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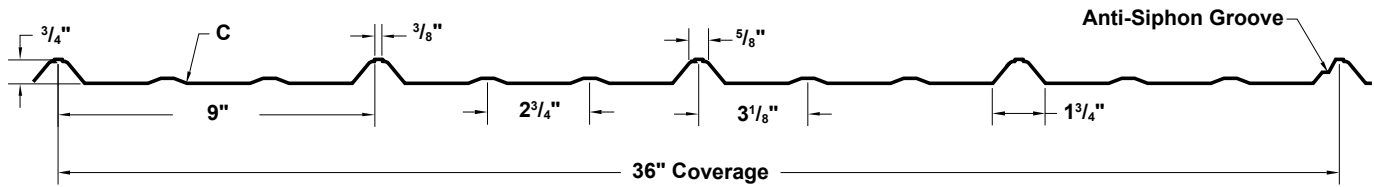
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# CLASSIC RIB® PANEL OVERVIEW

## PANEL PROFILE



## SLOPE

The minimum recommended roof slope for Classic Rib panels is 3:12.

## SUBSTRATE

Classic Rib is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

## COVERAGE

Classic Rib panels are available in 36" width coverage and 3/4" rib height.

## LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and PGI-3 for locations).

## AVAILABILITY

Classic Rib panels are available in 29 and 26 gauge.

## APPLICATION

Residential, Agricultural, Commercial and Industrial Panel

## PERFORMANCE TEST

UL 2218, UL 790, UL 263, UL 580, Texas Department of Insurance, Florida Approval, Miami-Dade County and ICC Evaluation Report

## FASTENING SYSTEM

Direct Fasten (exposed)

## FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12 through PGI-14).

## MATERIALS

29 and 26 gauge steel: Grade 80 per ASTM A 792  
Optional material: 0.032" aluminum

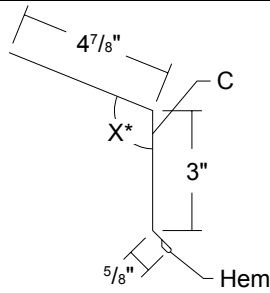
## FINISH

- ▶ \*Acrylic Coated Galvalume® (ACG), AZ55 per ASTM A 792
- ▶ Prepainted Galvalume®, AZ50 per ASTM A 792
- ▶ MS Colorfast45®
- ▶ \*\*PVDF

\* Differential appearance of Acrylic Coated Galvalume® roofing materials is not a cause for rejection.

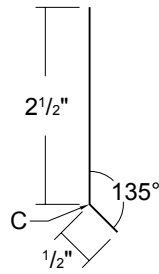
\*\* Meets both Kynar 500® and Hylar 5000® specifications.

**EAVE (DIRECT FASTEN)**



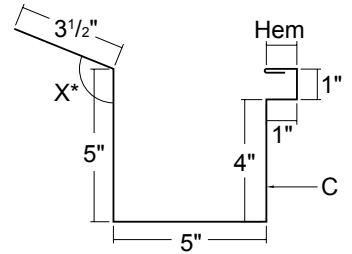
Length 10'-2" - \*Specify Slope Angle

**CLEAT**



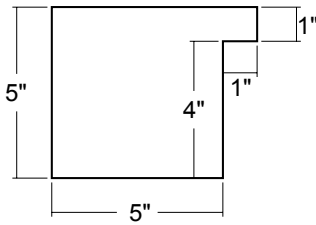
Length 10'-2"

**BOX GUTTER**

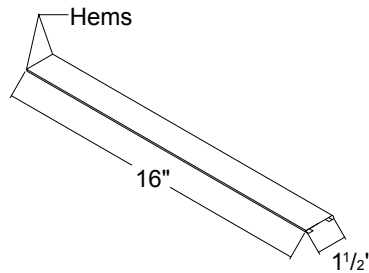


Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

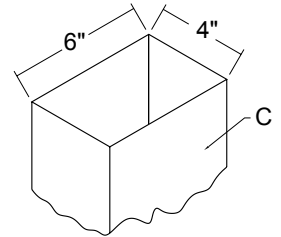
**BOX GUTTER END**



**UNIVERSAL GUTTER/  
DOWNSPOUT STRAP**

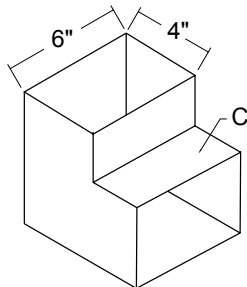


**6" x 4" DOWNSPOUT**



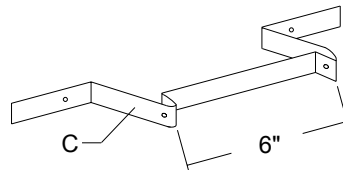
Lengths 10'-2" and 20'-3"  
(4" x 3 1/2" is also available)

**6" x 4" 95° ELBOW**



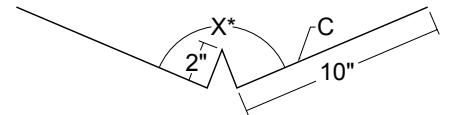
(4" x 3 1/2" is also available)

**DOWNSPOUT BRACKET**



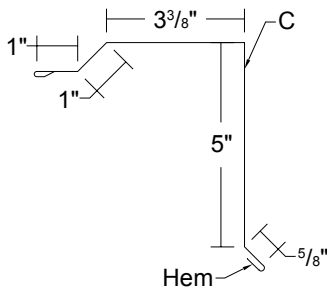
(4" is also available)

**VALLEY**



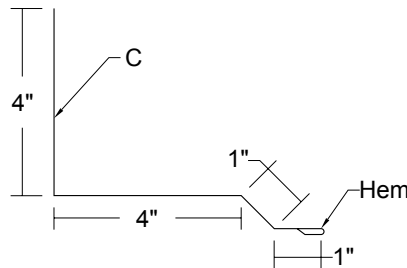
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**CLASSIC RIB RAKE**



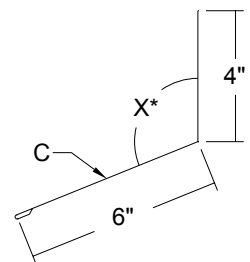
Lengths 10'-2" and 20'-3"

**RAKEWALL**



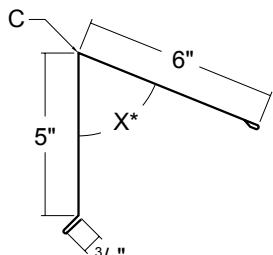
Length 10'-2"

**PITCH BREAK**



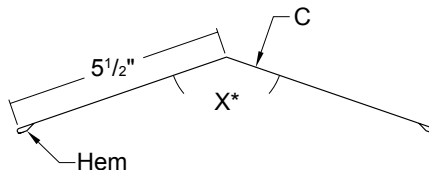
Length 10'-2" - \*Specify Slope Angle

**PEAK**



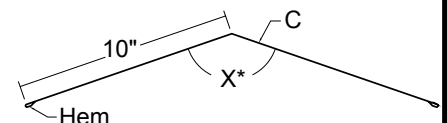
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**11" RIDGE/HIP COVER**



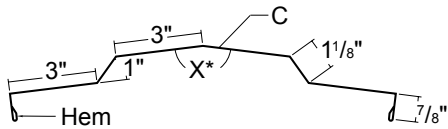
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**20" RIDGE/HIP COVER**



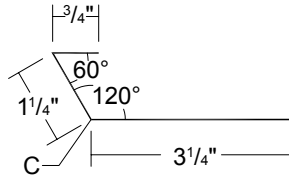
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**VENTED RIDGE COVER**



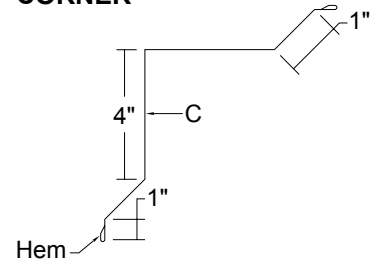
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**VENT DRIP**



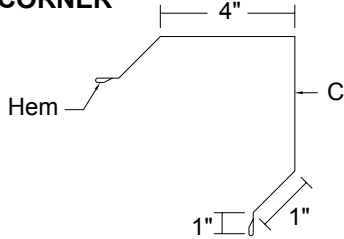
Length 10'-2"

**CLASSIC RIB INSIDE CORNER**



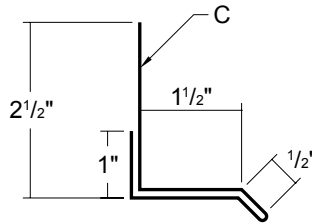
Lengths 10'-2", 14'-2" and 20'-3"

**CLASSIC RIB OUTSIDE CORNER**



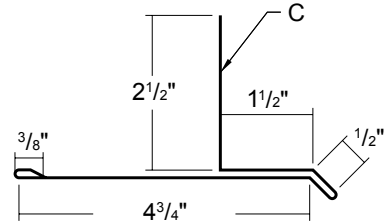
Lengths 10'-2", 14'-2" and 20'-3"

