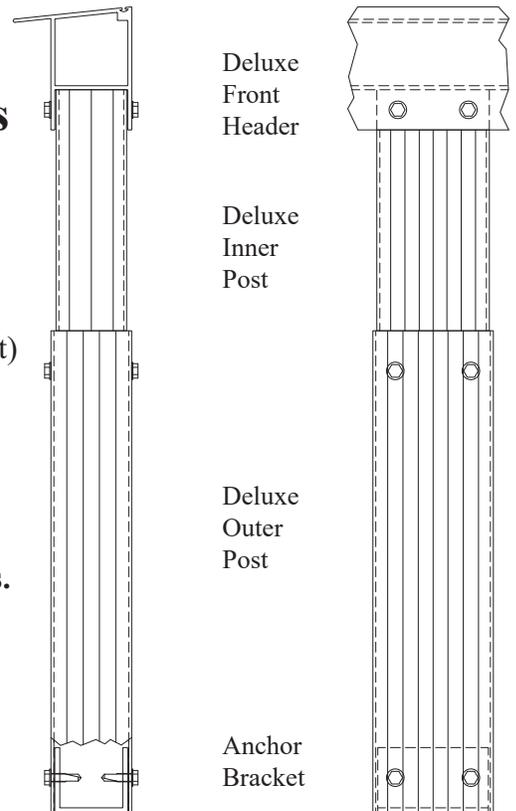


2. Insert the Front Header Joiner 4-1/4" into the Deluxe Front Header.
3. Secure in place with four (4) #12 x 3/4" Self Drilling Screws.
4. Insert opposite end of Front Header Joiner into next section of Deluxe Front Header and secure as in step #3.
5. Continue this same process with remaining Deluxe Front Header Sections.

## Deluxe Post Columns or Dura-Post Columns

1. Determine Post spacing using the chart on the next page. Then mark the location of each Post on back leg of the Deluxe Front Header.
2. Position the Deluxe Inner Post (located inside the Deluxe Outer Post) to the bottom of the Deluxe Front Header.
3. Secure with four (4) #12 x 3/4" Self Drilling Screws. Two in each front corner and two (2) in each back corner.

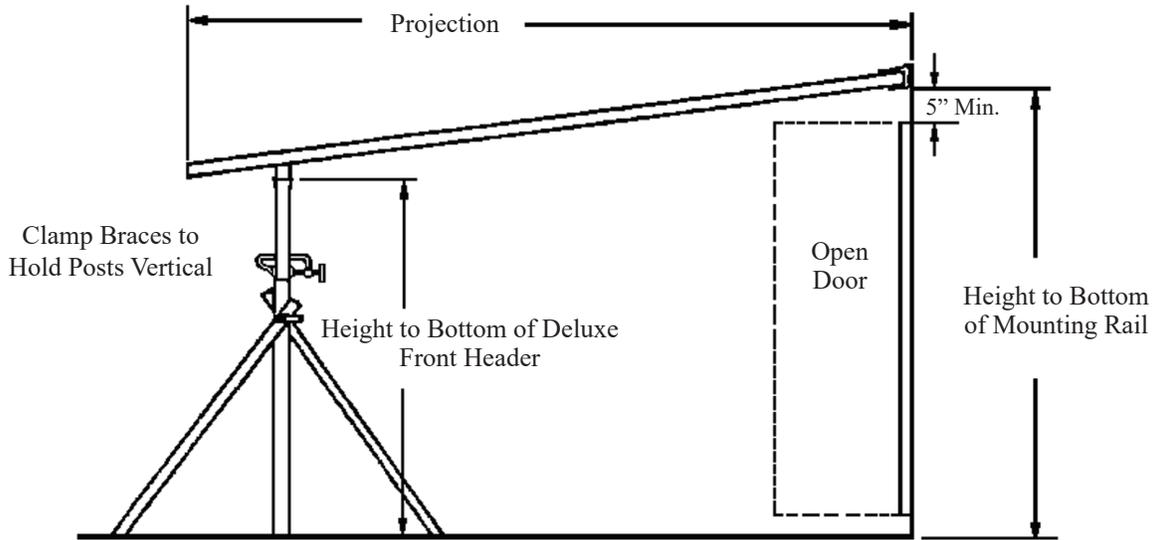
**Note: Flat and Corner Scroll Columns have their own Instructions.**



# Deluxe Post Columns or Dura-Post Columns

Continued

4. Determine post length and then pull out post section to that length. Use a "C" Clamp to clamp inserts after wrapping with a piece of cardboard to protect the painted surface.



