

Product Page No.

Panel Information

Classic Rib Panel Profile PCR-2
 Panel Overview..... PCR-2

Flashing Profiles

Eave (Direct Fasten) PCR-3
 Cleat PCR-3
 Box Gutter PCR-3
 Box Gutter End PCR-3
 Universal Gutter/Downspout Strap PCR-3
 6" x 4" Downspout PCR-3
 6" x 4" 95° Elbow PCR-3
 Downspout Bracket..... PCR-3
 Valley PCR-3
 Classic Rib Rake PCR-3
 Rakewall PCR-3
 Pitch Break PCR-3
 Peak PCR-3
 11" Ridge/Hip Cover PCR-3
 20" Ridge/Hip Cover PCR-3
 Vented Ridge Cover..... PCR-4
 Vent Drip PCR-4
 Classic Rib Inside Corner..... PCR-4
 Classic Rib Outside Corner PCR-4
 1.5" Sill/Head PCR-4
 1.5" Sill to Soffit PCR-4
 Head Jamb Cover..... PCR-4
 Classic Rib Jamb PCR-4
 1.25" Base PCR-4

Accessory Profiles

Classic Rib Closures PCR-5
 Universal Closure PCR-5
 Classic Rib Light Transmitting Panel..... PCR-5
 Tube Sealant..... PCR-5
 Tape Sealant..... PCR-5
 Rubber Roof Jack PCR-5
 Retro Roof Jack PCR-5
 Rubber Roof Flashing Kit PCR-5
 Touch-Up Paint PCR-5
 Continuous Ridge Vent PCR-5
 Classic Rib Panel Shear PCR-5
 Vent Material..... PCR-5
 Louver with Screen..... PCR-5

Testing Information

Section Properties and Load Tables..... PCR-6

Design/Installation Considerations

Fastener Installation Technique PCR-7
 Condition of Substructure..... PCR-7
 Fastening Information PCR-8

Product Page No.

Detail Conditions

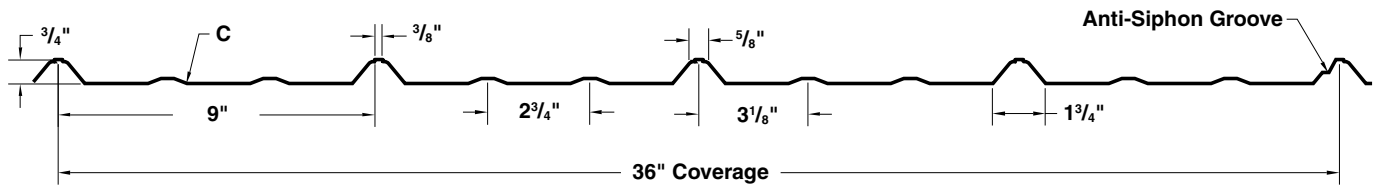
Eave Detail PCR-9
 Box Gutter Detail PCR-9
 Valley Detail PCR-10
 Rake Detail PCR-10
 Rakewall Detail PCR-11
 Endwall Detail..... PCR-11
 High Side Eave Detail..... PCR-12
 20" Ridge/Hip Detail PCR-12
 Ridge Detail PCR-13
 Gravel Stop Detail..... PCR-13
 Outside Corner Detail..... PCR-14
 Inside Corner Detail..... PCR-14
 Jamb Detail..... PCR-15
 Head Detail..... PCR-15
 Base Detail PCR-16

Notes

Notes PCR-16

CLASSIC RIB® PANEL OVERVIEW

PANEL PROFILE



SLOPE

The minimum recommended slope for any Classic Rib roofing panel 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 a 36" width with a 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, 26, and 24 gauge optional. Minimum quantity may apply.

APPLICATION

Commercial and Industrial panel.

PERFORMANCE TEST

UL 2218, UL 790, Texas Department of Insurance, Cantilever Diaphragm.

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-12-14).

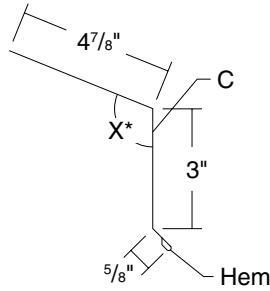
MATERIALS

Steel grade 50 per ASTM A-792
Steel grade 80 per ASTM A-792 or per ASTM A-653

FINISH

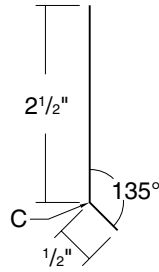
- ▶ *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- ▶ Prepainted Galvalume / ASTM A-792 - AZ50
- ▶ MS Colorfast30®
- ▶ **Fluorocarbon (PVDF)
 - * Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.
 - ** Meets both Kynar 500 and Hylar 5000 specifications.

EAVE (DIRECT FASTEN)



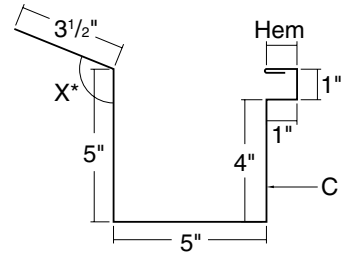
Length 10'-2" - *Specify Slope Angle

CLEAT



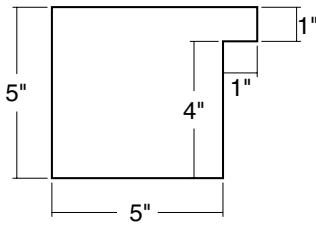
Length 10'-2"

BOX GUTTER

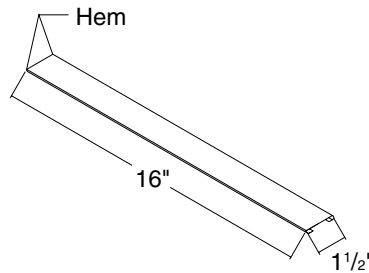


Length 10'-2", 20'-3" - *Specify Slope Angle

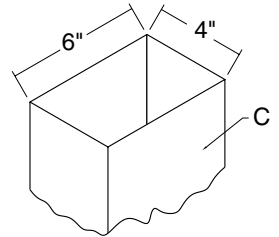
BOX GUTTER END



**UNIVERSAL GUTTER/
DOWNSPOUT STRAP**

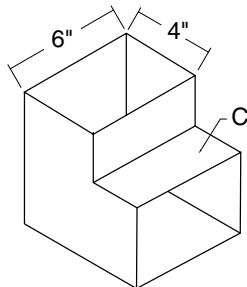


DOWNSPOUT 6" x 4"



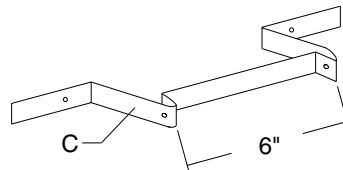
Length 10'-2", 20'-3"
(Also available 4" x 3 1/2")

95° ELBOW 6" x 4"



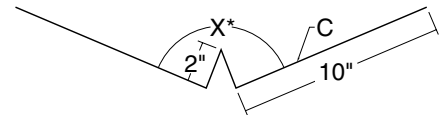
(Also available 4" x 3 1/2")

DOWNSPOUT BRACKET



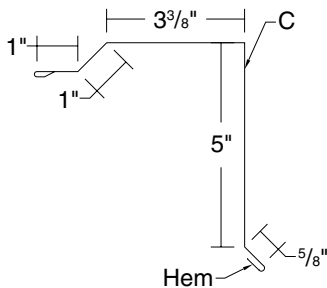
(Also available 4")

VALLEY



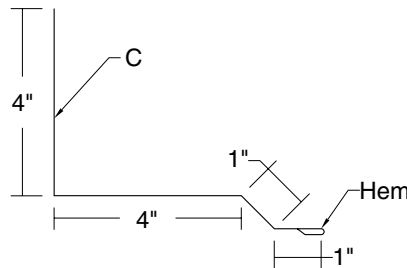
Length 10'-2", 20'-3" - *Specify Slope Angle

CLASSIC RIB RAKE



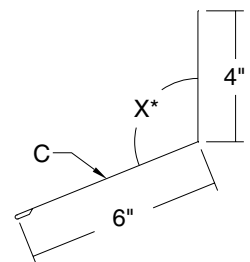
Length 10'-2", 20'-3"

