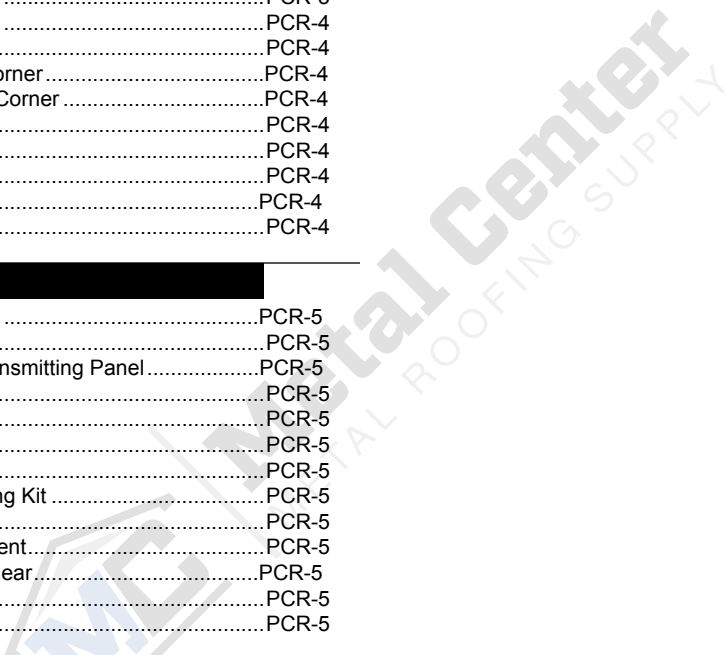
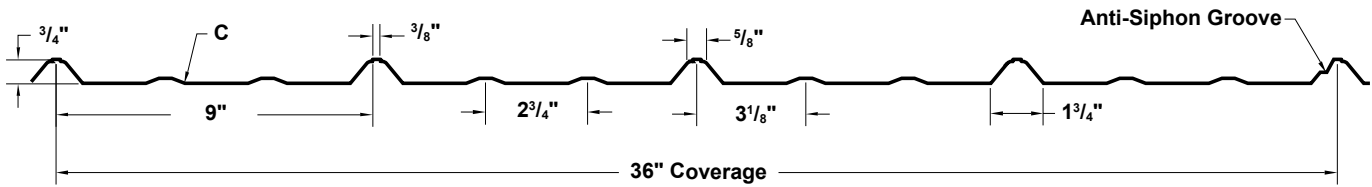


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PANEL PROFILE



SLOPE

The minimum recommended slope for any Desert-Rib roofing panel is 3:12.

SUBSTRATE

Desert-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

Desert 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 Center branch for recommendations.

AVAILABILITY

Desert-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

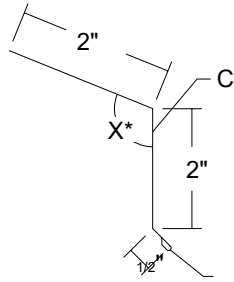
FINISH

- ▶ *Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- ▶ Prepainted Galvalume / ASTM A-792 - AZ50
- ▶ MS Colorfast45®
- ▶ **Fluorocarbon (PVDF)

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

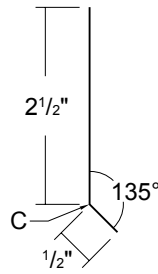
** Meets both Kynar 500 and Hylar 5000 specifications.

EAVE (DIRECT FASTEN)



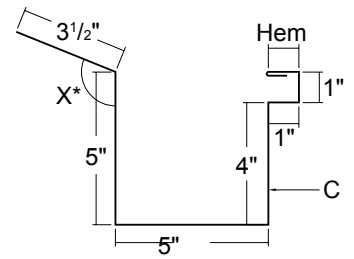
Length 10' - *Specify Slope Angle

SS RAKE CLEAT



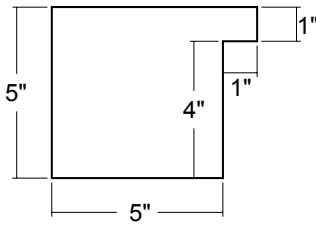
Length 10'

BOX GUTTER

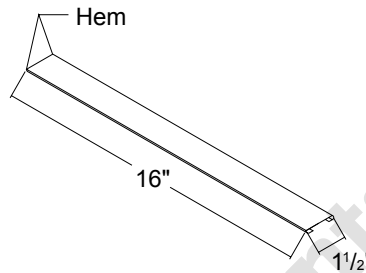


Length 10' *Specify Slope Angle

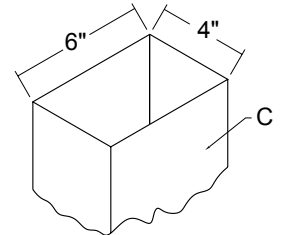
BOX GUTTER END



UNIVERSAL GUTTER/ DOWNSPOUT STRAP

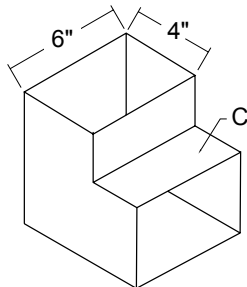


DOWNSPOUT 6" x 4"



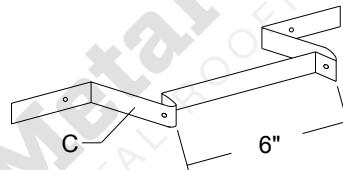
Length 10'

95° ELBOW 6" x 4"



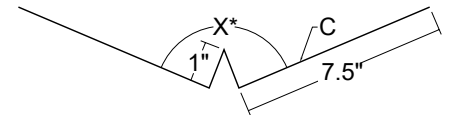
(Also available 4" x 3 1/2")