## Column Spacing Chart

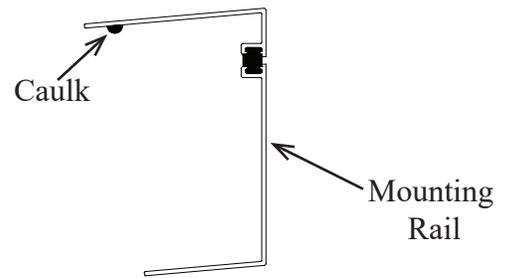
Columns at the corners are to be set in 12" on-center from each corner

Roof Length	Number Columns	Spacing On-Center	Roof Length	Number Columns	Spacing On-Center	Roof Length	Number Columns	Spacing On-Center
4	2	2'	27	6	5'	51	10	5' 5-3/8"
5	2	3'	28	6	5' 2-3/8"	52	10	5' 6-5/8"
6	2	4'	29	6	5' 4-3/4"	53	10	5'-8"
7	2	5'	30	6	5' 7-1/4"	54	10	5' 9-3/8"
8	2	6'	31	6	5' 9-5/8"	55	10	5' 10-5/8"
9	3	3'-6"	32	6	6'	56	10	6'
10	3	4'	33	7	5'-2"	57	11	5'-6"
11	3	4'-6"	34	7	5'-4"	58	11	5' 7-1/4"
12	3	5'	35	7	5'-6"	59	11	5' 8-3/8"
13	3	5'-6"	36	7	5'-8"	60	11	5' 9-5/8"
14	3	6'	37	7	5'-10"	61	11	5' 10-3/4"
15	4	4'-4"	38	7	6'	62	11	6'
16	4	4'-8"	39	8	5' 3-3/8"	63	12	5' 6-1/2"
17	4	5'	40	8	5' 5-1/8"	64	12	5' 7-5/8"
18	4	5'-4"	41	8	5' 6-7/8"	65	12	5' 8-3/4"
19	4	5'-8"	42	8	5' 8-1/2"	66	12	5' 9-3/4"
20	4	6'	43	8	5' 10-1/4"	67	12	5' 10-7/8"
21	5	4'-9"	44	8	6'	68	12	6'
22	5	5'	45	9	5' 4-1/2"	69	13	5'-7"
23	5	5'-3"	46	9	5'-6"	70	13	5'-8"
24	5	5'-6"	47	9	5' 7-1/2"	71	13	5'-9"
25	5	5'-9"	48	9	5'-9"	72	13	5'-10"
26	5	6'	49	9	5' 10-1/2"	73	13	5'-11"
			50	9	6'	74	13	6'

Columns should not be located within 12" of a Front Header Joiner.