RAKEWALL



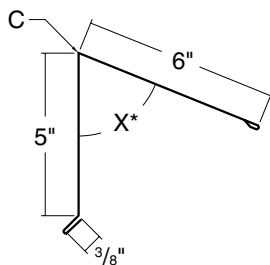
Length 10'-2"

PITCH BREAK



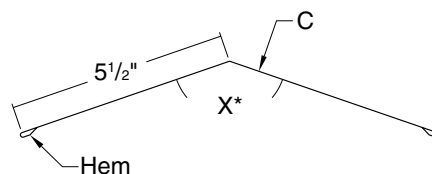
Length 10'-2" - *Specify Slope Angle

PEAK



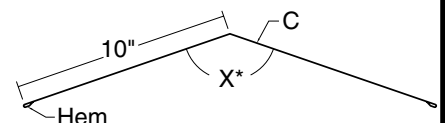
Length 10'-2", 20'-3" - *Specify Slope Angle

11" RIDGE/HIP COVER



Length 10'-2", 20'-3" - *Specify Slope Angle

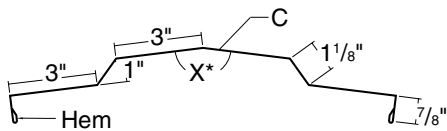
20" RIDGE/HIP COVER



Length 10'-2", 20'-3" - *Specify Slope Angle

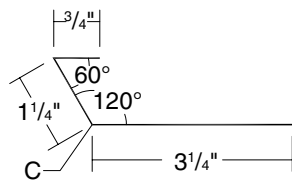
CLASSIC RIB® FLASHING PROFILES (CONT.)

VENTED RIDGE COVER



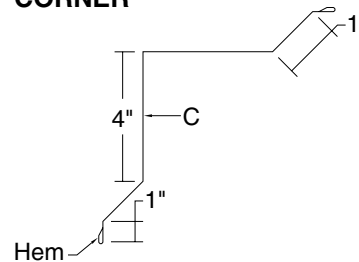
Length 10'-2", 20'-3" - *Specify Slope Angle

VENT DRIP



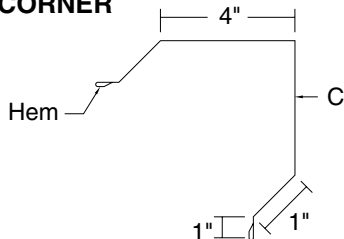
Length 10'-2"

CLASSIC RIB INSIDE CORNER



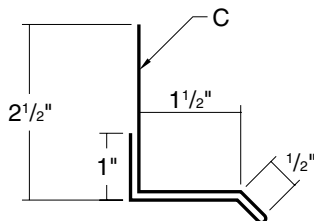
Length 10'-2", 14'-2", 20'-3"

CLASSIC RIB OUTSIDE CORNER



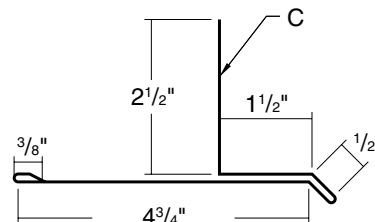
Length 10'-2", 14'-2", 20'-3"

1.5" SILL/HEAD



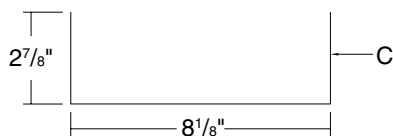
Length 10'-2"

1.5" SILL TO SOFFIT



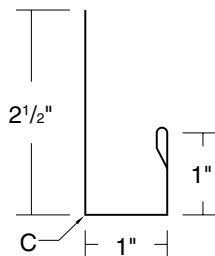
Length 10'-2"

HEAD JAMB COVER



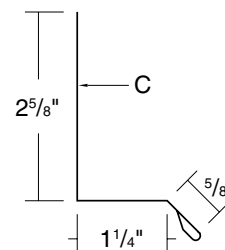
Length 10'-2", 14'-2"

CLASSIC RIB JAMB



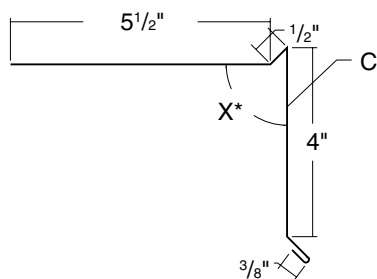
Length 10'-2"

1.25" BASE



Length 10'-2"

GRAVEL STOP



Length 10'-2"

C- Indicates color side of flashing.

CLASSIC RIB CLOSURES



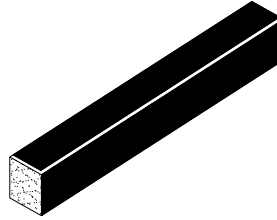
Outside Closure



Inside Closure

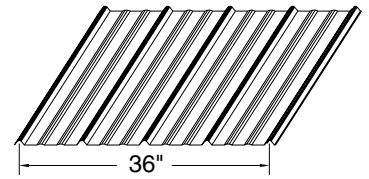
Polyethylene Foam

UNIVERSAL CLOSURE



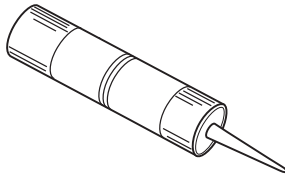
1" x 1 1/2" x 50' Polyethylene Foam
1" x 1 1/2" x 10' Polyethylene Foam

CLASSIC RIB LIGHT TRANSMITTING PANEL



8 Ounce Fiberglass
Available In 10' and 12' Panels

TUBE SEALANT



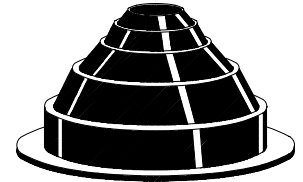
10.3 oz. Cartridge
Urethane

TAPE SEALANT



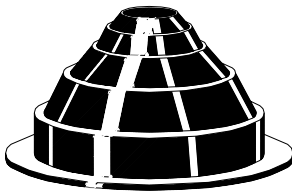
3/8" X 3/32" X 50'
Single Bead
Butyl - Gray

RUBBER ROOF JACK



MINI (1/4" to 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



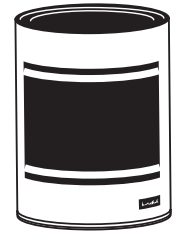
#801RETRO (3/4" to 2 3/4" O.D. Pipe)
#802RETRO (2" to 7 1/4" O.D. Pipe)
#803RETRO (3 1/4" to 10" O.D. Pipe)

RUBBER ROOF FLASH KIT



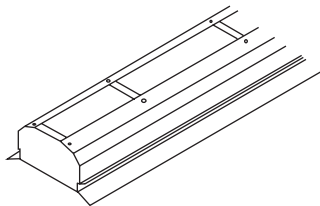
12" x 50'-0" Flash Kit
18" x 50'-0" Flash Kit

TOUCH-UP PAINT



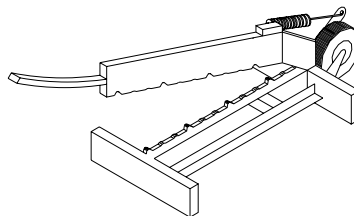
Available in pints
PVDF / MS CF30

CONTINUOUS RIDGE VENT

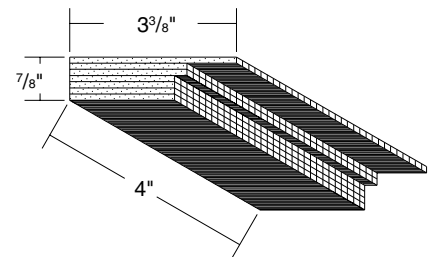


9" x 10', 12" x 10'