DOWNSPOUT BRACKET



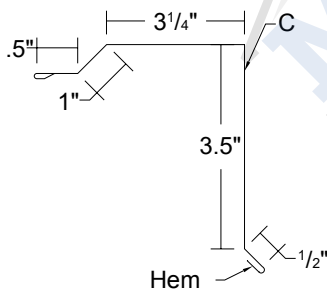
(Also available 4")

VALLEY



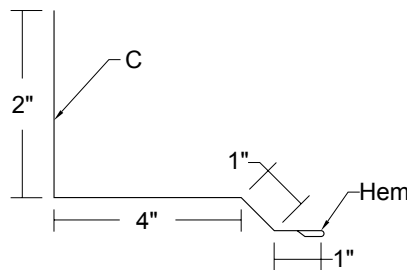
Length 10'-2", 20'-3" - *Specify Slope Angle

DESERT RIB RAKE



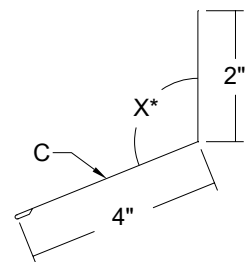
Length 10'

SIDEWALL



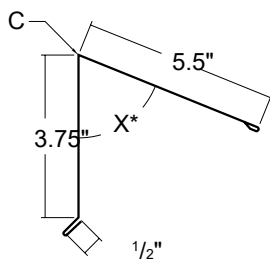
Length 10'

ENDWALL



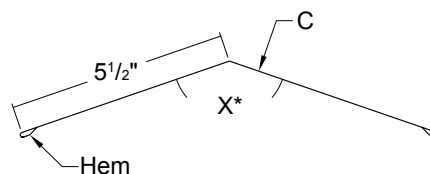
Length 10' - *Specify Slope Angle

PEAK



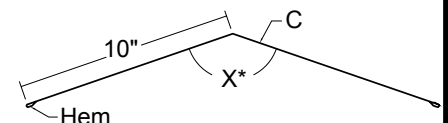
Length 10'

11" RIDGE/HIP COVER



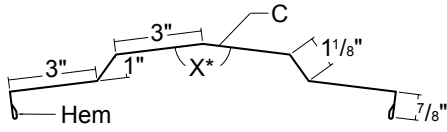
Length 10' - *Specify Slope Angle

20" RIDGE/HIP COVER



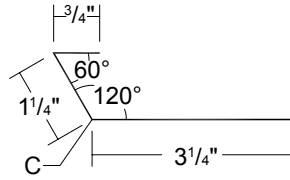
Length 10' - *Specify Slope Angle

SCULPTURED RIDGE CAP



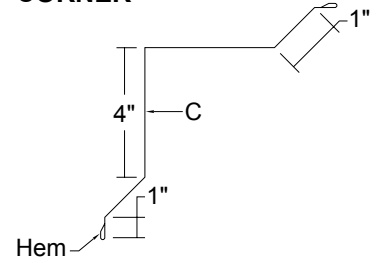
Length 10' - *Specify Slope Angle

VENT DRIP



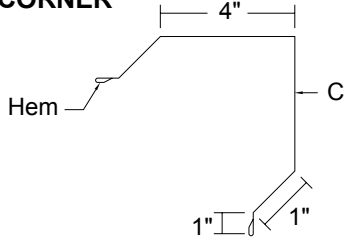
Length 10'-2"

DESERT RIB INSIDE CORNER



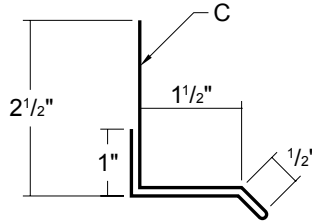
Length 10'-2", 14'-2", 20'-3"

DESERT RIB OUTSIDE CORNER



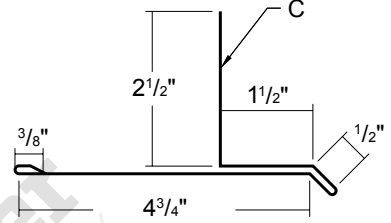
Length 10'-2", 14'-2", 20'-3"

1.5" SILL/HEAD



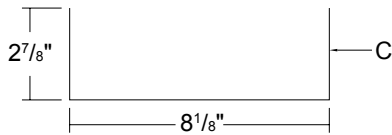
Length 10'-2"

1.5" SILL TO SOFFIT



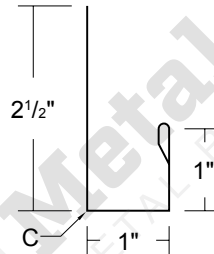
Length 10'-2"

HEAD JAMB COVER



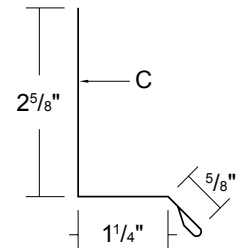
Length 10'-2", 14'-2"

DESERT RIB JAMB



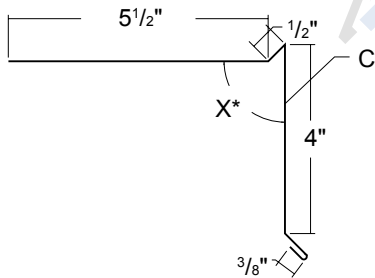
Length 10'-2"

1.25" BASE



Length 10'-2"

GRAVEL STOP



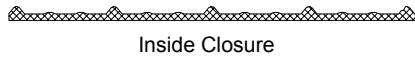
Length 10'-2"

C- Indicates color side of flashing.