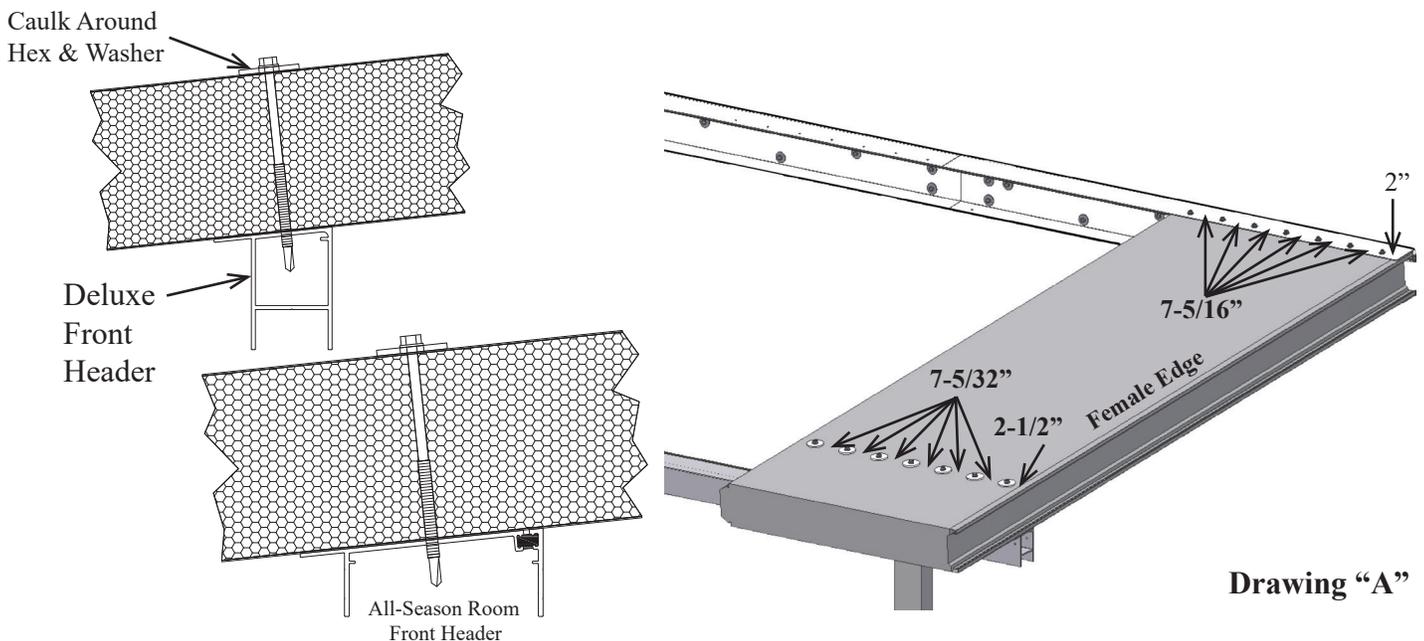
# Roof Panels

1. Apply caulk (1/4" to 1" in from edge) to underside of Top flange of the Mounting Rail. Bead of caulk should be slightly longer than the width of the panel to be installed. Apply caulk for each individual Panel just before inserting into position.



**Helpful Hint: Protect Roof Panels from being scratched by placing a piece of cardboard from product carton over the Deluxe Front Header.**

2. Insert the first panel into right end of the Mounting Rail. The Panel's female edge must be on the right.
3. Square Roof Panel in Mounting Rail, making sure it's fully seated. Then secure with seven (7) #12 x 3/4" Self Drilling Screws with EPDM Washer on top of Mounting Rail and seven (7) #12 x 3/4" Self Drilling Screws from the under side of Mounting Rail, Positioned 2" in from right side edge of Roof Panel and 3/4" back from the front lip of the Mounting Rail.

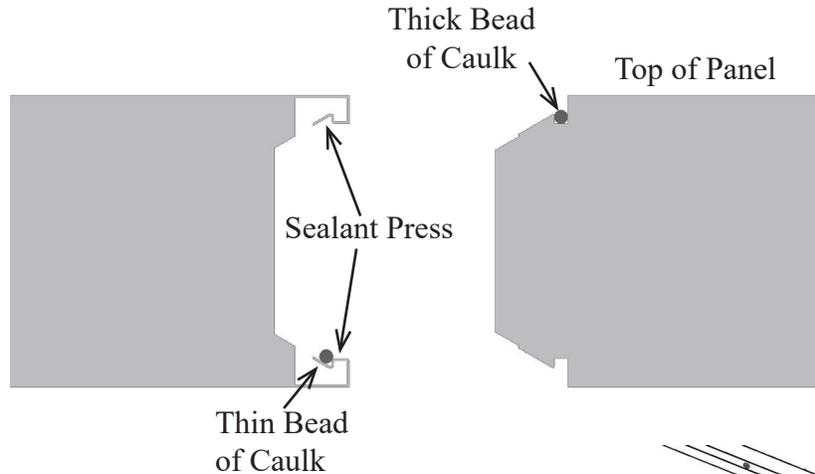


**IMPORTANT Do Not Over-Tighten the Screws. If you tighten to the point where the Roof Panel is depressed, even if the screw is backed out, the Roof Panel will NOT return to its original flat surface. Drive screws until tight to panel, but not depressing the surface of the panel.**

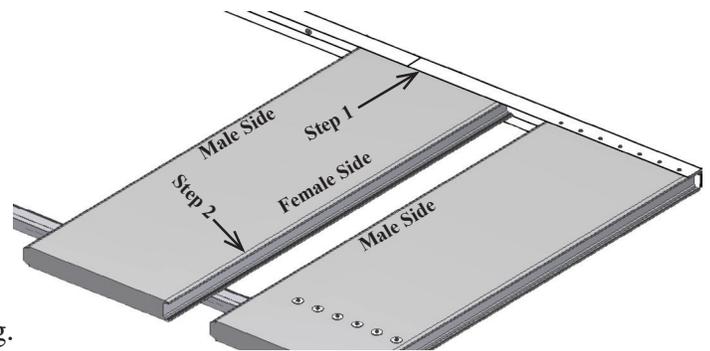
4. With the Roof Panel square in the Mounting Rail and on the Deluxe Front Header, strike a chalk line on top of the Roof Panel to mark the location for fasteners so they will go down through the center of the Front Header. Slide your cardboard protector down the Front Header before installing fasteners into Front Header.
5. Secure Roof Panel to Deluxe Front Header with seven (7) #14 x 4", 5" or 7" Self Drilling Screws and 1-1/2" EPDM Washer. Fastener should be 2-1/2" in from right side of Roof Panel and through your chalk line.  
See screw spacing in **Drawing "A"** above. **Do not install last screw into Header on front edge of panel** This will allow enough "lift" so that the next panel can snap into position.