**1.5" SILL/HEAD**



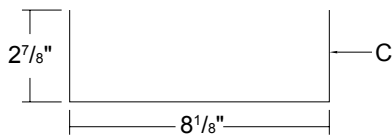
Length 10'-2"

**1.5" SILL TO SOFFIT**



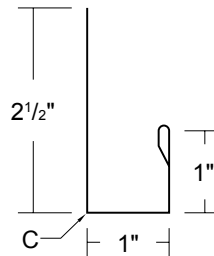
Length 10'-2"

**HEAD/JAMB COVER**



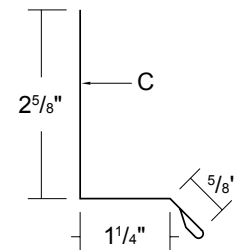
Lengths 10'-2" and 14'-2"

**CLASSIC RIB JAMB**



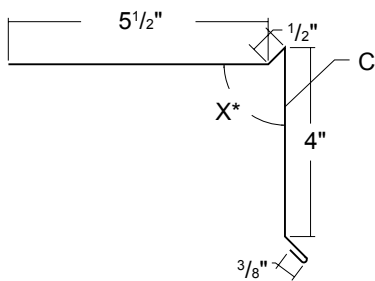
Length 10'-2"

**1 1/4" BASE**



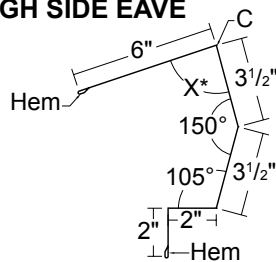
Length 10'-2"

**GRAVEL STOP**



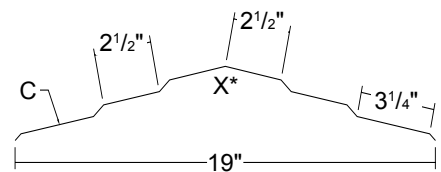
Length 10'-2"

**SCULPTURED HIGH SIDE EAVE**



Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**UNIVERSAL RIDGE COVER**



Length 10'-2" - \*Specify Slope Angle

C- Indicates color side of flashing.

**CLASSIC RIB CLOSURES**



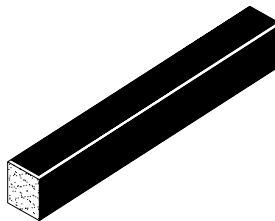
Outside Closure



Inside Closure

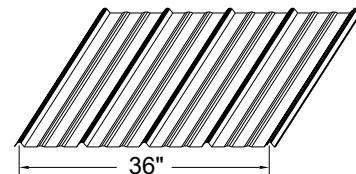
Polyethylene Foam

**UNIVERSAL CLOSURE**



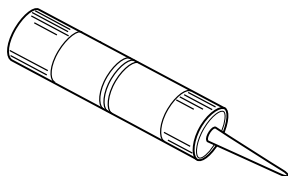
1" x 1 1/2" x 50' Polyethylene Foam  
1" x 1 1/2" x 10' Polyethylene Foam

**CLASSIC RIB LIGHT TRANSMITTING PANEL**



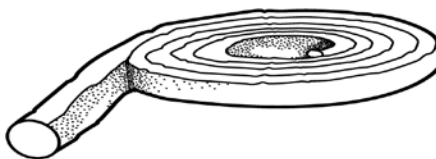
8 Ounce Fiberglass  
Available in 10' and 12' Lengths

**TUBE SEALANT**



10.3 oz. Cartridge Urethane

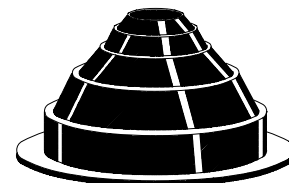
**TAPE SEALANT**



Double Bead Tape Sealant  
7/8" X 3/16" X 25'

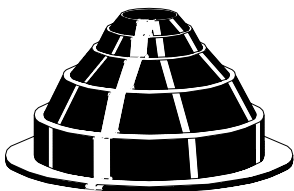
Single Bead Tape Sealant  
3/8" X 3/32" X 50'  
Butyl - Gray

**RUBBER ROOF JACK**



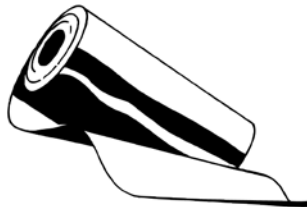
Mini (1/4" to 1 1/8" O.D. Pipe)  
#2 (1 3/4" to 3" O.D. Pipe)  
#4 (3" to 6" O.D. Pipe)  
#6 (6" to 9" O.D. Pipe)  
#8 (7" to 13" O.D. Pipe)

**RETRO ROOF JACK**



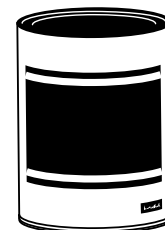
#801<sub>RETRO</sub> (3/4" to 2 3/4" O.D. Pipe)  
#802<sub>RETRO</sub> (2" to 7 1/4" O.D. Pipe)  
#803<sub>RETRO</sub> (3 1/4" to 10" O.D. Pipe)

**RUBBER ROOF FLASH KIT**



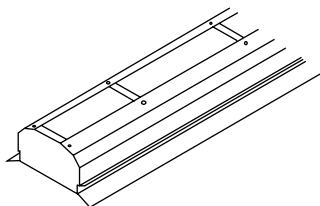
12" x 50'-0" Flash Kit  
18" x 50'-0" Flash Kit

**TOUCH-UP PAINT**



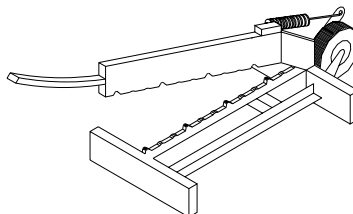
Available in 2 oz Bottles  
PVDF / MS Colorfast45®

**CONTINUOUS RIDGE VENT**

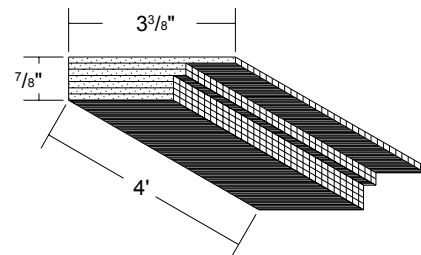


9" x 10' or 12" x 10'

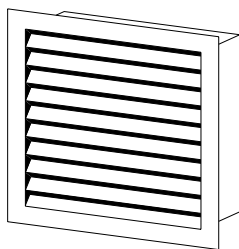
**CLASSIC RIB PANEL SHEAR**



**VENT MATERIAL**

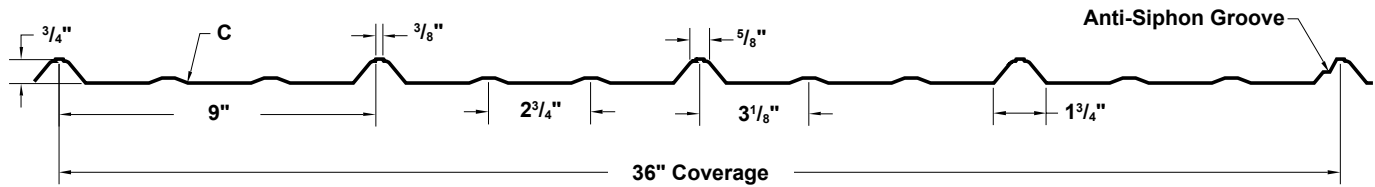


**LOUVRE WITH SCREEN**



3' x 3' or 3' x 4'

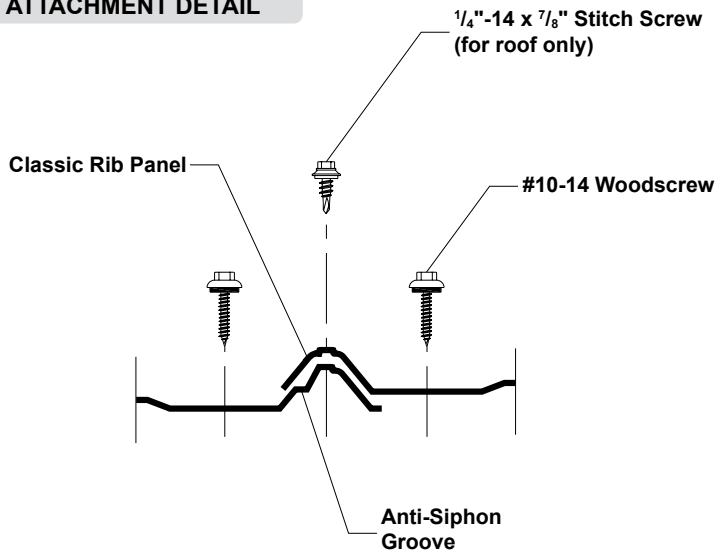
# CLASSIC RIB® SECTION PROPERTIES AND GENERAL INFORMATION



SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS psf (3 or More Equal Spans)											
Ga	Width in	Yield ksi	Weight psf	Top in Compression		Bottom in Compression		Inward Load				Outward Load							
				Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	1.5'	2'	2.5'	3'	3.5'	4'	1.5'	2'	2.5'	3'	3.5'	4'
29	36	80	0.62	0.0099	0.0151	0.0053	0.0118	142	81	52	36	27	21	179	103	66	46	34	26
26	36	80	0.79	0.0126	0.0192	0.0072	0.0153	184	105	68	47	35	27	227	131	84	59	44	33

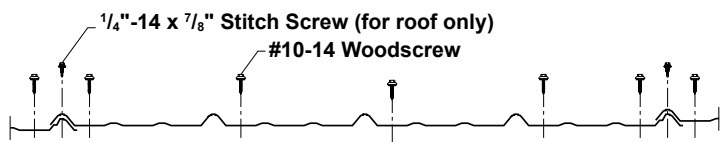
- Theoretical section properties have been calculated per AISI 2012 "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers the 3 or more equal span condition. Allowable load does not address web crippling, fasteners/support connection or load testing. Panel weight is not considered.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Allowable loads do not include a 1/3 stress increase in uplift.
- Diaphragm Capacity** - 296 plf average Ultimate Shear Strength using the above fastening pattern on 2x supports located 2' on center per ASTM E 455-04.

## ATTACHMENT DETAIL

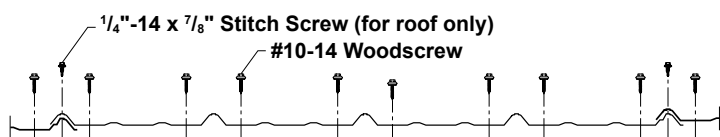


## FASTENING PATTERN

### Field of Panel



### Ends of Panel



## GENERAL INFORMATION

### ► Slope

The minimum recommended roof slope for Classic Rib panel is 3:12.

### ► Substructure

Classic Rib is designed to be utilized over open structural framing, or a solid substrate. To avoid panel distortion, use a properly aligned and uniform substructure.

### ► Coverage

Classic Rib panels are available in a 3/4" rib height with a coverage width of 36".

### ► Length

Minimum factory cut length is 5'-0". Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping and erection. Please consult Metal Sales for recommendations.

### ► Fasteners

The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.

*NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.*


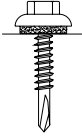
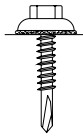
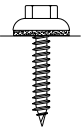
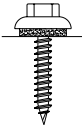
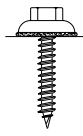
### ► Availability

Finishes: Acrylic Coated Galvalume®, MS Colorfast45® and PVDF  
Gauge: 29 ga and 26 ga standard

## FASTENER INSTALLATION TECHNIQUE

Recommended Tool Type - Use depth locating nose or adjustable clutch on screw gun to prevent overdrilling and strip out. Do not use impact tools or runners.

Seating the washer - Apply sufficient torque to seat the washer - do not overdrive the fastener.

	<b>CORRECT</b> Sealing material slightly visible at edge of metal washer. Assembly is watertight.	<b>TOO LOOSE</b> Sealing material is not visible; not enough compression to seal properly.	<b>TOO TIGHT</b> Metal washer deformed; sealing material pressed beyond washer edge.
SELF DRILLER			
WOODSCREW			

To prevent wobbling - Make sure fastener head is completely engaged in the socket. If the head does not go all the way in the socket - tap the magnet deeper into the socket to allow full head engagement. Metal chips will build up from drilling and should be removed from time to time.

Protect drill point - Push only hard enough on the screw gun to engage clutch. This prevents excess friction and burn out of the drill point. Correct pressure will allow screw to drill and tap without binding.

Drilling through sheet and insulation - Ease up on pressure when drilling through insulation to avoid striking the purlin or girt with the point - apply more pressure after drill point contacts purlin or girt.

Drilling through purlin overlaps - Drilling through lapped purlins requires extra care. Excessive voids between purlins sometimes damages drill points and two self-drillers might be necessary to complete the operation. It is sometimes advantageous to predrill.

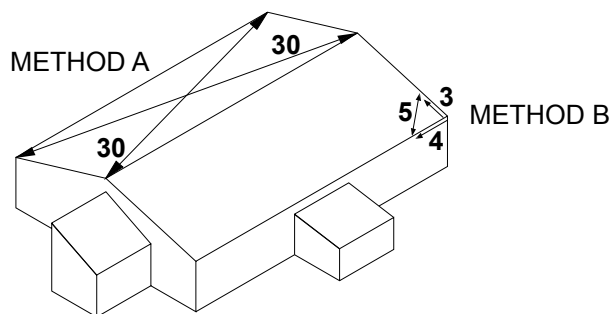
## CONDITION OF SUBSTRUCTURE

Whether over solid substrate or open structural framing, panel distortion may occur if not applied over properly aligned and uniform substructure.

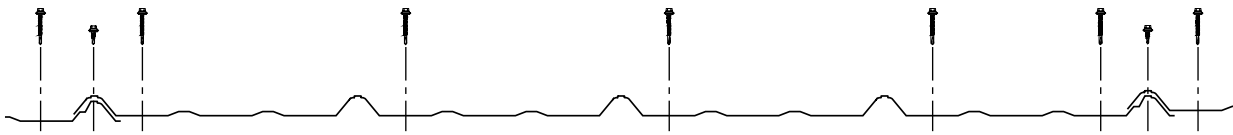
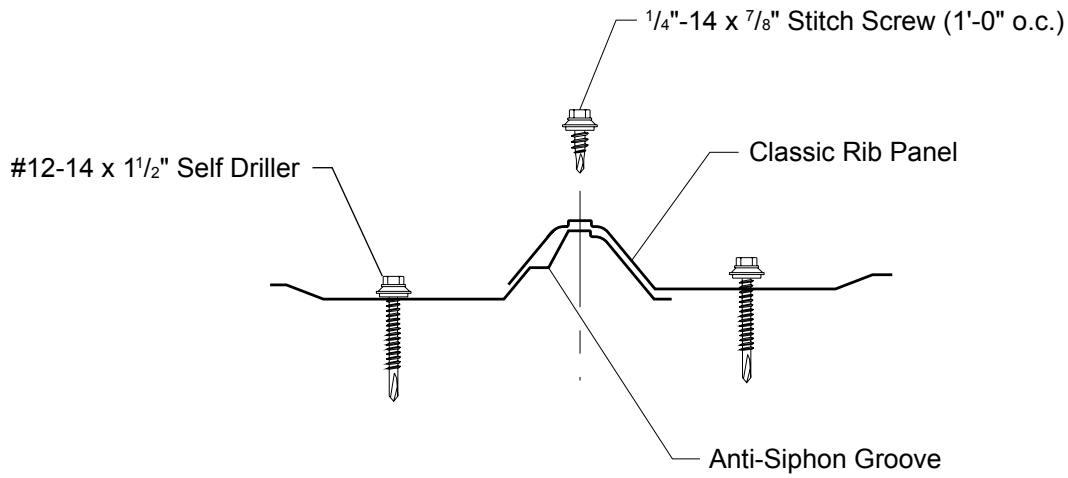
The installer should check the roof deck for squareness before installing Classic Rib panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

METHOD "A" - One method for checking the roof for squareness is to measure diagonally across one slope of the roof from similar points at the ridge and eave and obtain the same dimension.

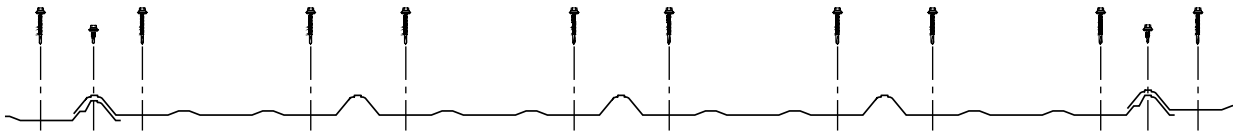
METHOD "B" - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established, the dimension should be exactly a module of five (5) to have a square corner. Multiple uses of this system may be required to determine building squareness. If the endwall cannot be made square, the roof system cannot be installed as shown in these instructions.