DESERT RIB CLOSURES



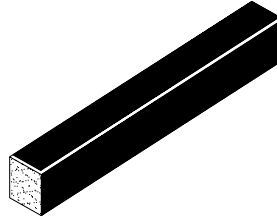
Outside Closure



Inside Closure

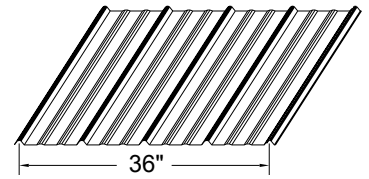
Polyethylene Foam

UNIVERSAL CLOSURE



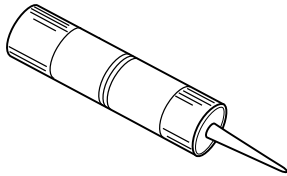
1" x 1½" x 50' Polyethylene Foam
1" x 1½" x 10' Polyethylene Foam

DESERT RIB LIGHT TRANSMITTING PANEL



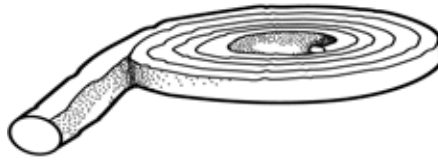
8 Ounce Fiberglass
Available In 10' and 12' Panels

TUBE SEALANT



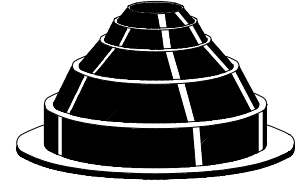
10.3 oz. Cartridge
Urethane

TAPE SEALANT



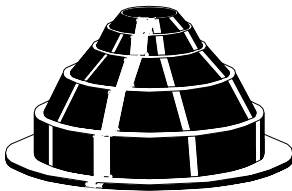
¾" X ¾" X 50'
Single Bead
Butyl - Gray

RUBBER ROOF JACK



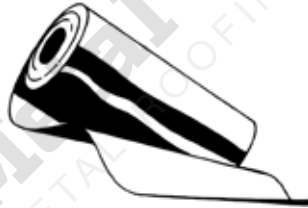
MINI (¼" to 1½" O.D. Pipe)
#2 (1¾" to 3" O.D. Pipe)
#4 (3" to 6" O.D. Pipe)
#6 (6" to 9" O.D. Pipe)
#8 (7" to 13" O.D. Pipe)

RETRO ROOF JACK



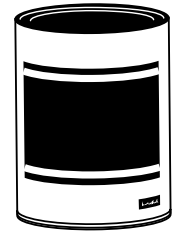
#801RETRO (¾" to 2¾" O.D. Pipe)
#802RETRO (2" to 7¼" O.D. Pipe)
#803RETRO (3¼" to 10" O.D. Pipe)

RUBBER ROOF FLASH KIT



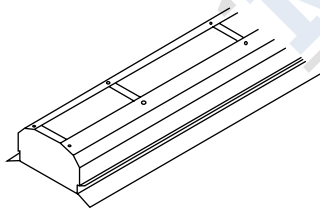
12" x 50'-0" Flash Kit
18" x 50'-0" Flash Kit

TOUCH-UP PAINT



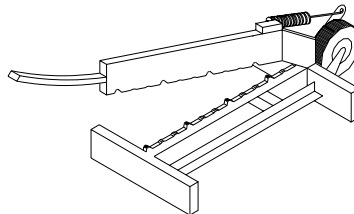
Available in pints
PVDF / MS Colorfast45

CONTINUOUS RIDGE VENT

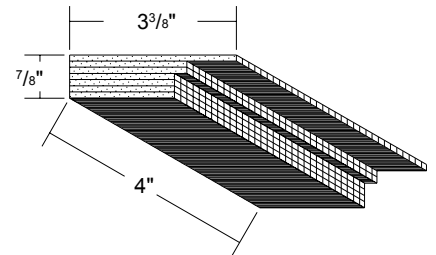


9" x 10', 12" x 10'