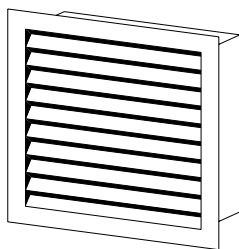
CLASSIC RIB PANEL SHEAR



VENT MATERIAL

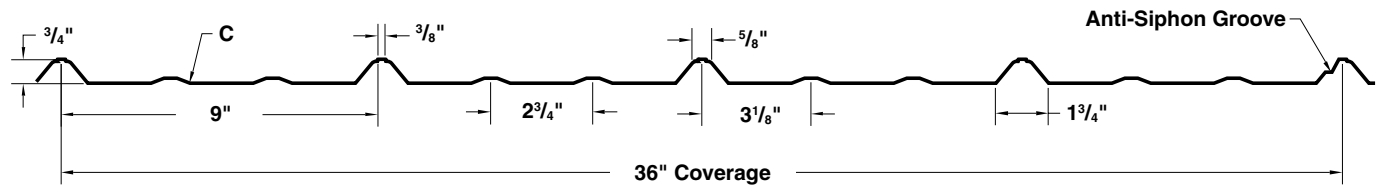


LOUVRE WITH SCREEN



3' x 3' or 3' x 4'

CLASSIC RIB® SECTION PROPERTIES AND LOAD TABLES



CLASSIC RIB SECTION PROPERTIES

GAUGE	WIDTH (in)	YEILD KSI	WEIGHT PSF	TOP IN COMPRESSION ¹			BOTTOM IN COMPRESSION ¹		
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ma (k-in)	Ixx in ⁴ /ft	Sxx in ³ /ft	Ma (k-in)
30	36"	80	.62	.0090	.0137	0.49	.0053	.0111	0.40
29	36"	80	.70	.0100	.0151	0.54	.0060	.0124	0.51
26	36"	80	.86	.0123	.0190	0.68	.0080	.0160	0.65

CLASSIC RIB ALLOWABLE UNIFORM LIVE LOADS PSF^{1,2,3,4}

1-Span			Inward (Gravity / Deflection) Load ^{2,4}						Outward Uplift (Stress) Load ³					
GA.	Width	Ksi	2'	2.5'	3'	3.5'	4'	5'	2'	2.5'	3'	3.5'	4'	5'
30	36"	80	82	50	29	18	12	6	89	57	39	29	22	14
29	36"	80	90	56	32	20	14	7	99	63	44	32	25	16
26	36"	80	114	69	40	25	17	9	128	82	57	42	32	20

2-Equal Spans			Inward (Gravity / Deflection) Load ^{2,4}						Outward Uplift (Stress) Load ³					
GA.	Width	Ksi	2'	2.5'	3'	3.5'	4'	5'	2'	2.5'	3'	3.5'	4'	5'
30	36"	80	66	42	29	22	17	11	107	69	48	35	27	17
29	36"	80	73	47	33	24	18	12	118	76	53	39	30	19
26	36"	80	94	61	42	31	24	15	149	96	67	49	38	24


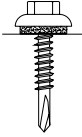

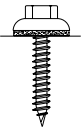
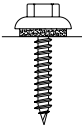
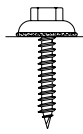
3 or more-Equal Spans			Inward (Gravity / Deflection) Load ^{2,4}						Outward Uplift (Stress) Load ³					
GA.	Width	Ksi	2'	2.5'	3'	3.5'	4'	5'	2'	2.5'	3'	3.5'	4'	5'
30	36"	80	76	49	34	25	19	12	124	80	56	41	32	20
29	36"	80	85	55	38	28	22	13	137	89	62	46	35	22
26	36"	80	110	71	49	36	28	16	172	111	78	57	44	28

- Theoretical section properties have been calculated per AISI 1996. "Specifications for the design of cold formed steel members." Ixx and Sxx are effective section properties for deflection and bending.
- Tabulated loads are allowable loads calculated in accordance with good engineering practices and with AISI 1996 specifications for bending stresses. Panel weight has not been subtracted from allowable gravity loads. Allowable load does not address web crippling requirement, or fasteners/support connection.
- Allowable loads are calculated in accordance with AISI 1996 specifications, and have been increased by 33 1/3% for wind uplift. Contact Metal Sales Technical Services Department for more information.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.

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.

	CORRECT Sealing material slightly visible at edge of metal washer. Assembly is watertight.	TOO LOOSE Sealing material is not visible; not enough compression to seal properly.	TOO TIGHT 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.

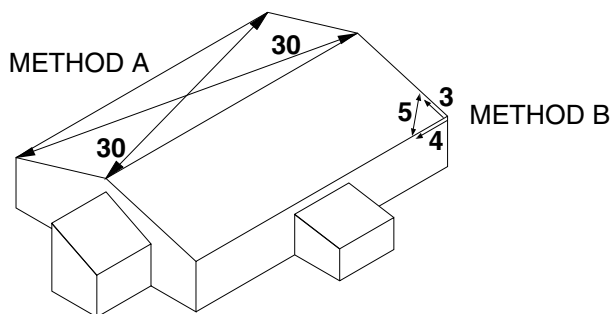
CONDITION OF SUBSTRUCTURE

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

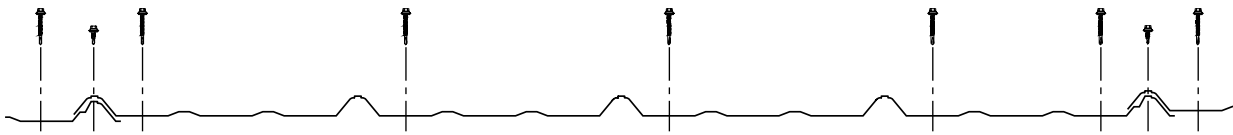
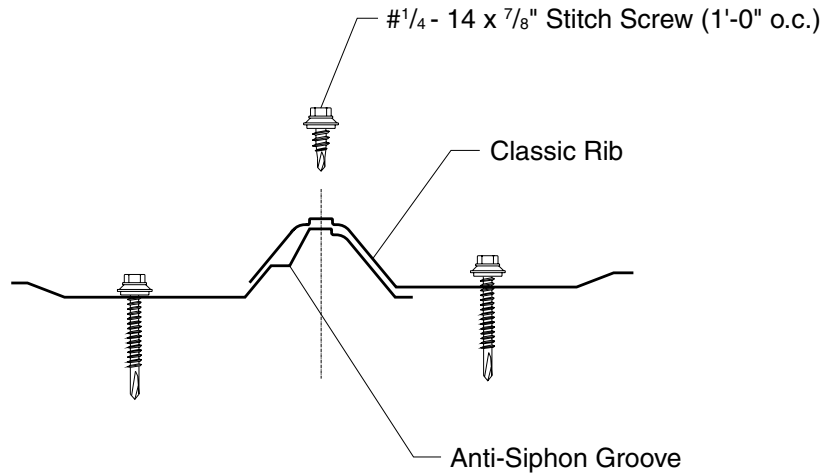
The installer should check the roof deck for squareness before installing Classic Rib panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

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.

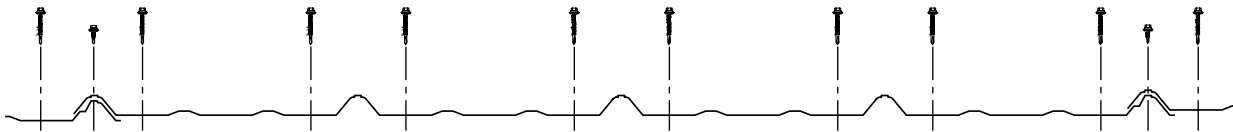
METHOD "B" - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established, 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.