**CLASSIC RIB FASTENING PATTERN**



**Classic Rib Fastening Pattern - Interior**

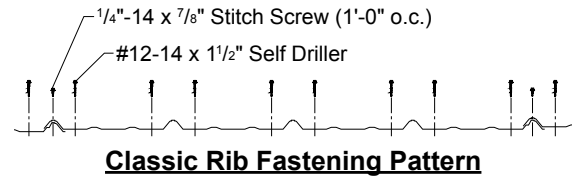
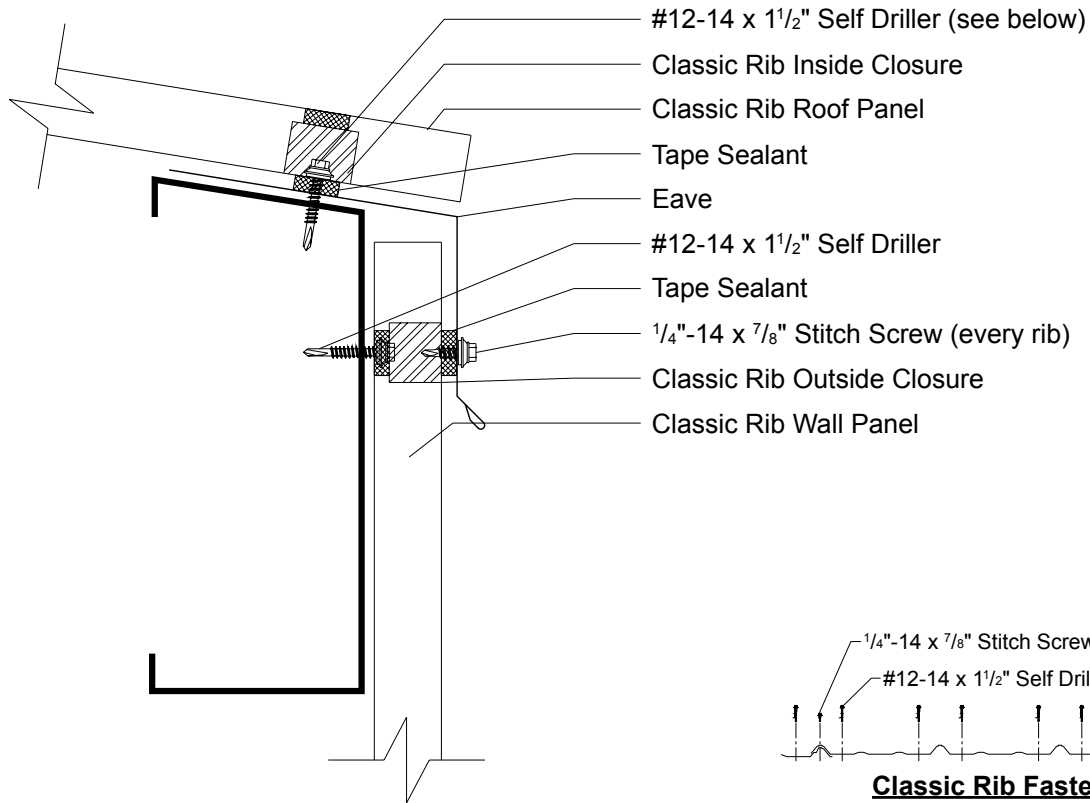


**Classic Rib Fastening Pattern - Ends**



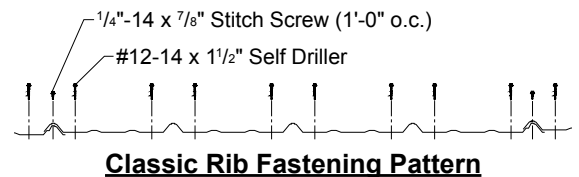
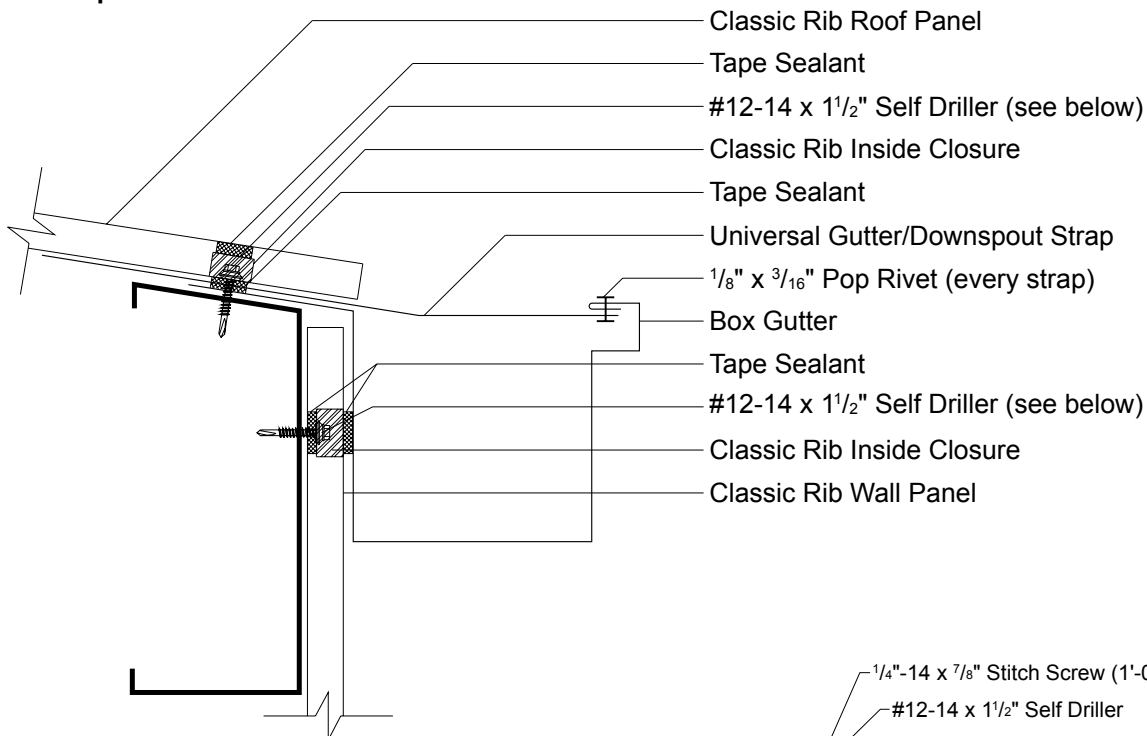
# CLASSIC RIB® EAVE DETAIL

3:12 Minimum  
Roof Slope



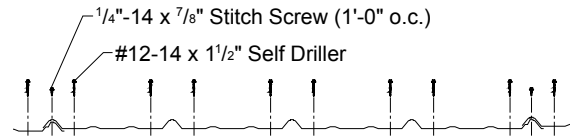
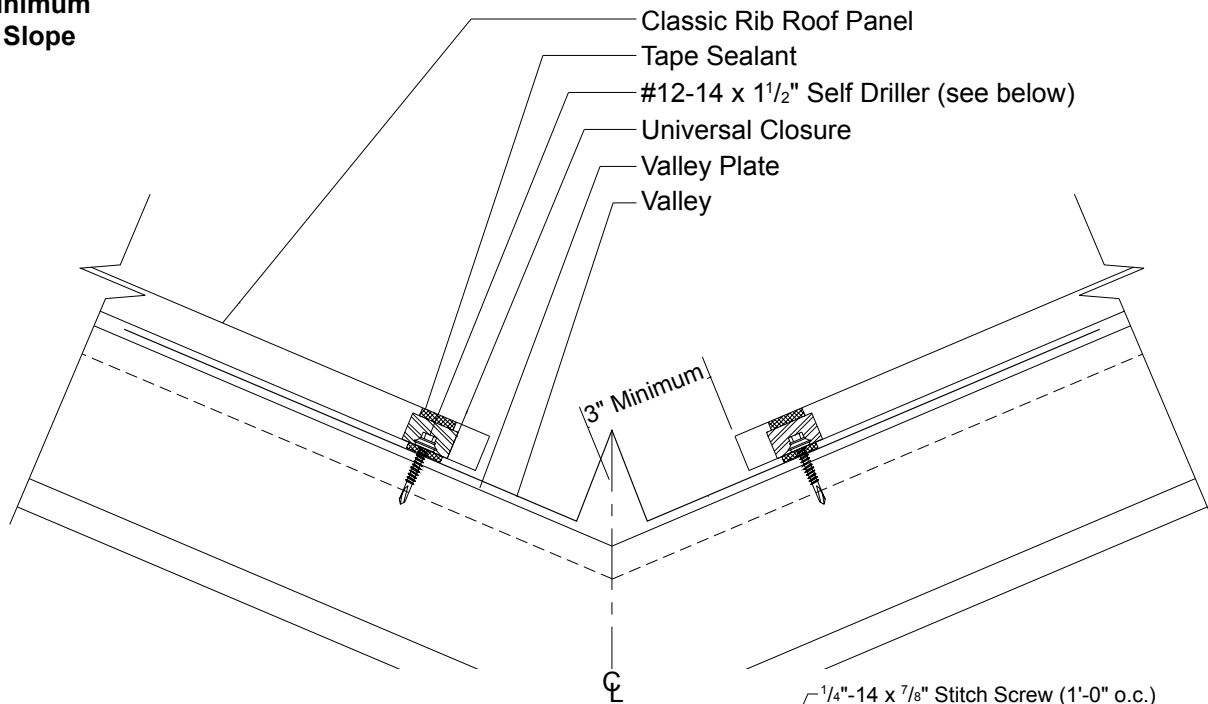
# CLASSIC RIB BOX GUTTER DETAIL