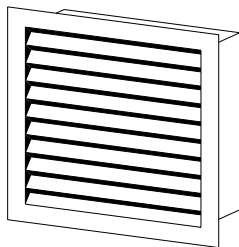
DESERT RIB PANEL SHEAR



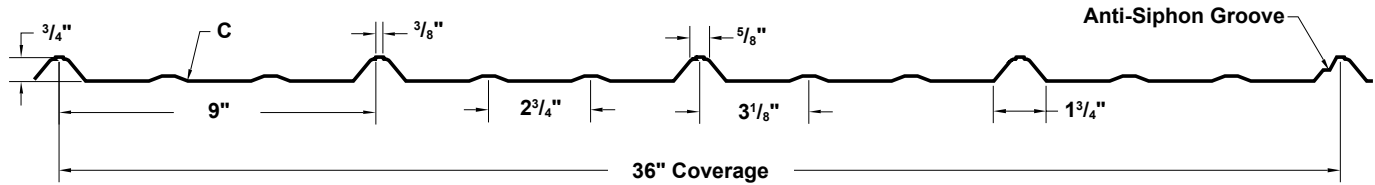
VENT MATERIAL



LOUVRE WITH SCREEN



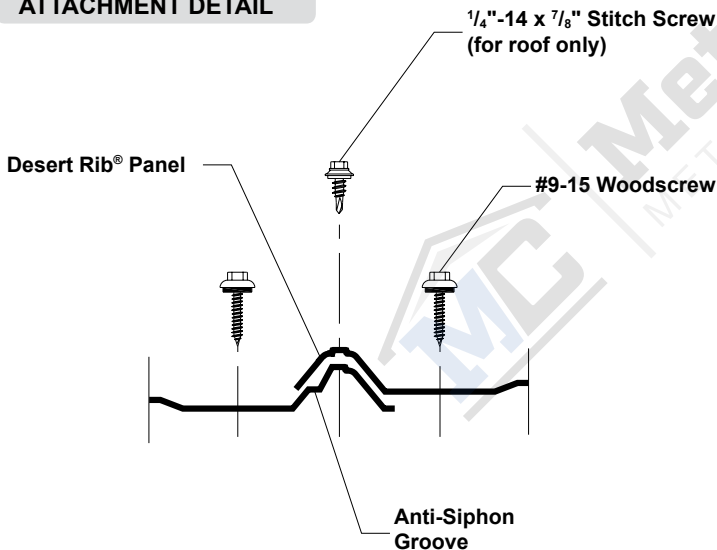
3' x 3' or 3' x 4'



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 ⁴ /ft	Sxx In ³ /ft	Ixx In ⁴ /ft	Sxx In ³ /ft	1.5'	2'	2.5'	3'	3.5'	4'	1.5'	2'	2.5'	3'	3.5'	4'
29	36"	80	0.62	0.0100	0.0151	0.0053	0.0118	142	81	52	36	27	21	179	103	66	46	34	26
26	36"	80	0.86	0.0123	0.0190	0.0080	0.0151	182	104	67	47	34	26	225	129	84	58	43	33

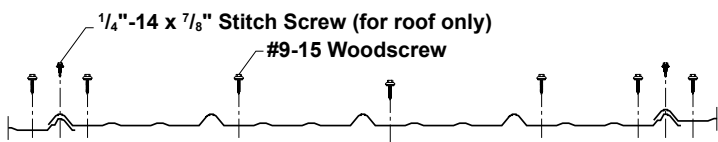
- Theoretical section properties have been calculated per AISI 2001. "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2001 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and 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

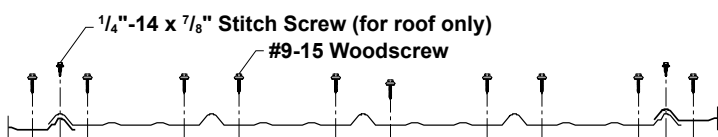


FASTENING PATTERN

Field of Panel



Ends of Panel



GENERAL INFORMATION

► **Slope**

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

► **Substructure**

Desert 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**

Desert 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 Center 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**


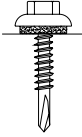
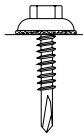
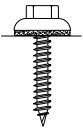
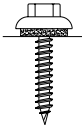
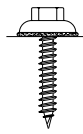
Finishes: Acrylic Coated Galvalume® & SMP

Gauge: 26ga and 29ga 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.

	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.

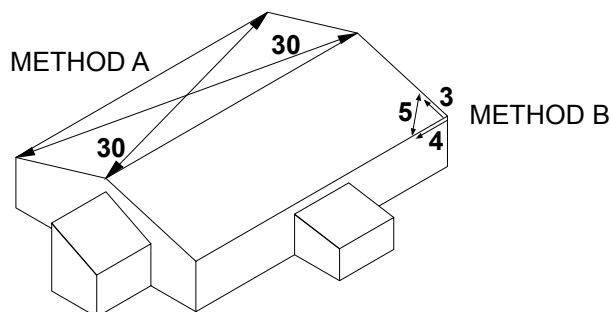
CONDITION OF SUBSTRUCTURE

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

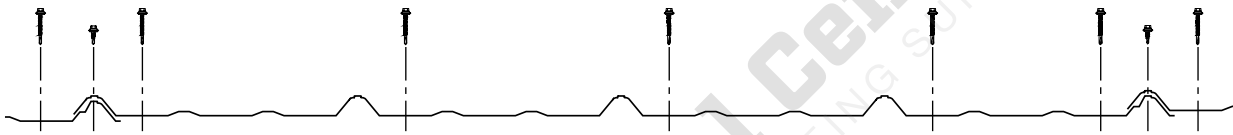
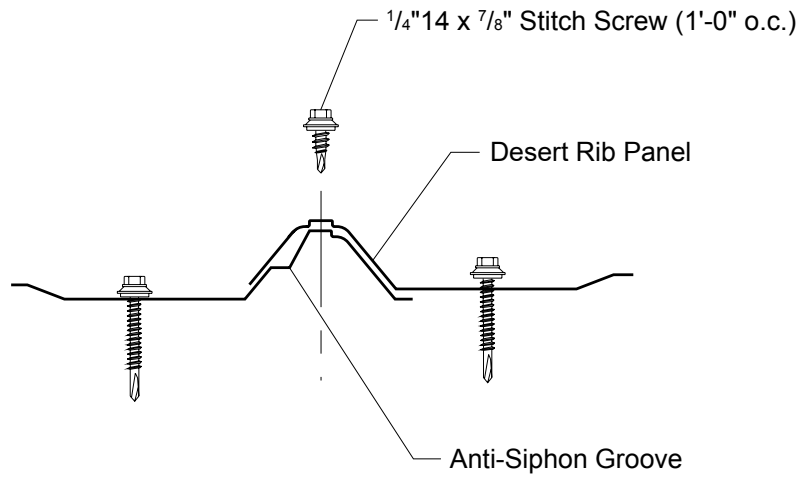
The installer should check the roof deck for squareness before installing Desert Rib panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

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.