6. Repeat step 1, applying caulk to Mounting Rail.

**Recommended Procedure: Remove the wax coating on the Male Recess and the Sealant Press with a solvent before caulking.** Run a thick bead of caulk down the entire male recess on top of the first panel and a thin bead down the entire female recess on the bottom of the next panel. Make sure there are no air bubbles or air pockets in the caulk. Repeat this procedure on all remaining panels.



7. Position second panel with female edge lined up with the male edge of the installed panel.  
**Note:** Step 1 Panel should be resting on Front Header. and fully inserted into the Mounting Rail.  
 Step 2 with panel in position, bump new panel into first panel until they snap together. See Drawing.

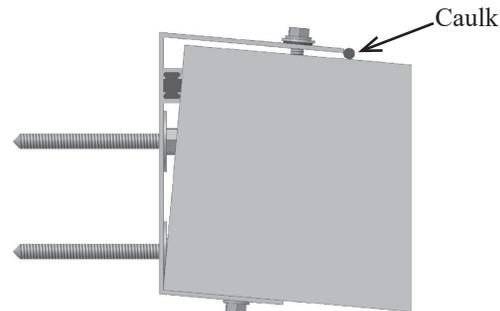


8. Smooth caulk on top, the length of the joint. Add caulk in low spots, if necessary.
9. Go back and install last screw in first panel into Front Header.
10. Secure new panel as in steps 4 and 5.
11. Repeat procedure until all panels are installed.

12. Before installing last panel, trim off the Male Interlock.



13. Apply a bead of caulk to full length where the top of the Roof Panels meet the Mounting Rail.



**If you are installing a fan beam, please note that the proper position is to have the beam cavity closer to the top of the panel rather than the bottom of the panel.**

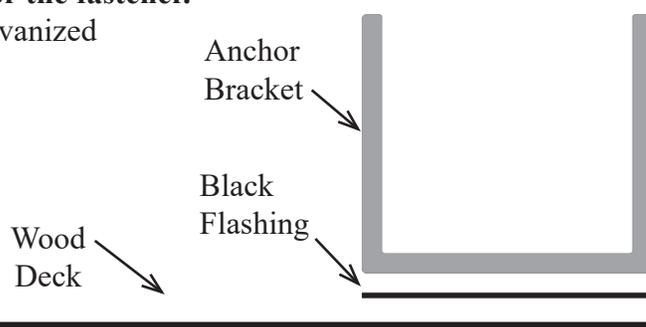
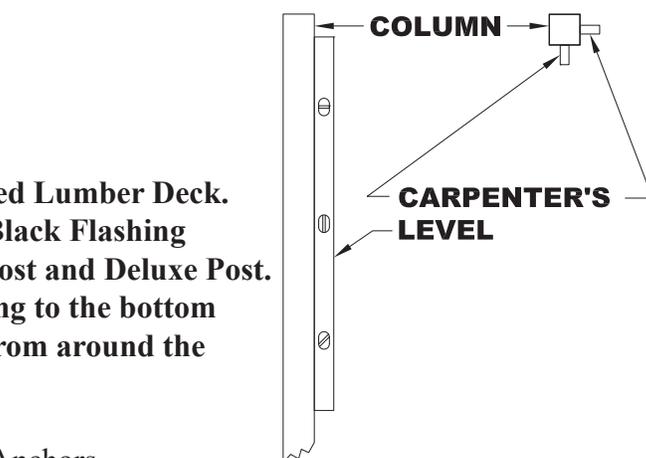
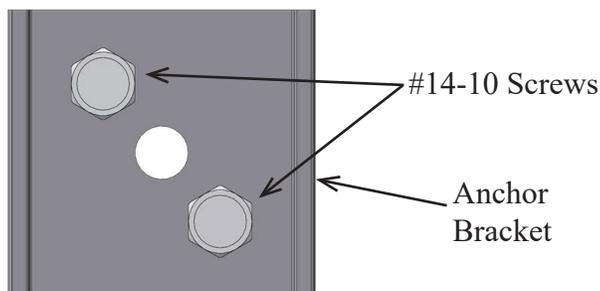
## Dura-Lock Roof Column Anchoring