3:12 Minimum  
Roof Slope



# CLASSIC RIB® VALLEY DETAIL

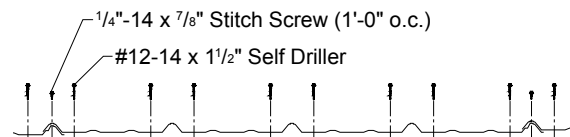
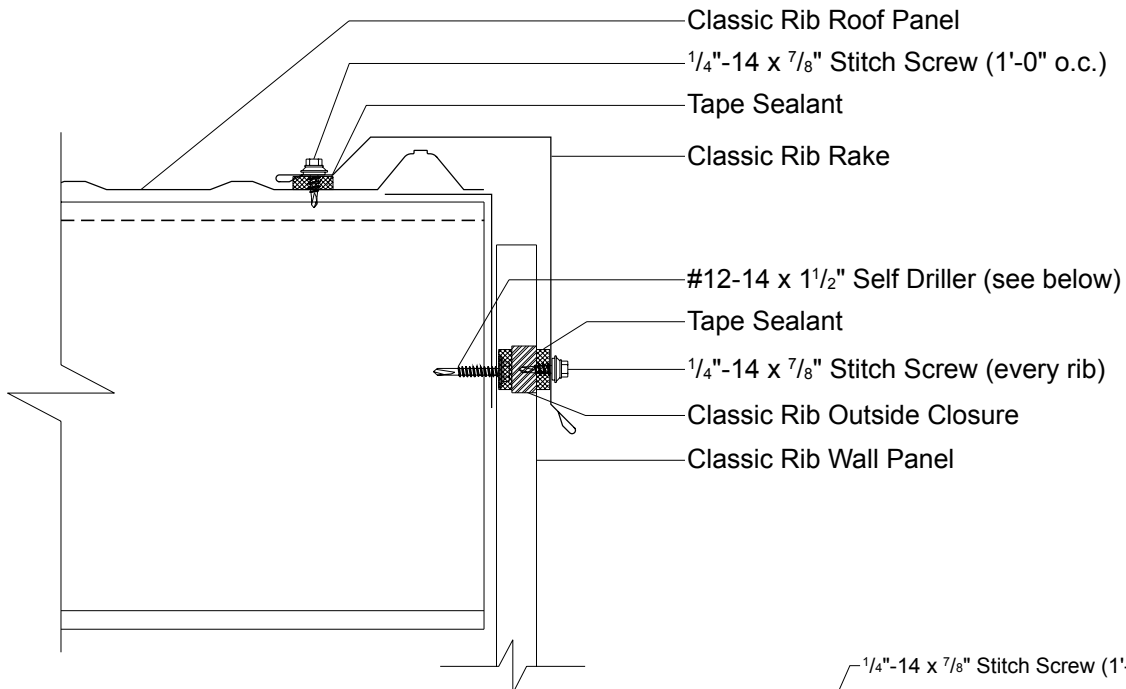
3:12 Minimum  
Roof Slope