R-PANEL FASTENING PATTERN



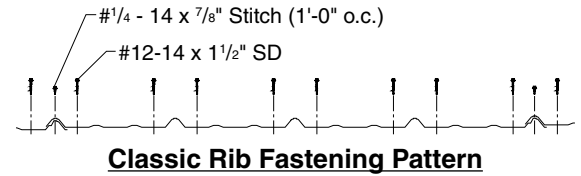
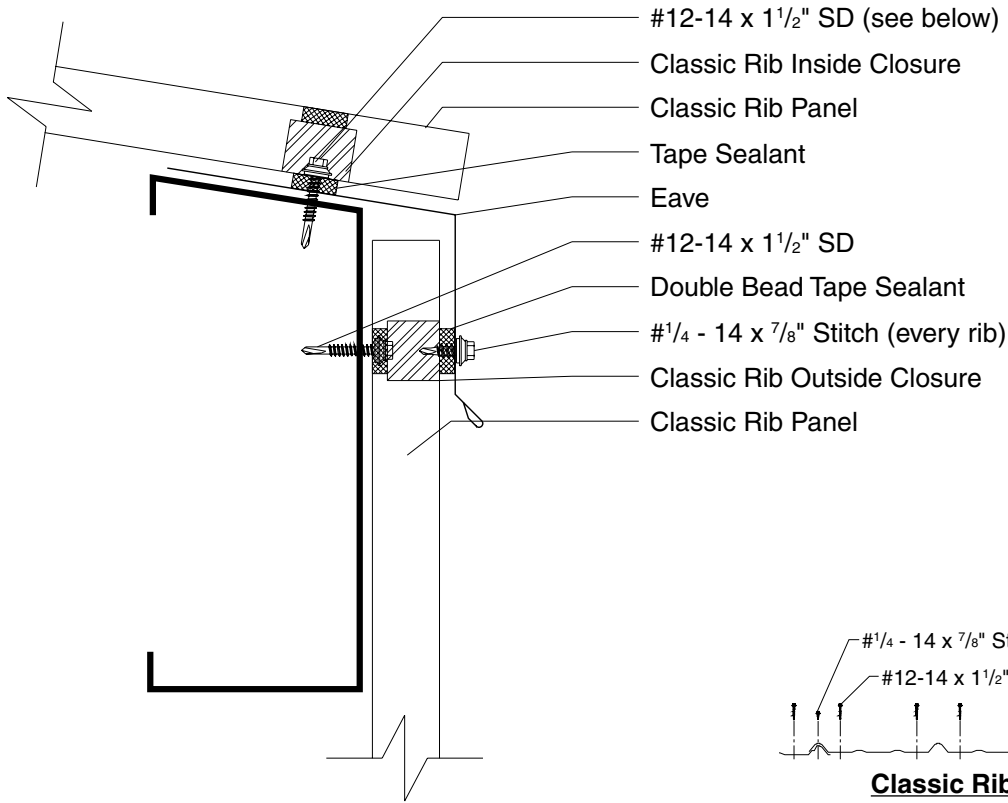
Classic Rib Fastening Pattern - Interior



Classic Rib Fastening Pattern - Ends

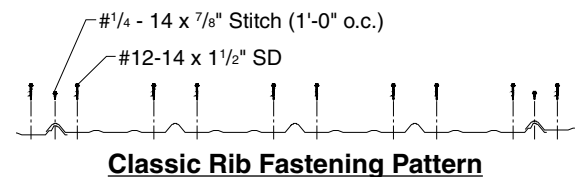
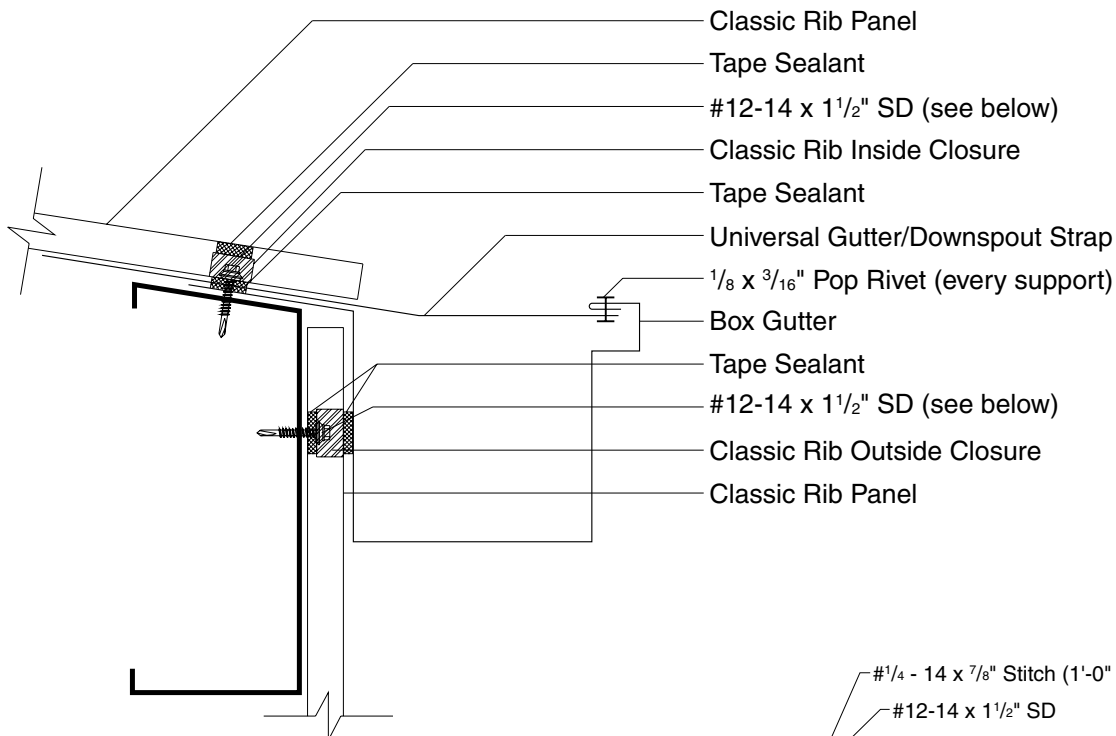
CLASSIC RIB® EAVE DETAIL