1. Make sure Columns are plumb in both directions
2. Mark location for Anchor Brackets.

**Note: If you are installing Columns on a Pressure Treated Lumber Deck. With your order you will receive a 4" x 4-1/2" piece of Black Flashing with paper coated adhesive on one side for each Dura-Post and Deluxe Post. Peel the paper off from the Flashing and stick the flashing to the bottom of the Anchor Bracket. Then trim the excess Flashing from around the Anchor Bracket.**

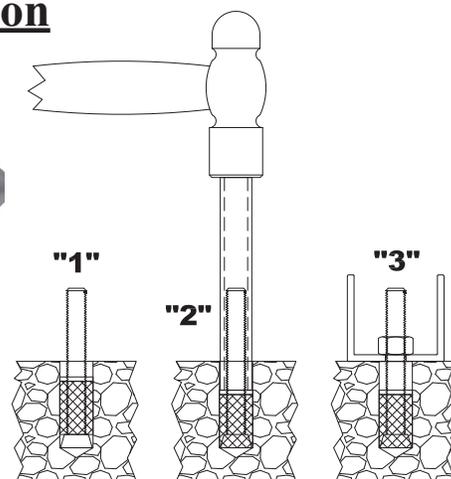
3. Move Columns aside from marked locations and install Anchors.

**Note: You must use a 1/8" drill and pre-drill the holes for the fastener. Attach Bracket to wood with two (2) #14-10 x 2-1/2" Galvanized Hex Head SMS. (Full Embedment Required!!!)**



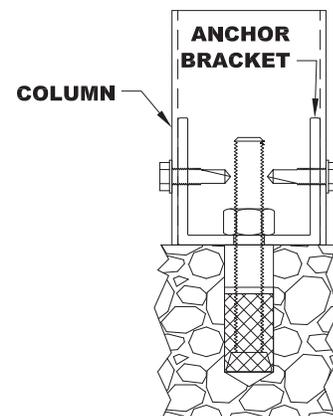
## Concrete Anchor Installation

1. Drill hole 1-1/2" deep with a 1/2" masonry drill bit. Insert Anchor Bolt, Expanding Ferrule, Lead Anchor and Washer.
2. Use hammer and 1/4" pipe to seat Anchor.
3. Place center hole of Anchor Bracket over Bolt and secure with 1/4" nut.



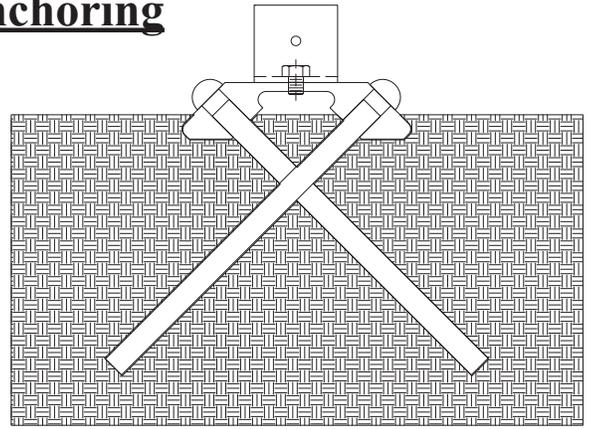
## Installing Column Anchor Bracket

1. Slide Deluxe Post Column over Anchor Bracket.
2. Secure Column to Anchor Bracket with four (4) #12 x 3/4" Self-Drilling Screws.



## Soil or Blacktop Anchoring

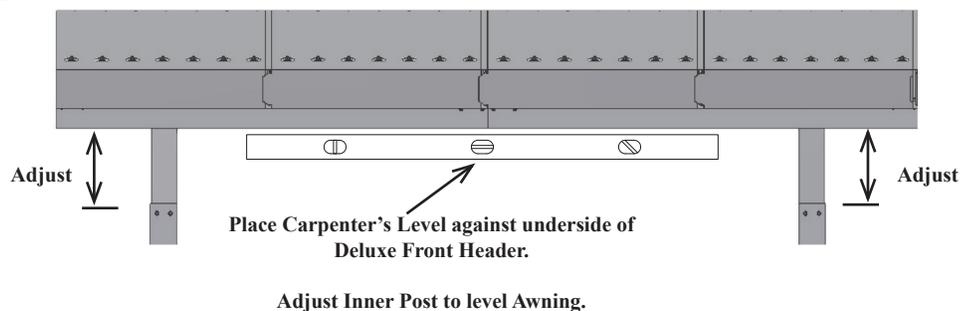
1. Secure Anchor Bracket to Anchor with 5/16" bolt provided.
2. Install Column to Anchor Bracket as described above.
3. Tap Soil Anchor lightly to set in place.
4. Drive Soil Anchor Pins alternately until flush with top of fitting.