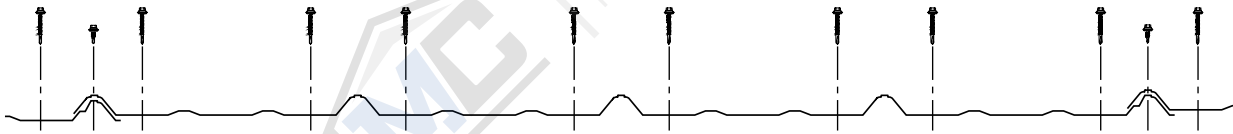
METHOD "B" - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established,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



DESERT RIB FASTENING PATTERN

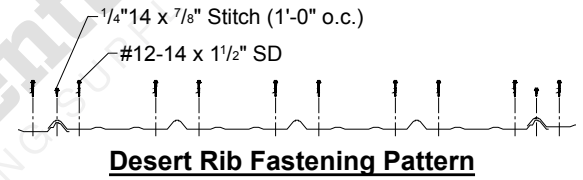
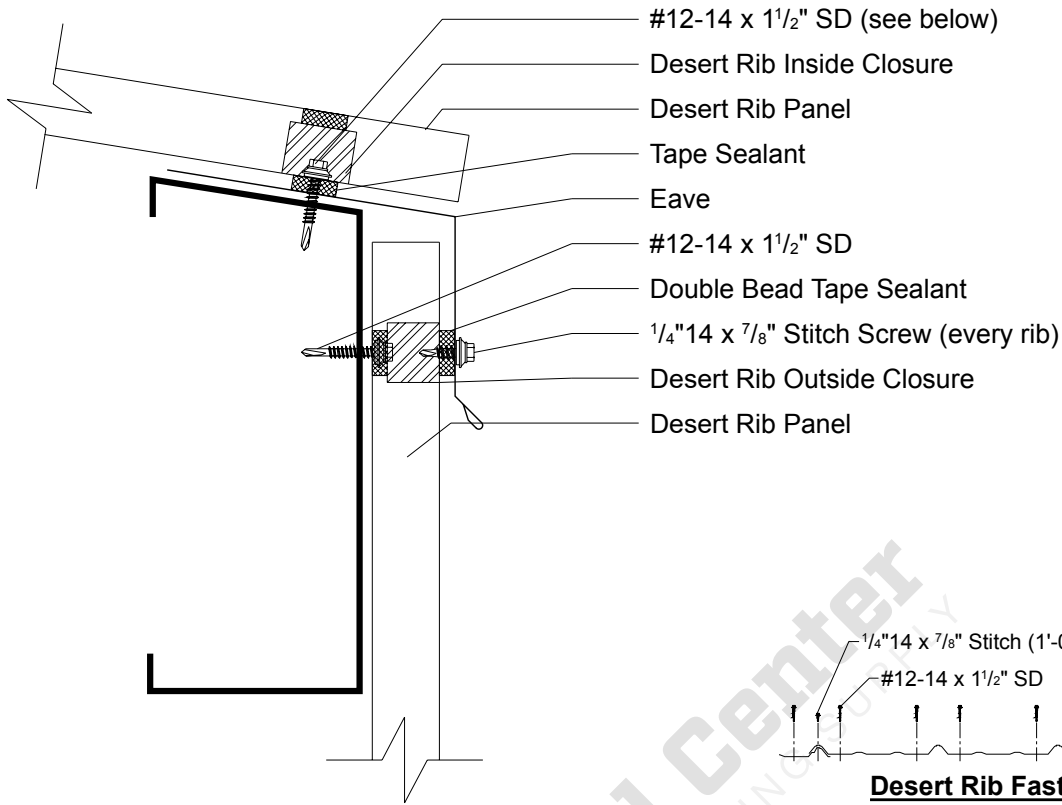


Desert Rib Fastening Pattern - Interior

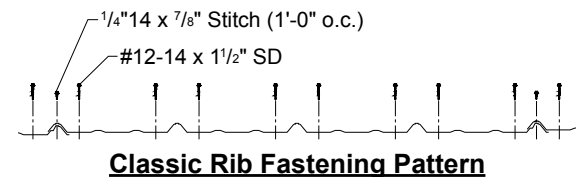
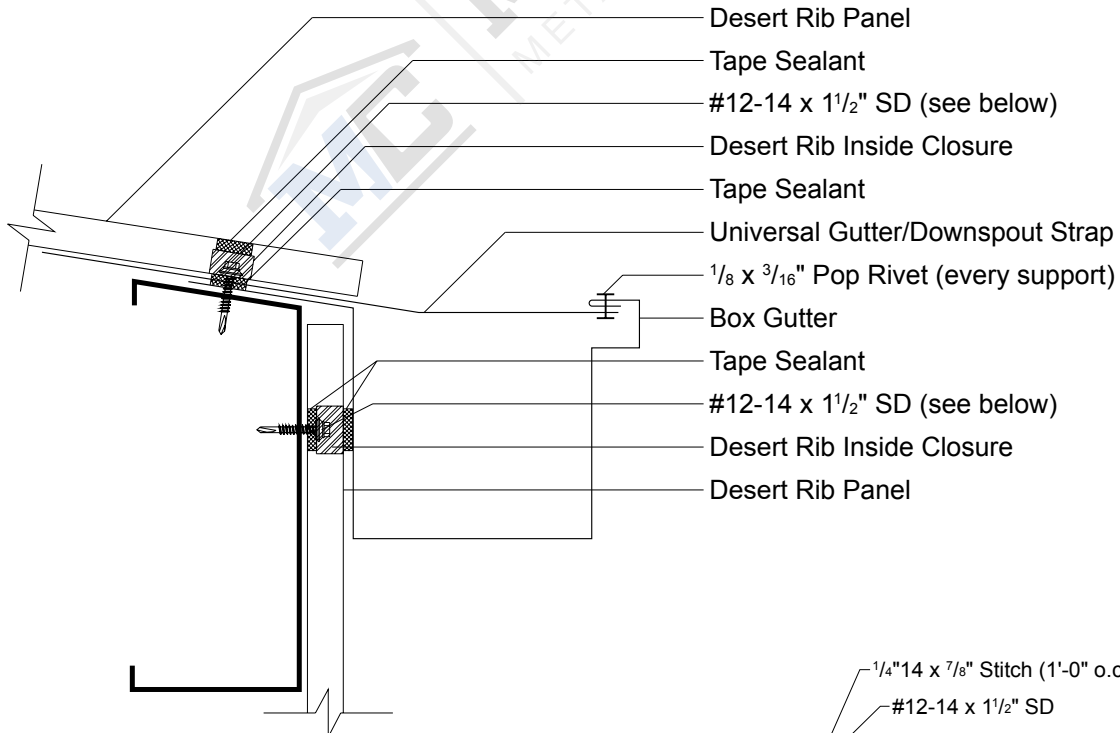