**Classic Rib Fastening Pattern**

# CLASSIC RIB® RAKE DETAIL

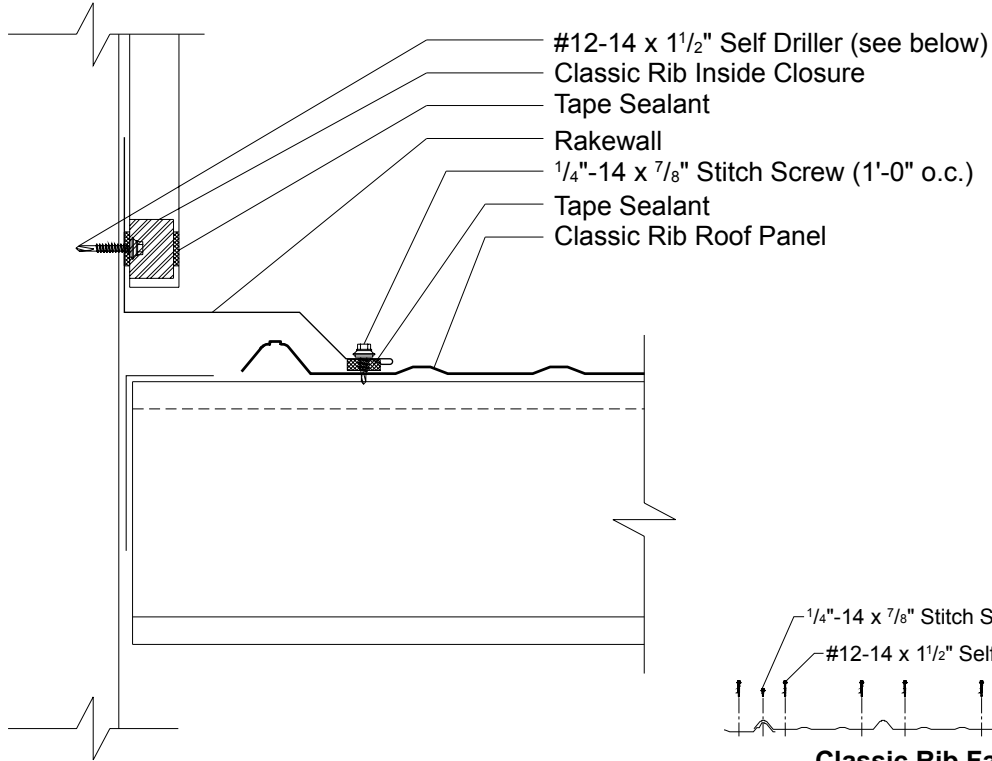
3:12 Minimum  
Roof Slope



**Classic Rib Fastening Pattern**

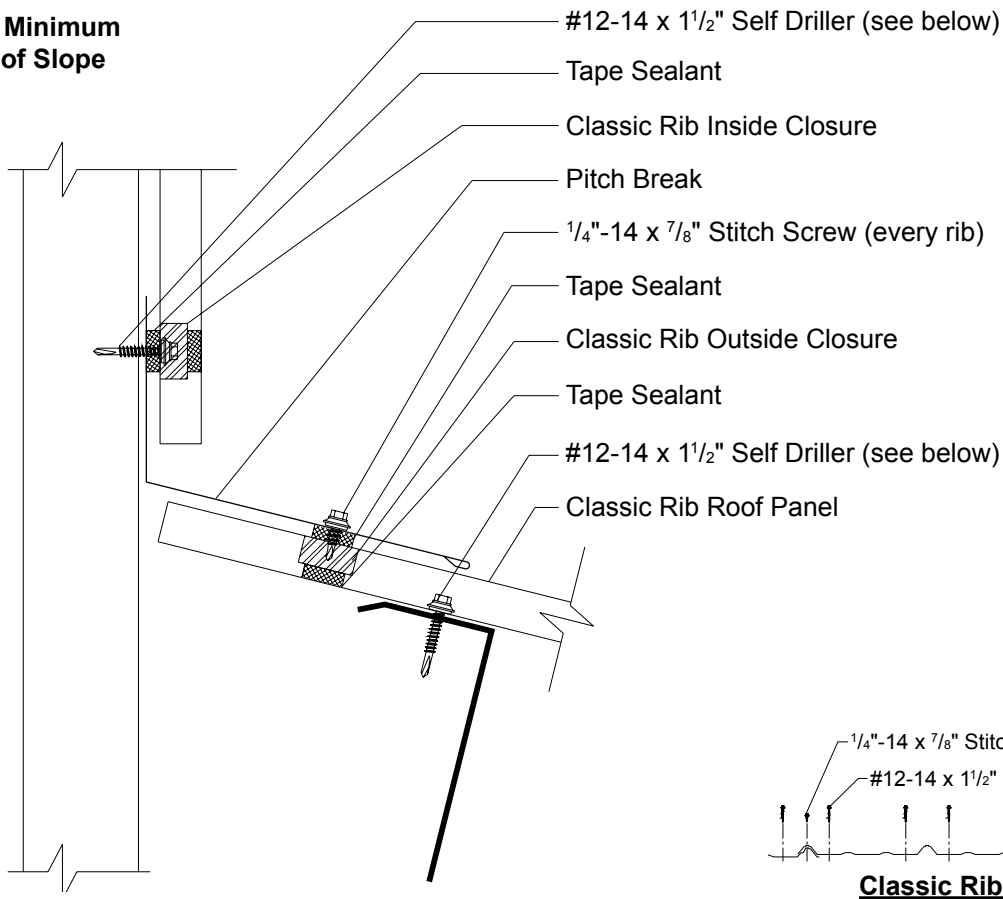
# CLASSIC RIB® RAKEWALL DETAIL

3:12 Minimum  
Roof Slope



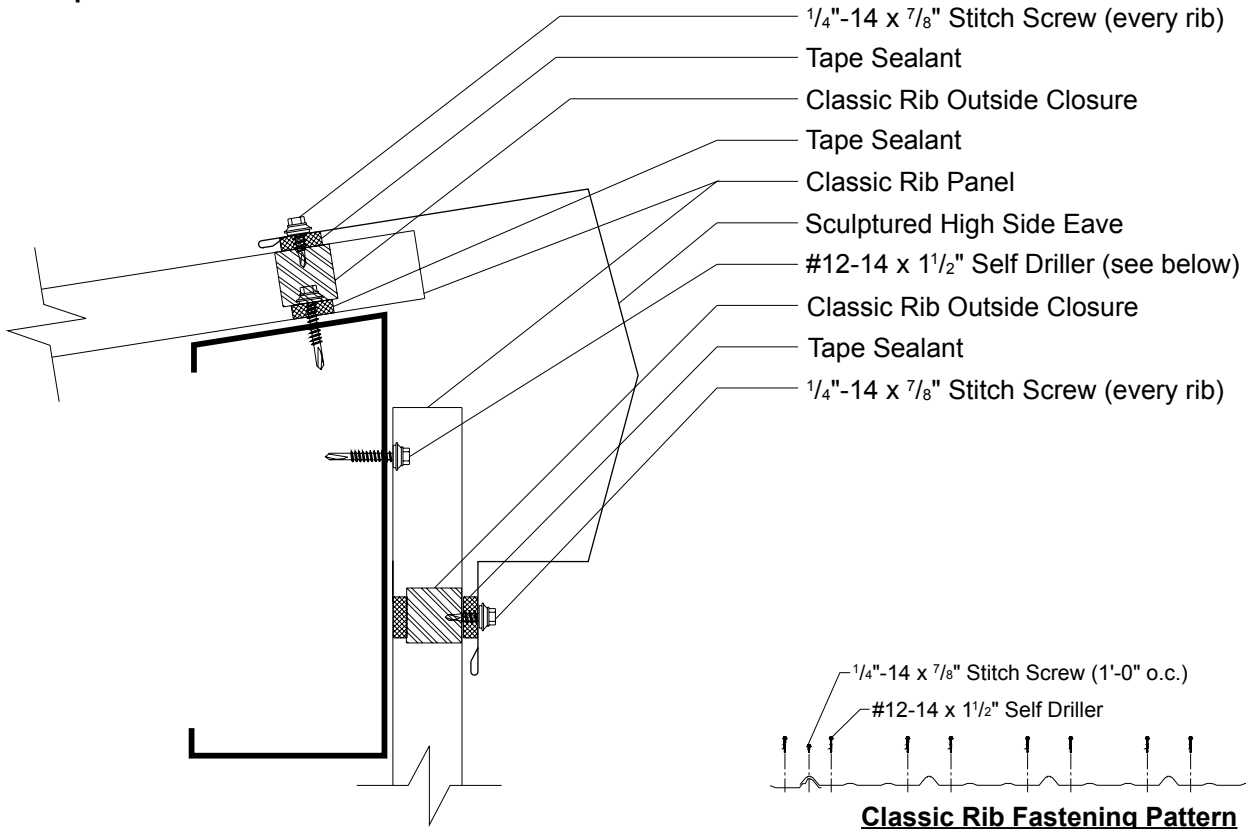
# CLASSIC RIB ENDWALL DETAIL

3:12 Minimum  
Roof Slope



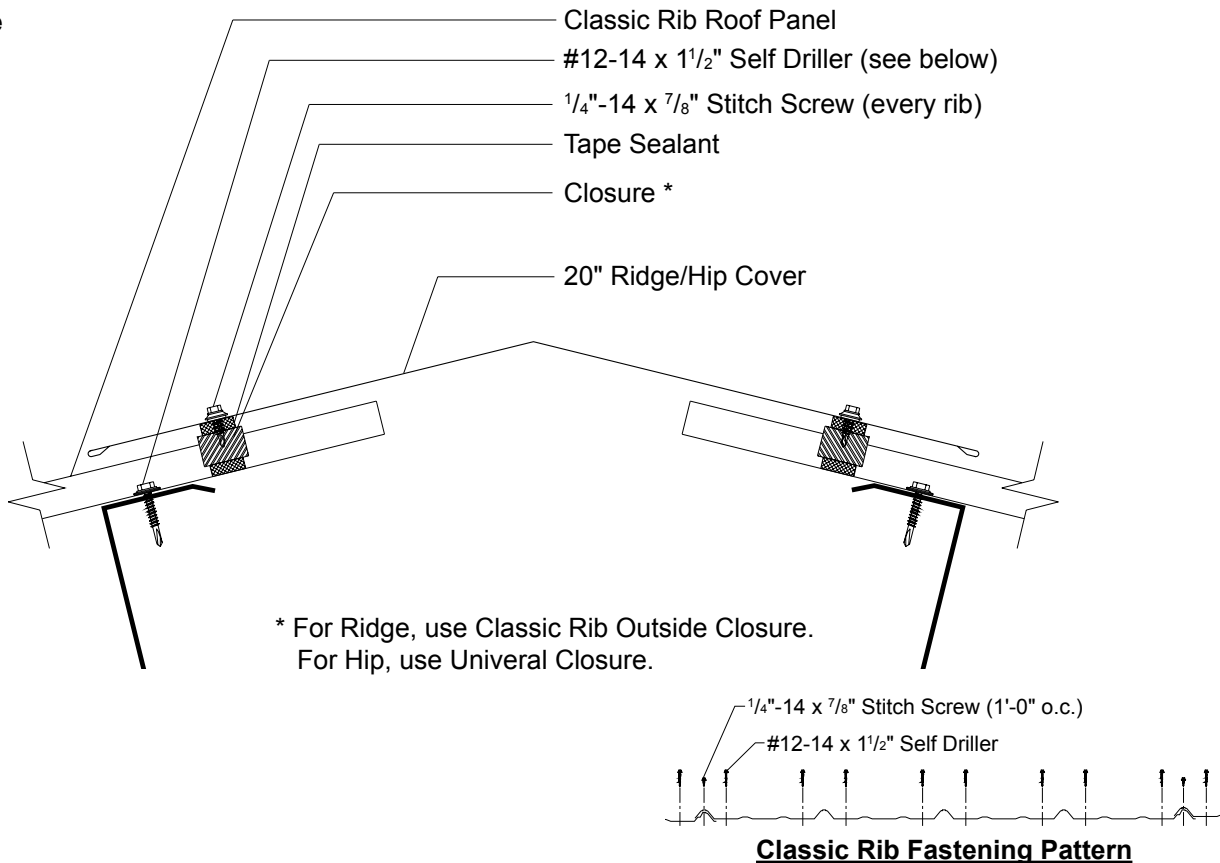
# CLASSIC RIB® HIGH SIDE EAVE DETAIL

3:12 Minimum  
Roof Slope



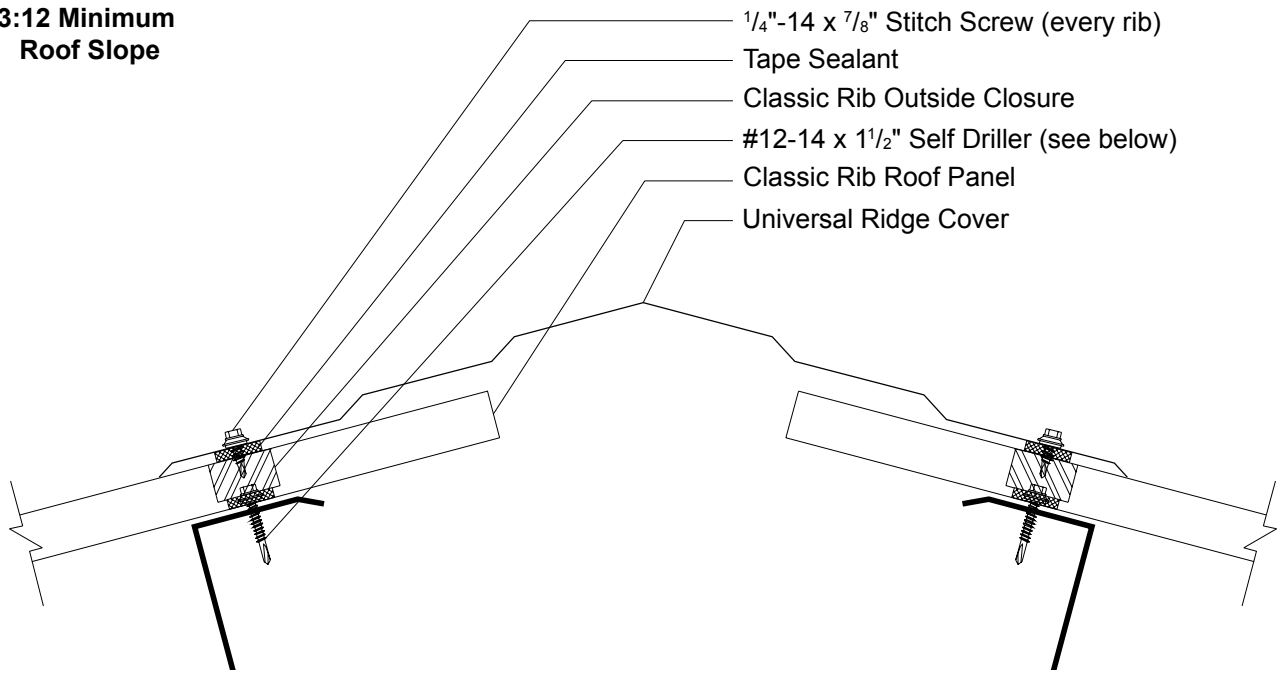
# CLASSIC RIB 20" RIDGE/HIP DETAIL

3:12 Minimum  
Roof Slope

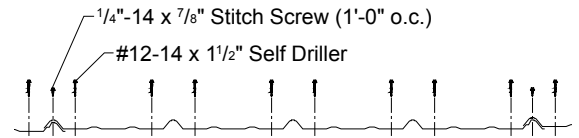