Note: The Soil Anchor Pins are 1/2" dia. x 24" long Oval Head Round Steel Pins made from C-1018 Material entering the soil @ 45°.

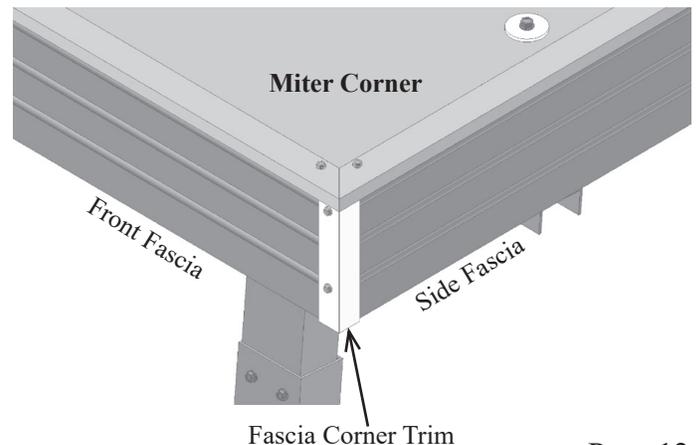
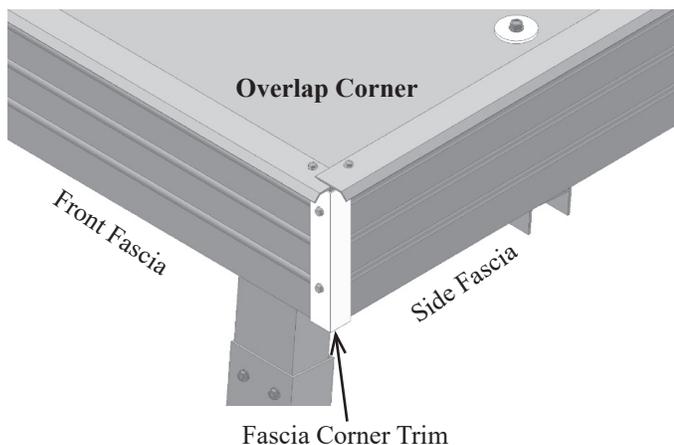
## Leveling

1. Place carpenter's level on underside of Deluxe Front Header.
2. Adjust Inner Post to level the Deluxe Front Header.
3. Secure with four (4) #12 x 3/4" Self Drilling Screws.



## Front & Side Fascia

1. Install Front & Side Fascia on the front and sides of Roof.
2. The two side pieces will be 2" longer than the actual projection of the Awning.
3. The remaining pieces will be 4" longer than the Awning length. This extra length provides enough material to miter the corners.
4. Cut Front & Side Fascia straight to overlap the corner or at 45° miter for a finished corner look.