3:12 Slope
Minimum



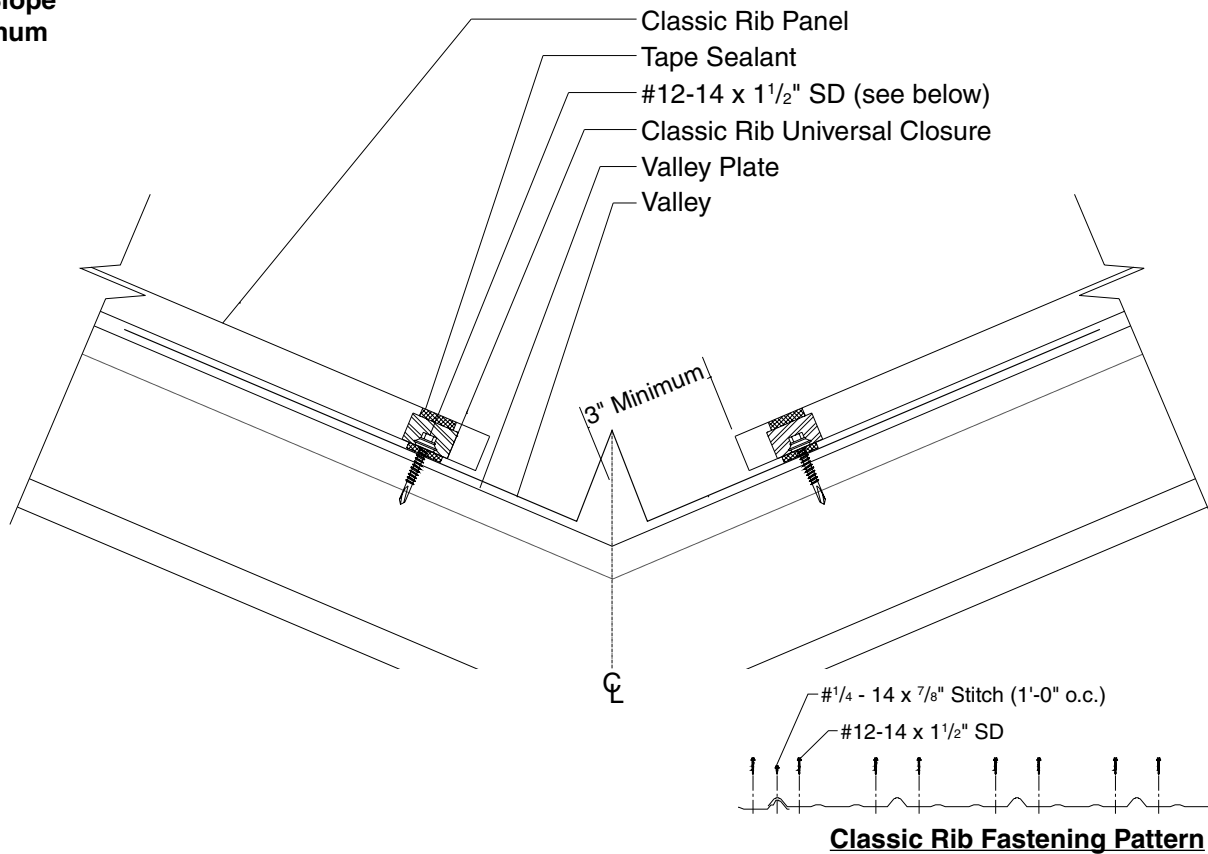
CLASSIC RIB® BOX GUTTER DETAIL

3:12 Slope
Minimum



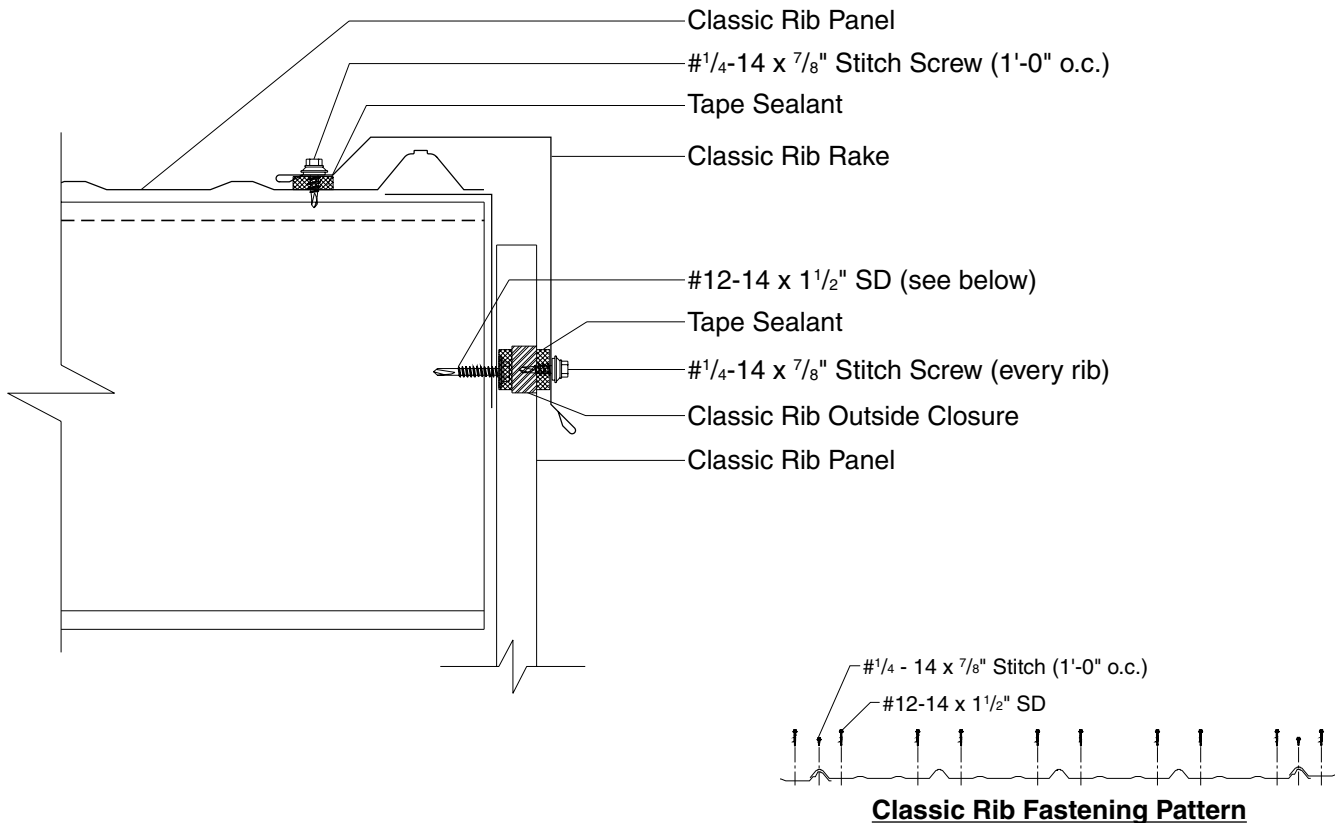
CLASSIC RIB® VALLEY DETAIL

3:12 Slope
Minimum



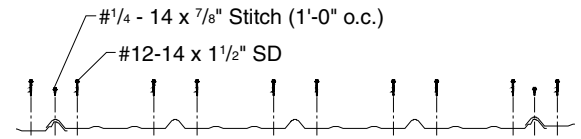
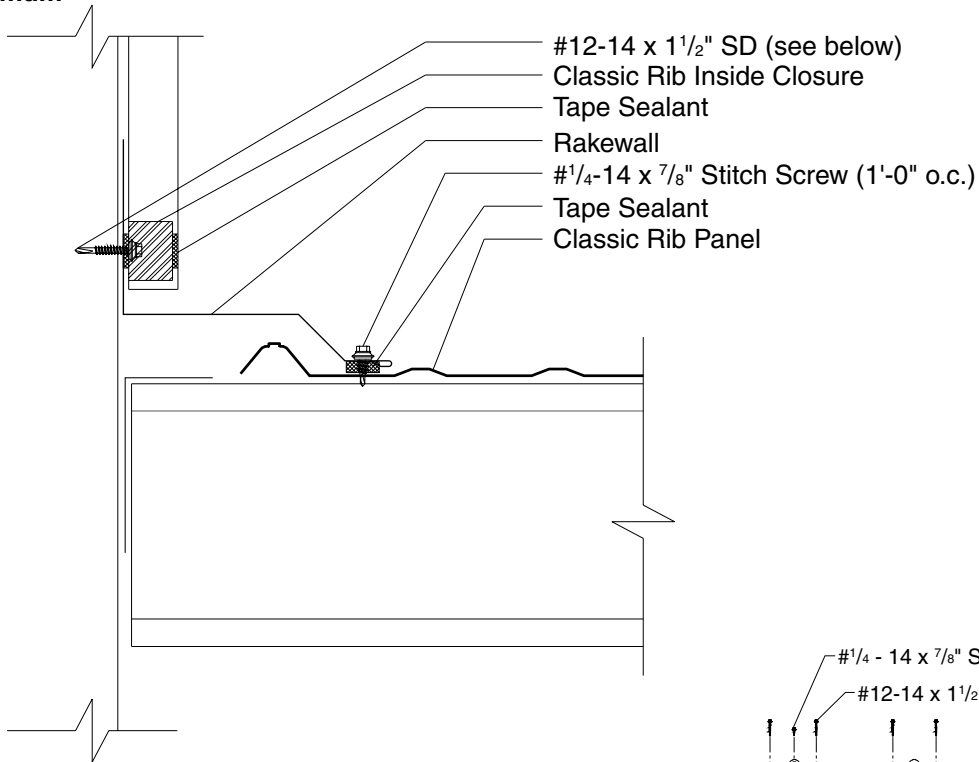
CLASSIC RIB® RAKE DETAIL