Desert Rib Fastening Pattern - Ends

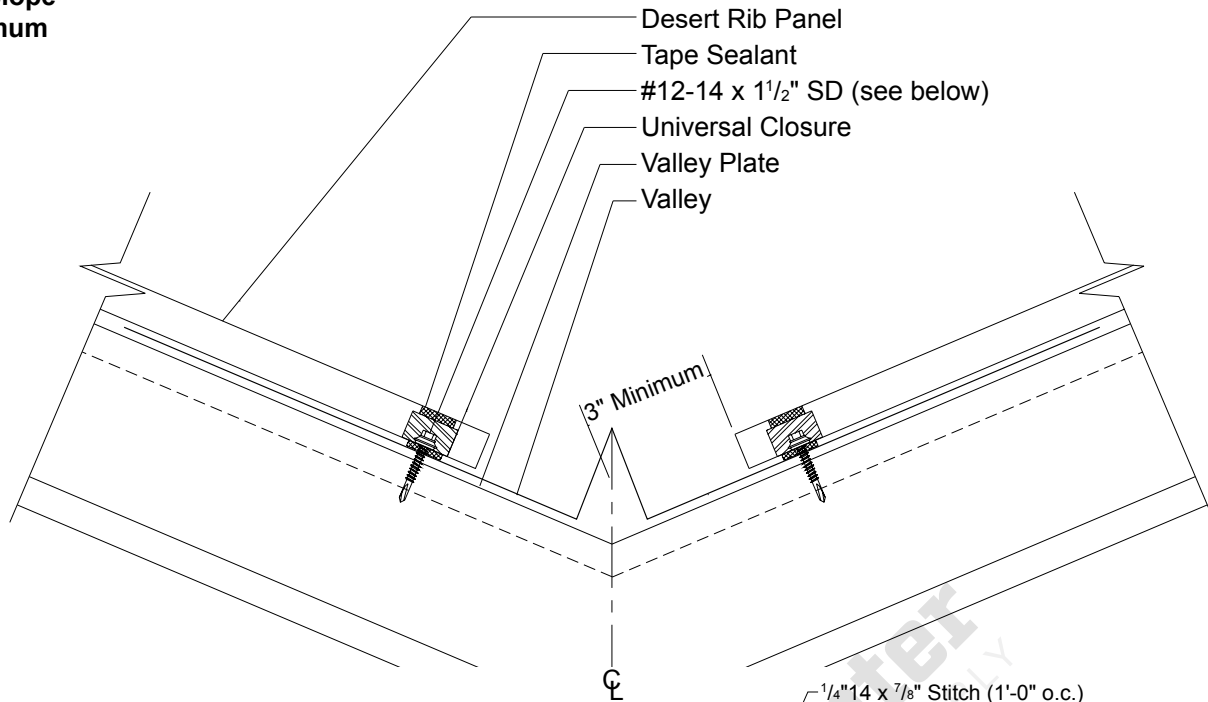
**3:12 Slope
Minimum**



**3:12 Slope
Minimum**

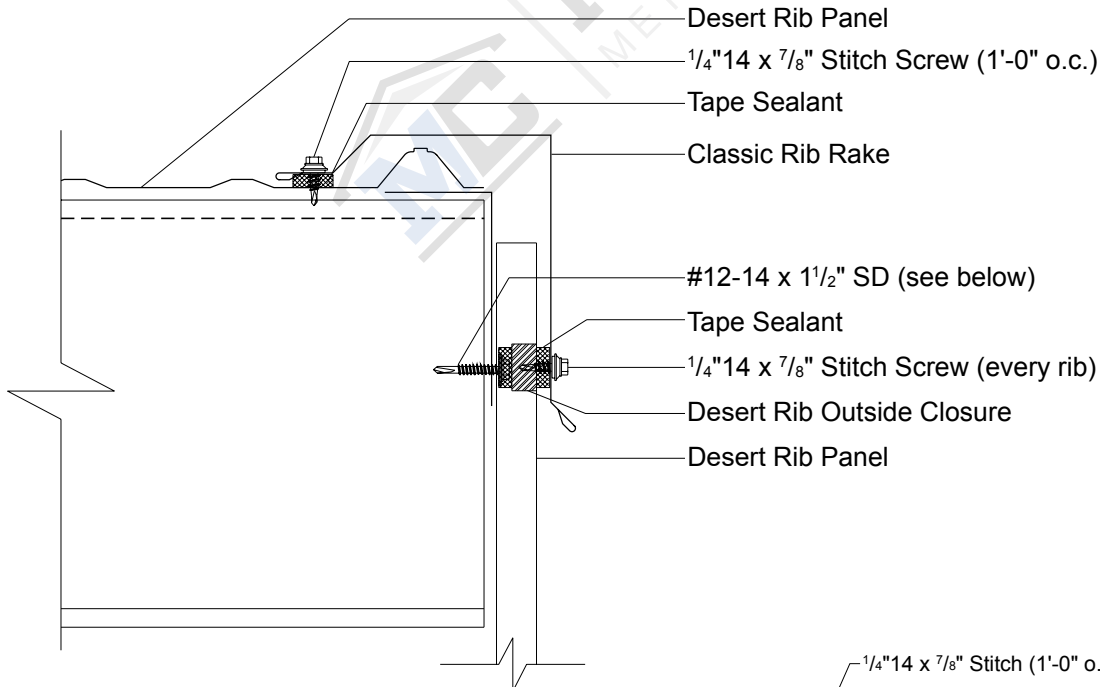


**3:12 Slope
Minimum**



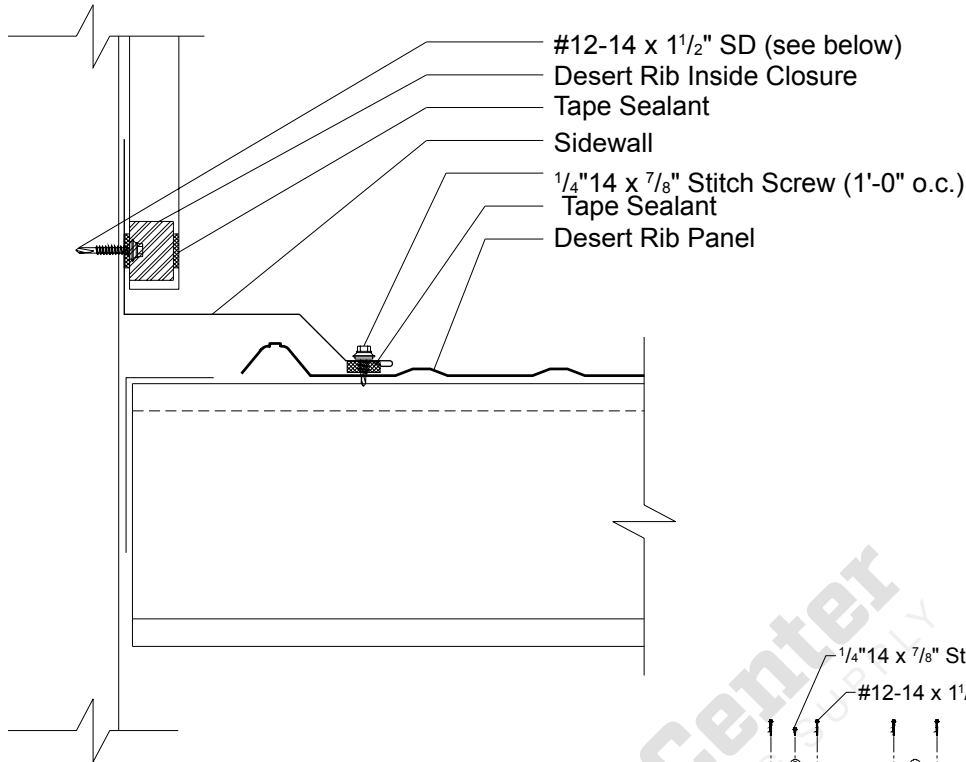
Desert Rib Fastening Pattern

**3:12 Slope
Minimum**

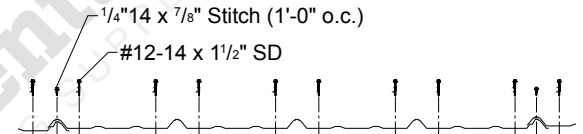