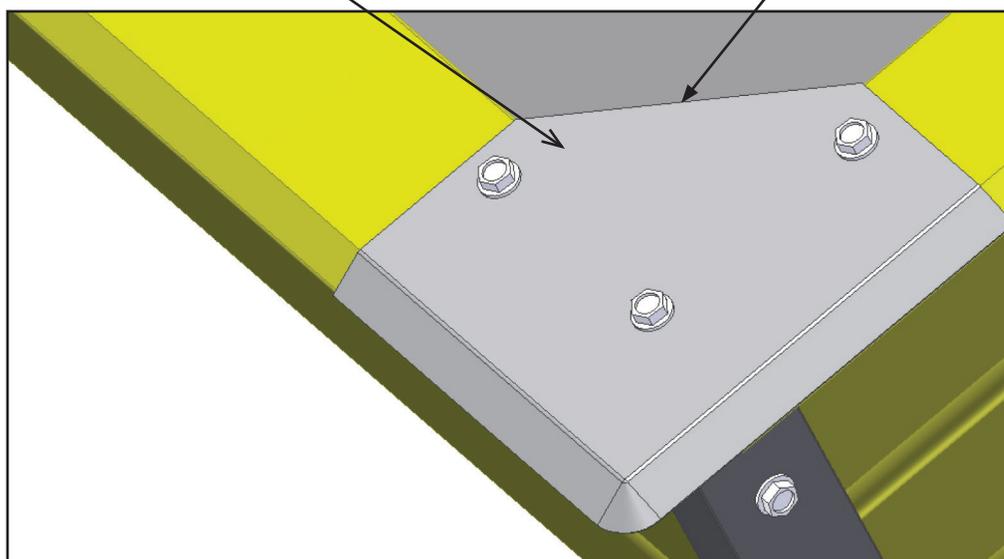


5. Before installing Front and Side Fascia, apply a small bead of caulk on top of Panel, 1/2" in from edge. Slide the Fascia onto the Panel. Secure to Panel with #8 x 1/2" Self Drilling Screws, spaced 18" apart, installed through both the top and bottom lips of the Front and Side Fascia.
6. Measure and cut the Fascia Corner Trim to fit as shown above. (It is shipped in one piece; 1" x 1" x 14"). Attach to Front and Side Fascia with two (2) #8 x 1/2" Self Drilling Screws as shown.

## **Roof Corner Trim**

Dura-Lock Roof Corner Trim

CAULK



1. After the Dura-Lock Roof has been installed and the Front and Side Fascia has been attached.
2. Caulk the bottom of the Dura-Lock Roof Corner Trim to insure a good seal.
3. Install one Dura-Lock Roof Corner Trim on Top of the Front and Side Fascia on the two front corners using (3) #8 X 1/2" Self Drilling Screws.

# Installing Gutter

Gutter is shipped in lengths of: 16'-3", 12'-3", 10'-3" and 5'-3"

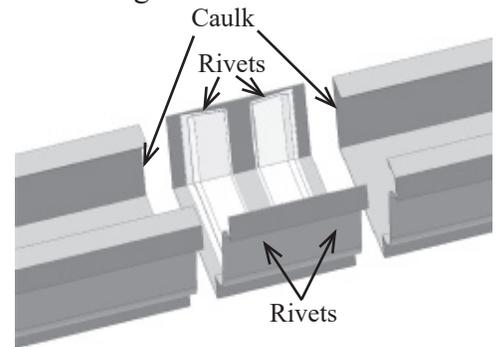
1. Decide where downspouts will be located. This will determine where the Outlets will be installed in the gutter.
2. Mark gutter where the Outlets are to be installed. The round Outlets will allow the elbows to be rotated to any position you want.
3. To install Outlet, cut a 2-3/8" round hole centered in the bottom of the gutter. Then simply push Outlet down through gutter until it snaps into position. No caulk, screws or rivets are required to install the Outlet in the gutter.
4. If you have gutter sections to be joined, it is recommended to do it while on the ground.

The sections may be joined by one of the following methods.

## Method #1

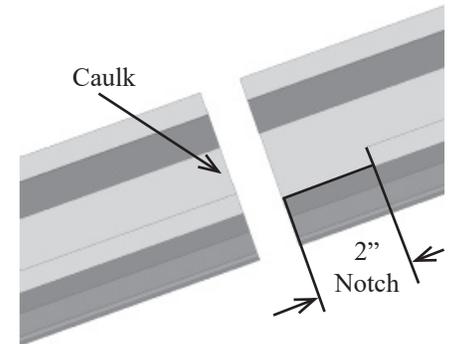
Use the Gutter Joiner provided. Caulk ends of gutter, then slide gutter sections into the Joiner seams. Pop Rivet the joints where shown. Then smooth caulk in the seams of Joiner and gutter.

**Note: No Clay Gutter Joiners available use Method #2.**



## Method #2

Cut a 2" notch in front and back walls of gutter as shown. Caulk the section not notched. Then slide the notched section inside the caulked section. Install Pop Rivets in bottom and each side.

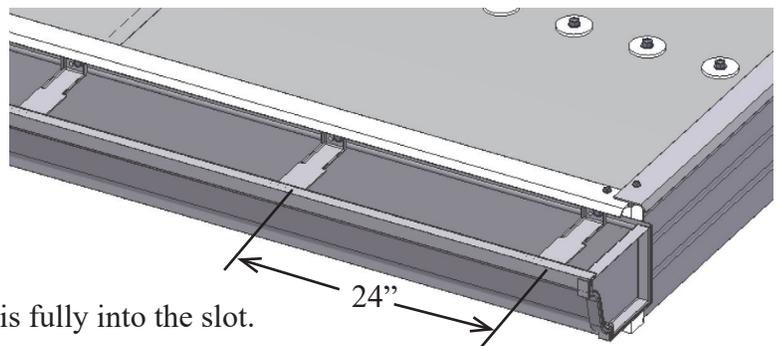
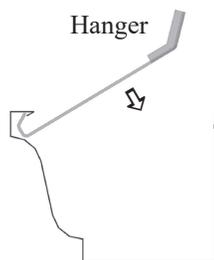