3:12 Slope
Minimum



CLASSIC RIB® RAKEWALL DETAIL

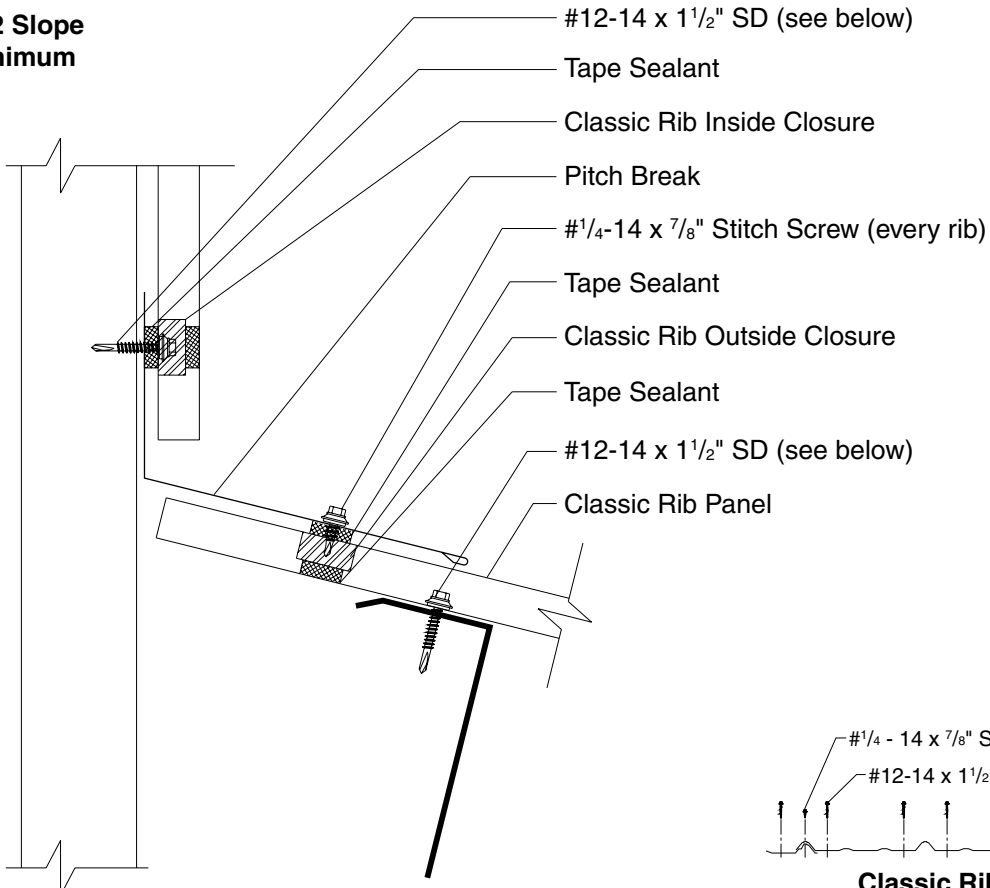
3:12 Slope
Minimum



Classic Rib Fastening Pattern

CLASSIC RIB ENDWALL DETAIL

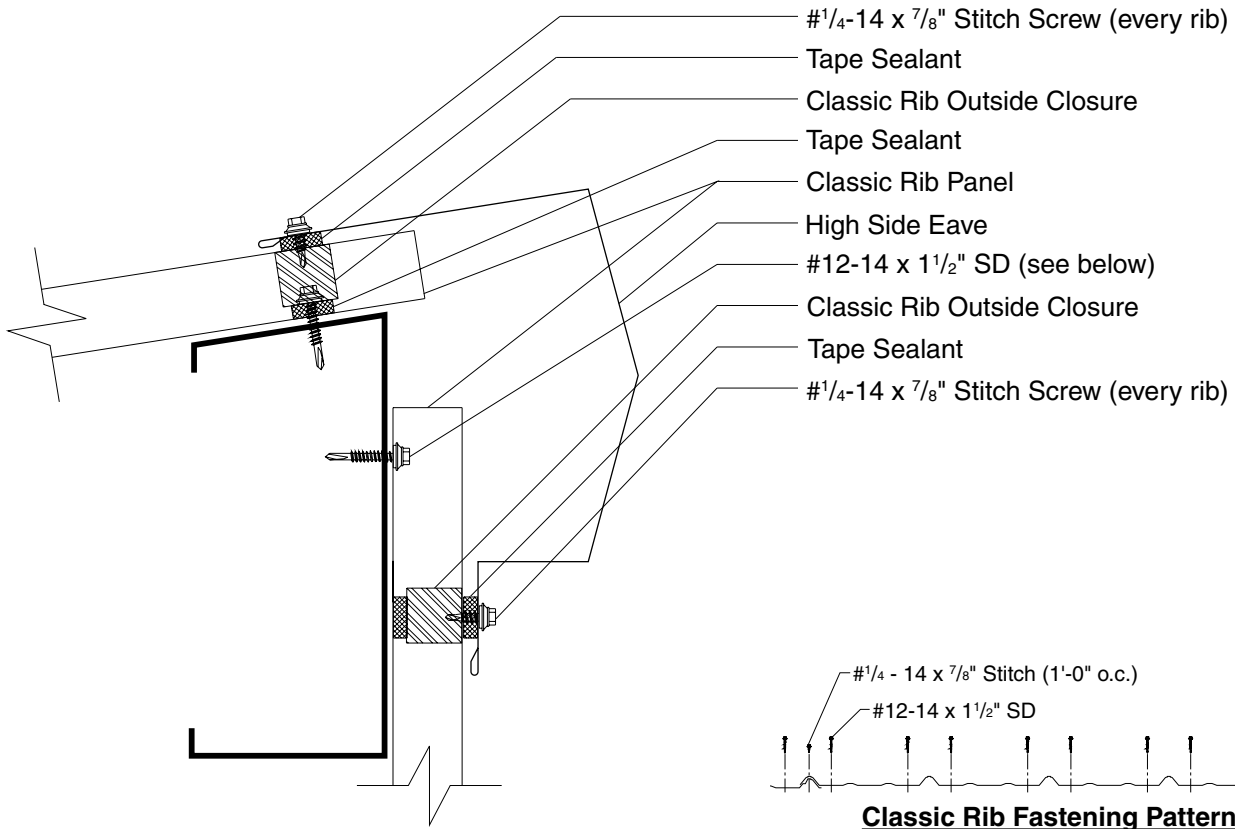
3:12 Slope
Minimum



Classic Rib Fastening Pattern

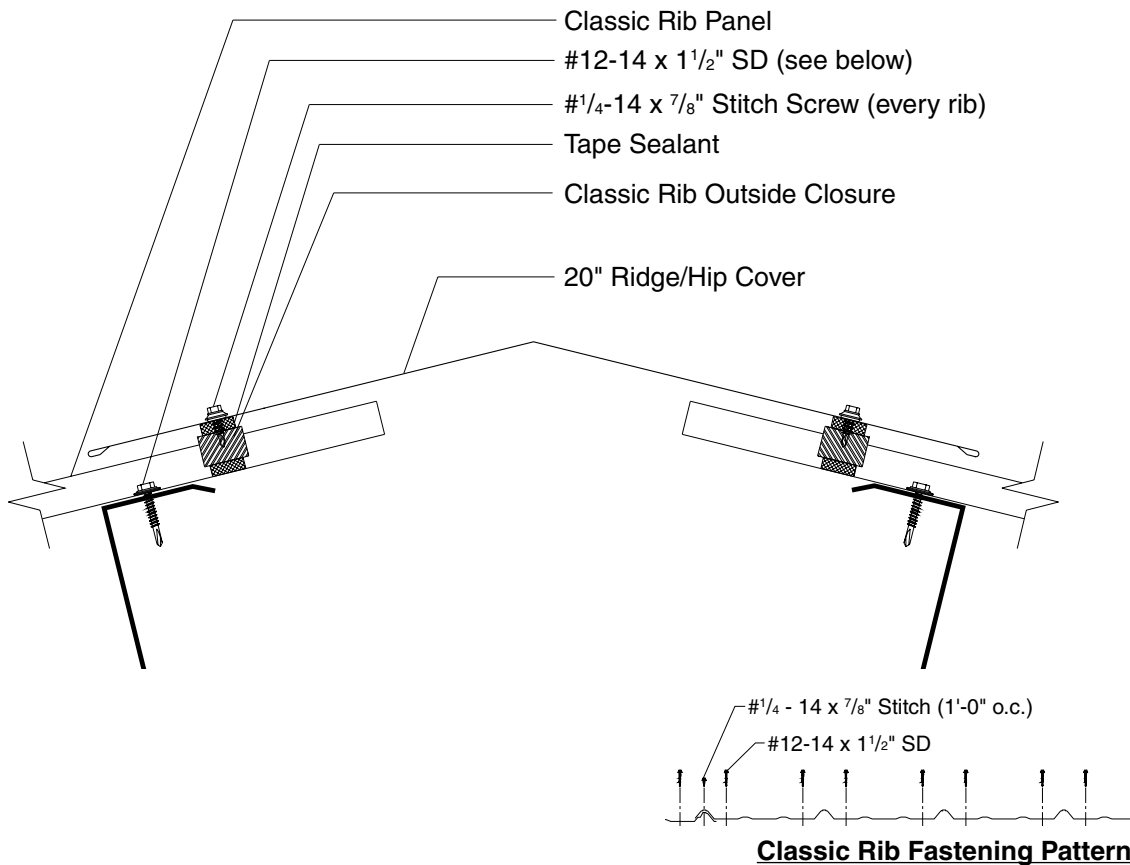
CLASSIC RIB® HIGH SIDE EAVE DETAIL

3:12 Slope
Minimum



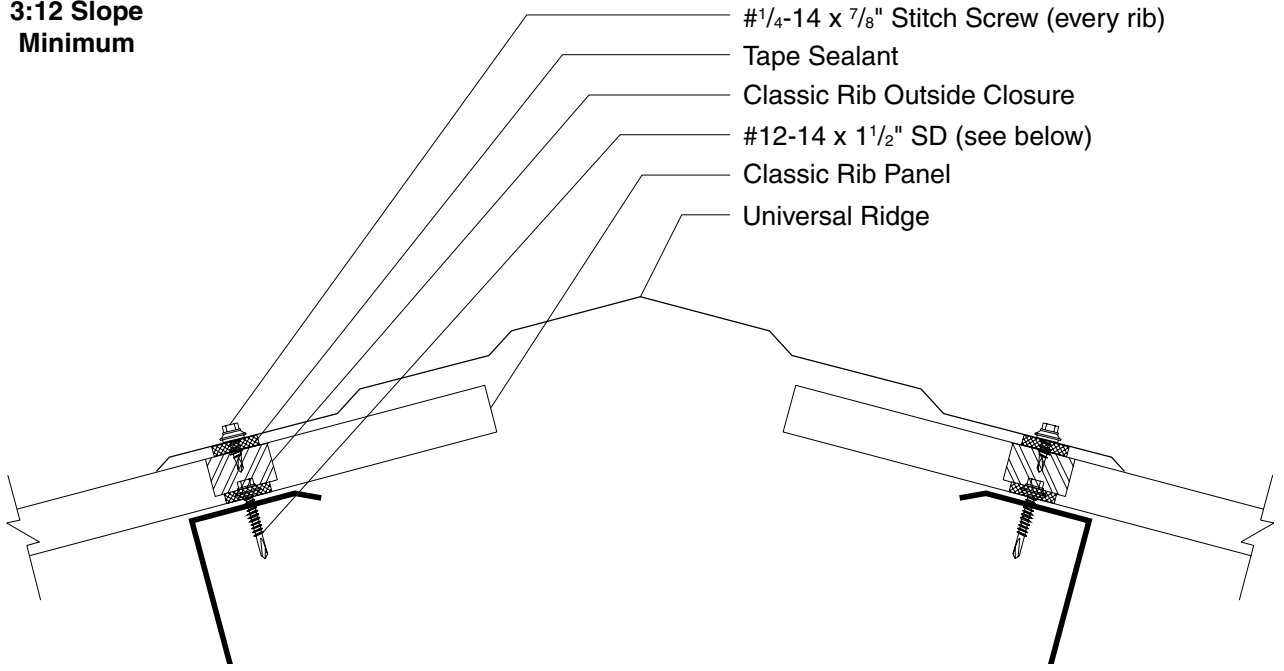
CLASSIC RIB 20" RIDGE/HIP DETAIL

3:12 Slope
Minimum

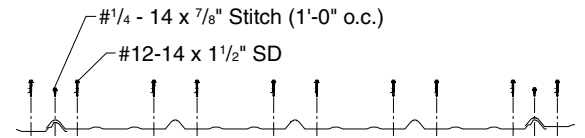


CLASSIC RIB® RIDGE DETAIL

3:12 Slope
Minimum