Desert Rib Fastening Pattern

**3:12 Slope
Minimum**

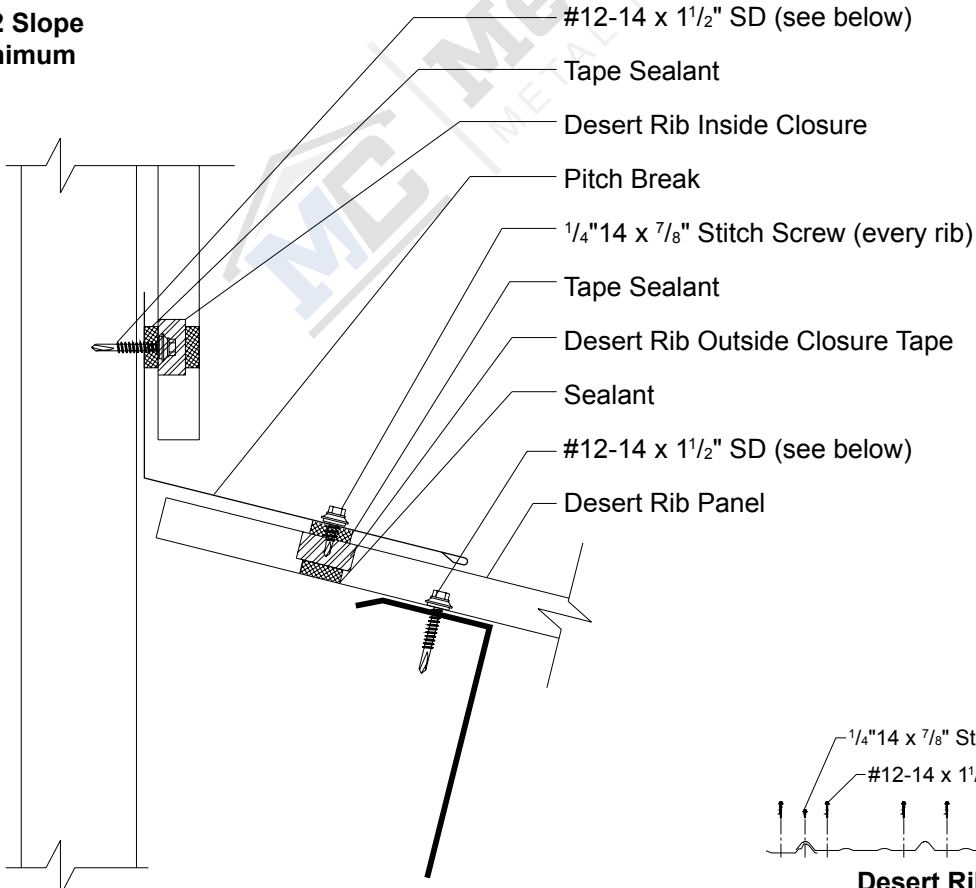


- #12-14 x 1 1/2" SD (see below)
- Desert Rib Inside Closure
- Tape Sealant
- Sidewall
- 1/4" x 14 x 7/8" Stitch Screw (1'-0" o.c.)
- Tape Sealant
- Desert Rib Panel

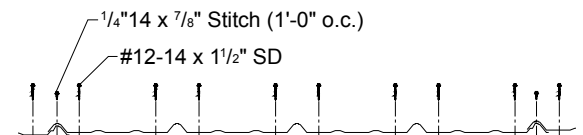