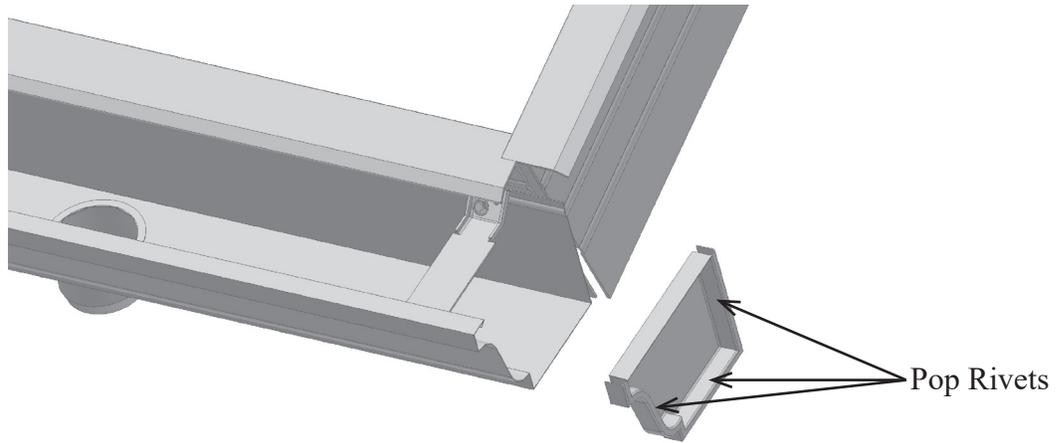
**Helpful Hint:** For a professional looking installation, make gutter cut-offs at the ends that will be hidden in the Joiner (Method #1) or inside another section (Method #2).

5. Install Hidden Gutter Hangers in the gutter. Locate your first hanger so that it will be at end of Fascia. See drawing.

Then install Hangers for the length of the gutter. Hangers should be no more than 24" apart. If you have joined gutter sections, you may have to move a Hanger a few inches to miss the joint.

To install hanger, hook the end of the hanger without a screw hole under the front lip of the gutter. Then swing hanger down to back wall of gutter. Push the hanger slot down over back wall of the gutter until back wall is fully into the slot.

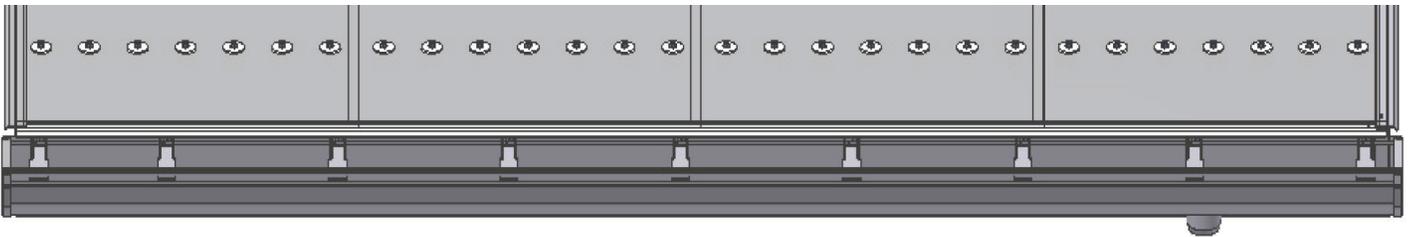




6. Install the End Caps. Caulk the end of the gutter. Install End Cap. Pop Rivet where shown.

## Hanging the Gutter

1. You must provide support for the gutter to hold it in position against the fascia. Starting at the center of the gutter, install a #12 X 3/4" Self Drilling Screw through the hole in the hanger and into the fascia. Continue until all hangers have been fastened.



## Downspout Assembly

### **Downspout Leader**

Supplied in 8-foot length only. Cut to desired length using metal saw with fine tooth blade (24T).

### **Elbows**

When Elbows and Downspout Leader are fitted and in position---install two #8 x 1/2" screws at each joint.

### **Downspout Leader Straps**

Straps are supplied flat and are easily hand formed around the Downspout and fastened to Column.