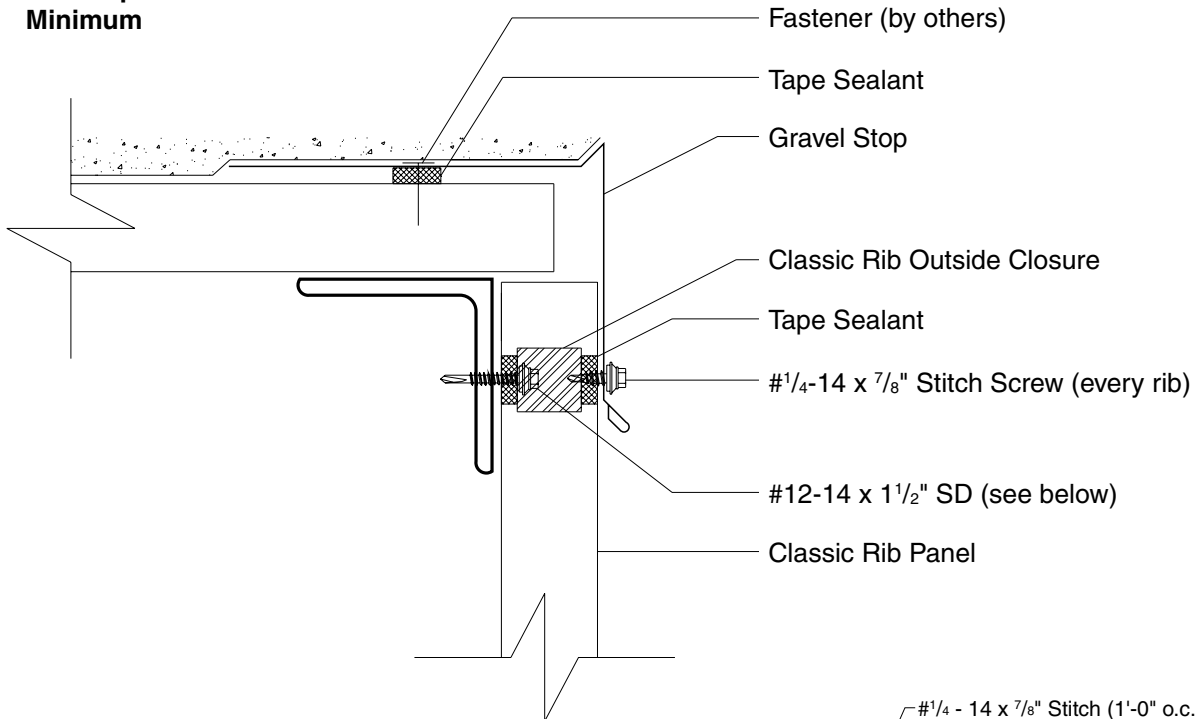
- #1/4-14 x 7/8" Stitch Screw (every rib)
- Tape Sealant
- Classic Rib Outside Closure
- #12-14 x 1 1/2" SD (see below)
- Classic Rib Panel
- Universal Ridge



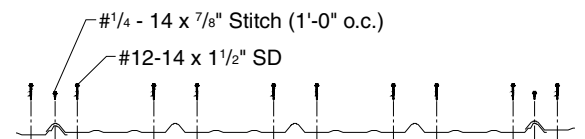
Classic Rib Fastening Pattern

CLASSIC RIB GRAVEL STOP DETAIL

3:12 Slope
Minimum

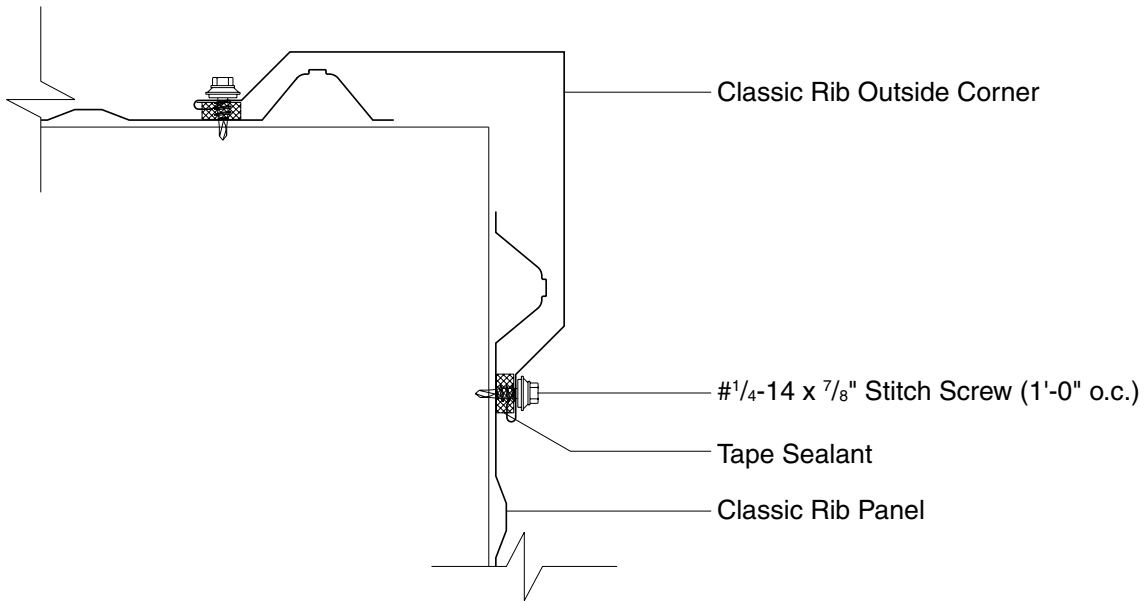


- Fastener (by others)
- Tape Sealant
- Gravel Stop
- Classic Rib Outside Closure
- Tape Sealant
- #1/4-14 x 7/8" Stitch Screw (every rib)
- #12-14 x 1 1/2" SD (see below)
- Classic Rib Panel