# CLASSIC RIB® RIDGE DETAIL

3:12 Minimum  
Roof Slope

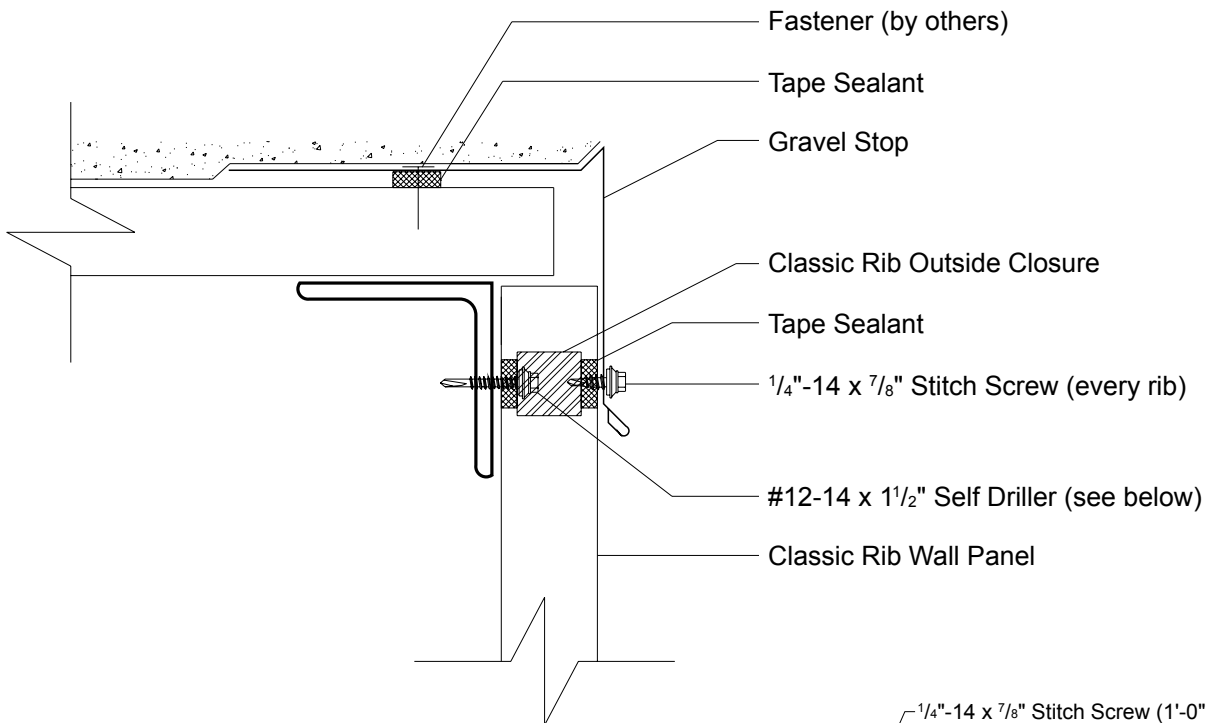


- 1/4"-14 x 7/8" Stitch Screw (every rib)
- Tape Sealant
- Classic Rib Outside Closure
- #12-14 x 1 1/2" Self Driller (see below)
- Classic Rib Roof Panel
- Universal Ridge Cover

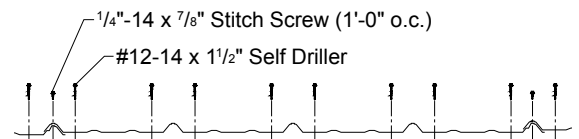


**Classic Rib Fastening Pattern**

# CLASSIC RIB GRAVEL STOP DETAIL

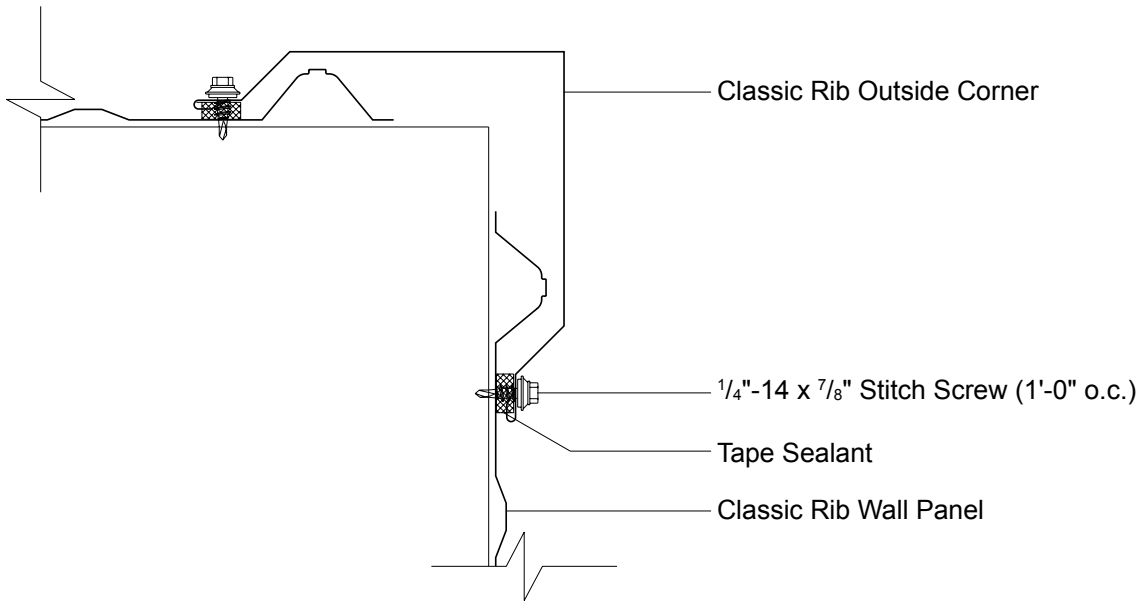


- Fastener (by others)
- Tape Sealant
- Gravel Stop
- Classic Rib Outside Closure
- Tape Sealant
- 1/4"-14 x 7/8" Stitch Screw (every rib)
- #12-14 x 1 1/2" Self Driller (see below)
- Classic Rib Wall Panel

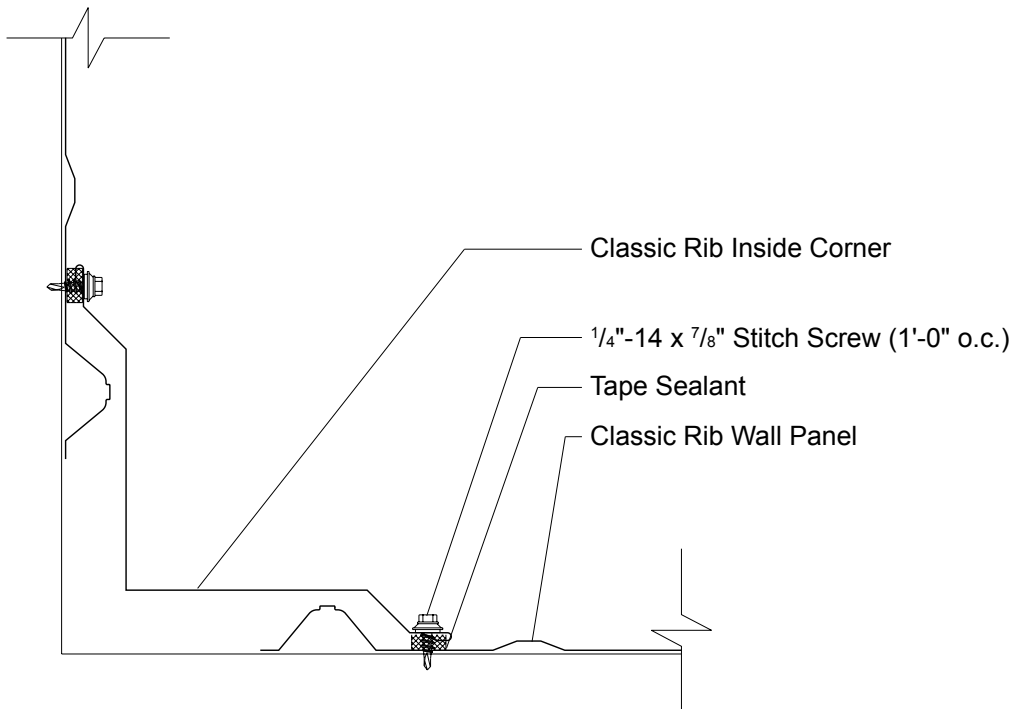


**Classic Rib Fastening Pattern**

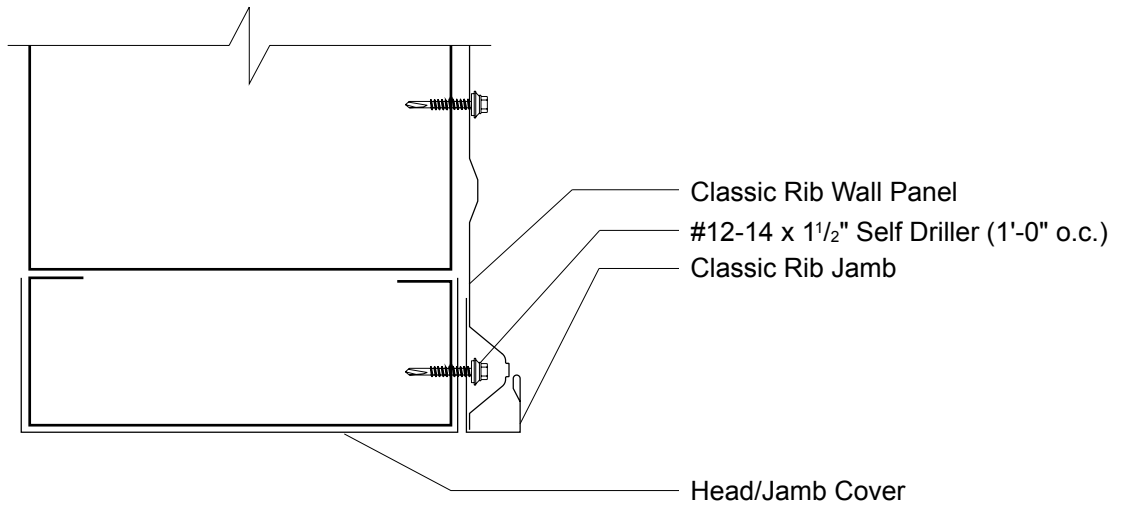
**CLASSIC RIB®** OUTSIDE CORNER DETAIL



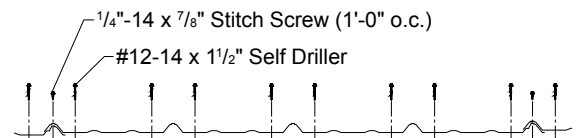
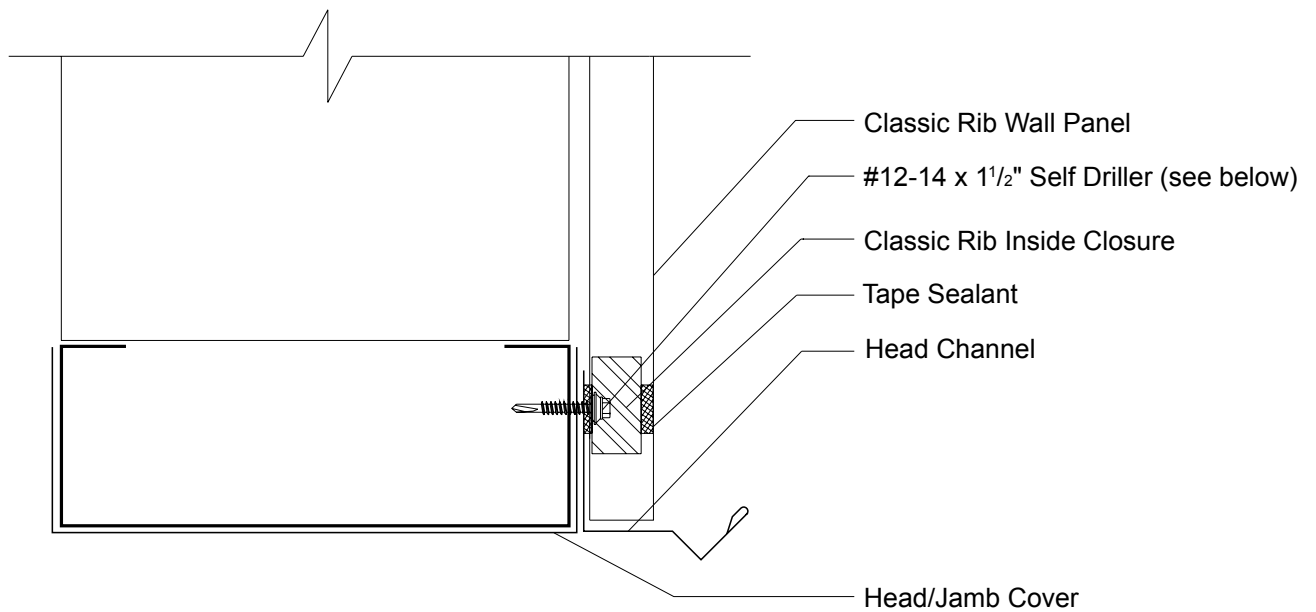
**CLASSIC RIB** INSIDE CORNER DETAIL



**CLASSIC RIB® JAMB DETAIL**

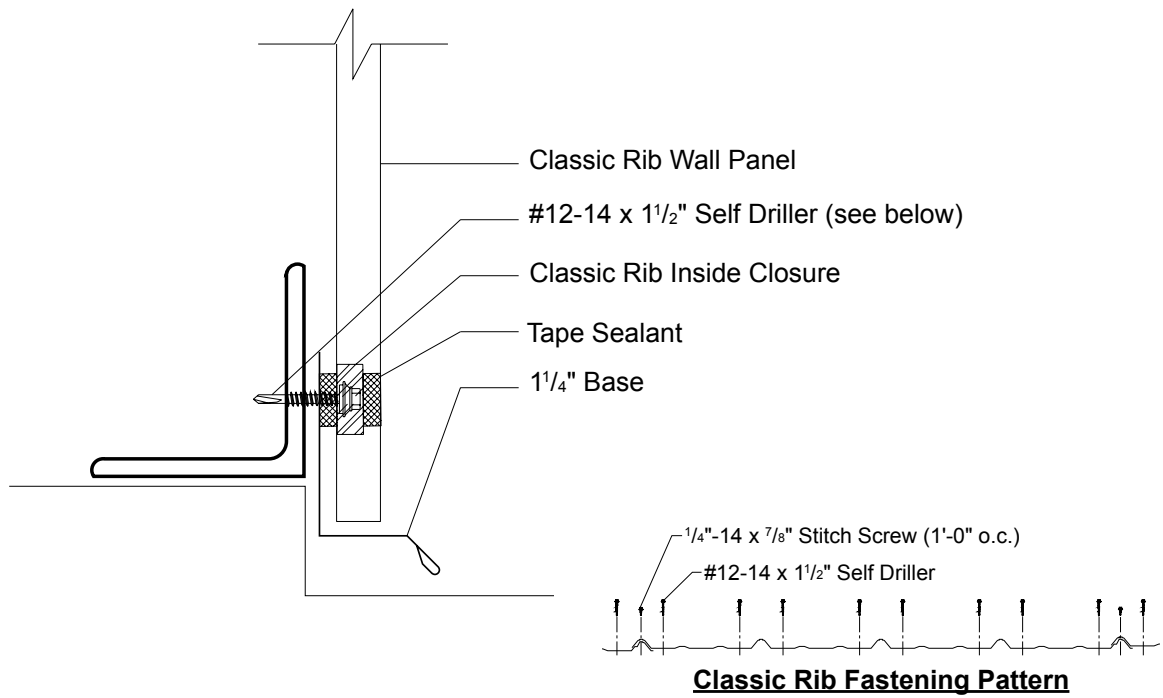


**CLASSIC RIB HEAD DETAIL**



**Classic Rib Fastening Pattern**

# CLASSIC RIB® BASE DETAIL



## CLASSIC RIB NOTES