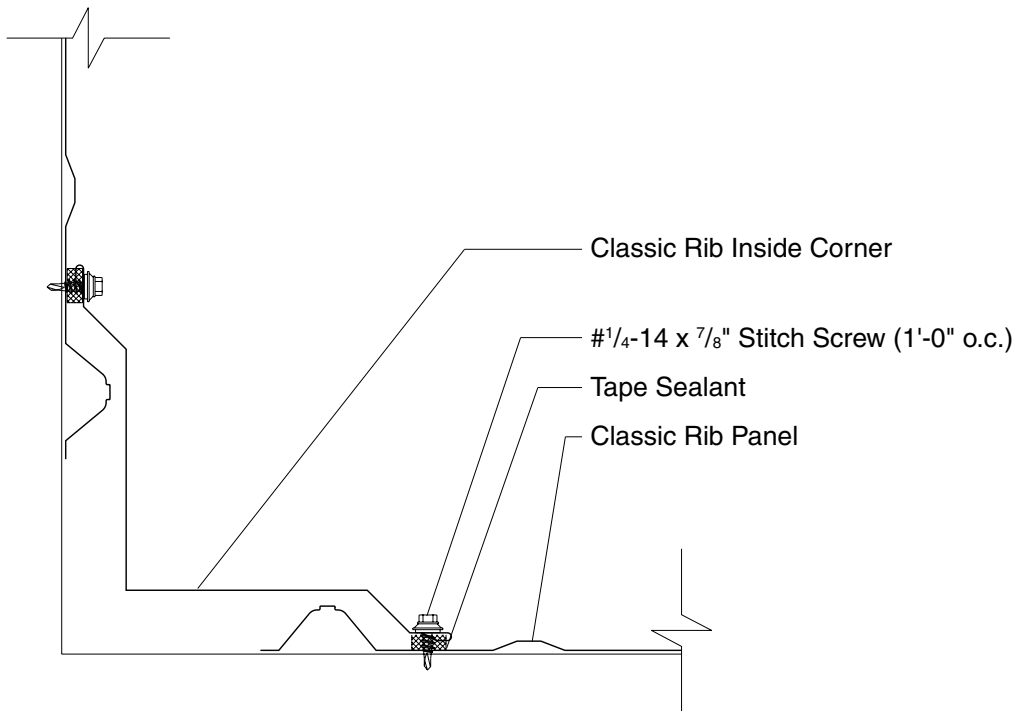


Classic Rib Fastening Pattern

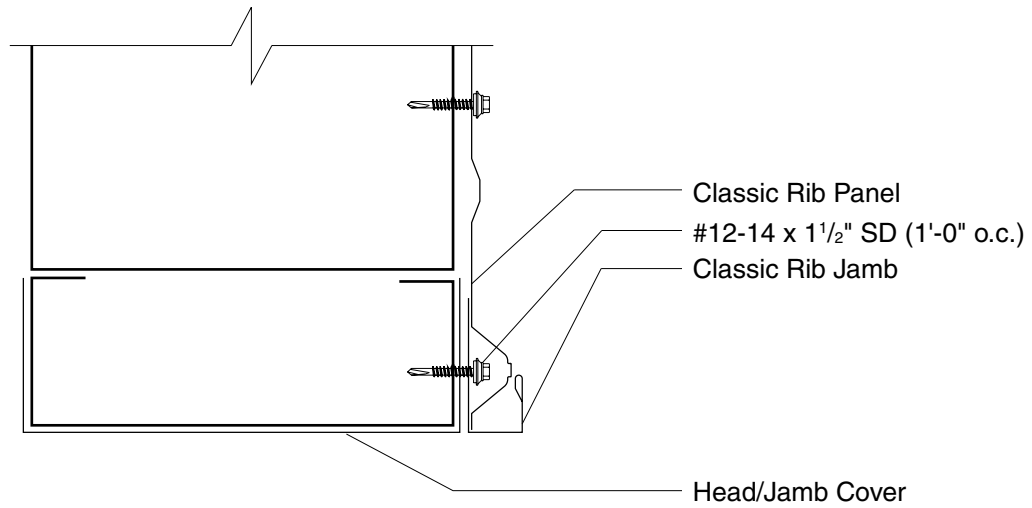
CLASSIC RIB® OUTSIDE CORNER DETAIL



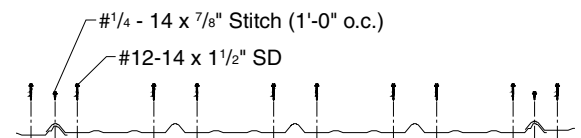
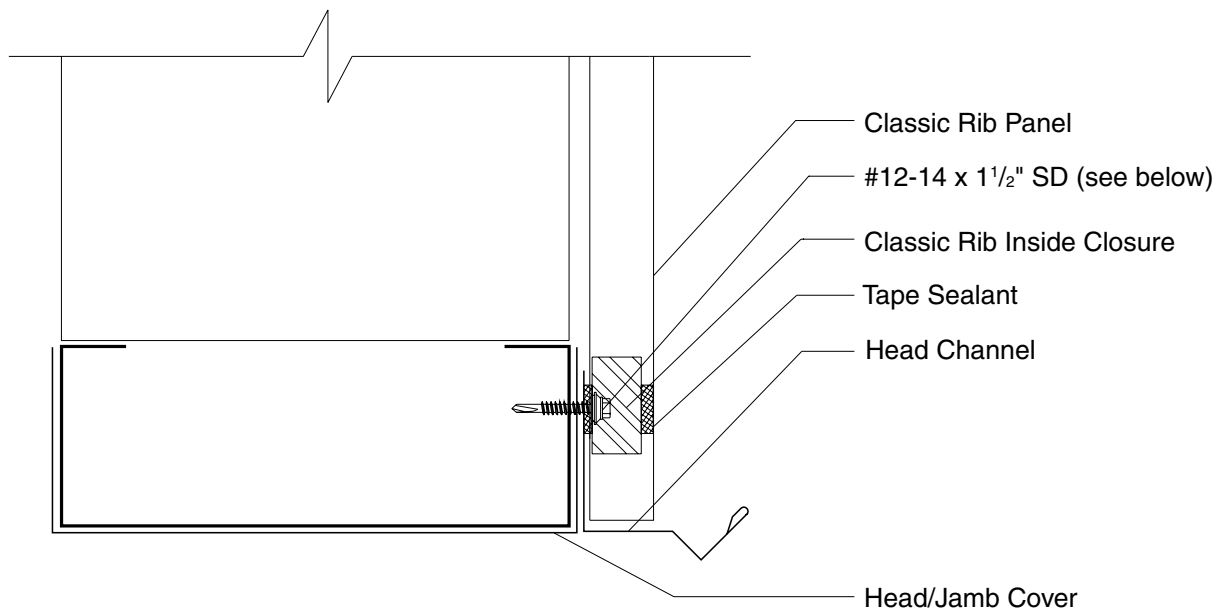
CLASSIC RIB INSIDE CORNER DETAIL



CLASSIC RIB® JAMB DETAIL



CLASSIC RIB HEAD DETAIL



Classic Rib Fastening Pattern