Desert Rib Fastening Pattern

**3:12 Slope
Minimum**

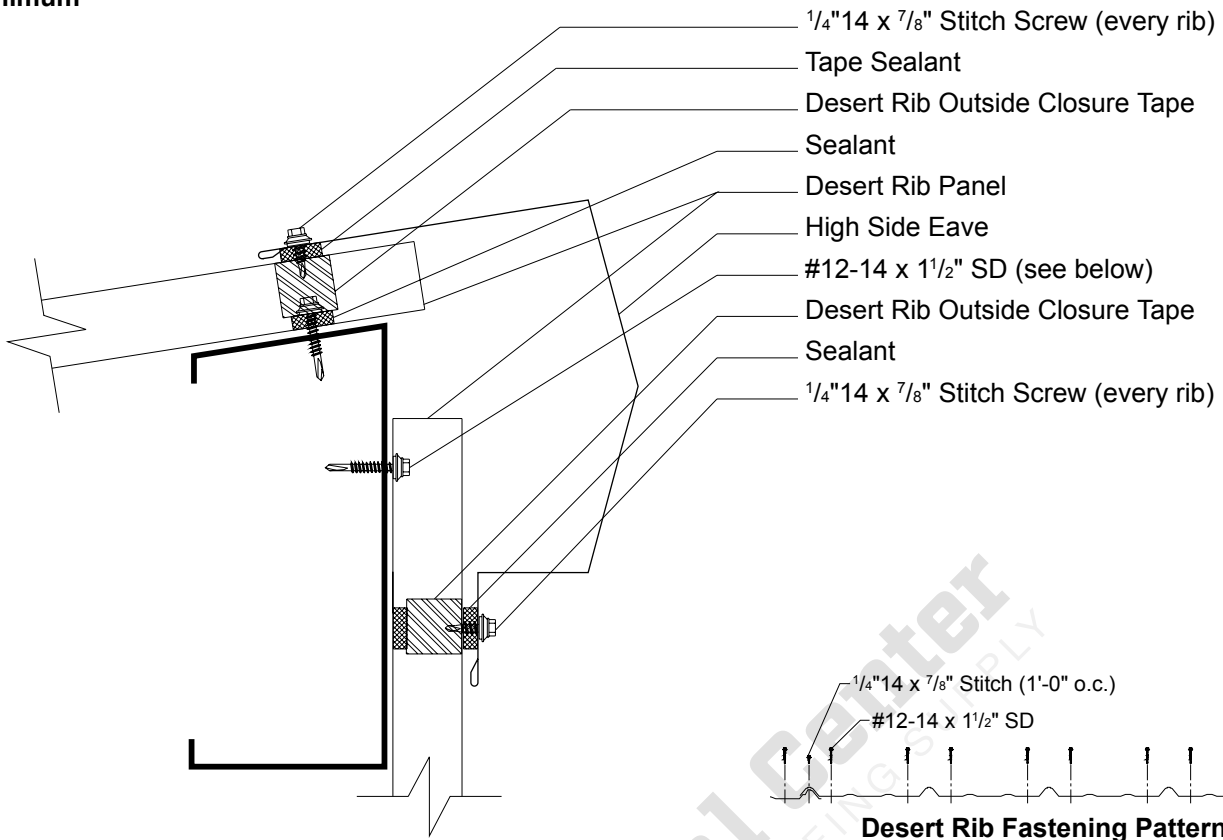


- #12-14 x 1 1/2" SD (see below)
- Tape Sealant
- Desert Rib Inside Closure
- Pitch Break
- 1/4" x 14 x 7/8" Stitch Screw (every rib)
- Tape Sealant
- Desert Rib Outside Closure Tape
- Sealant
- #12-14 x 1 1/2" SD (see below)
- Desert Rib Panel

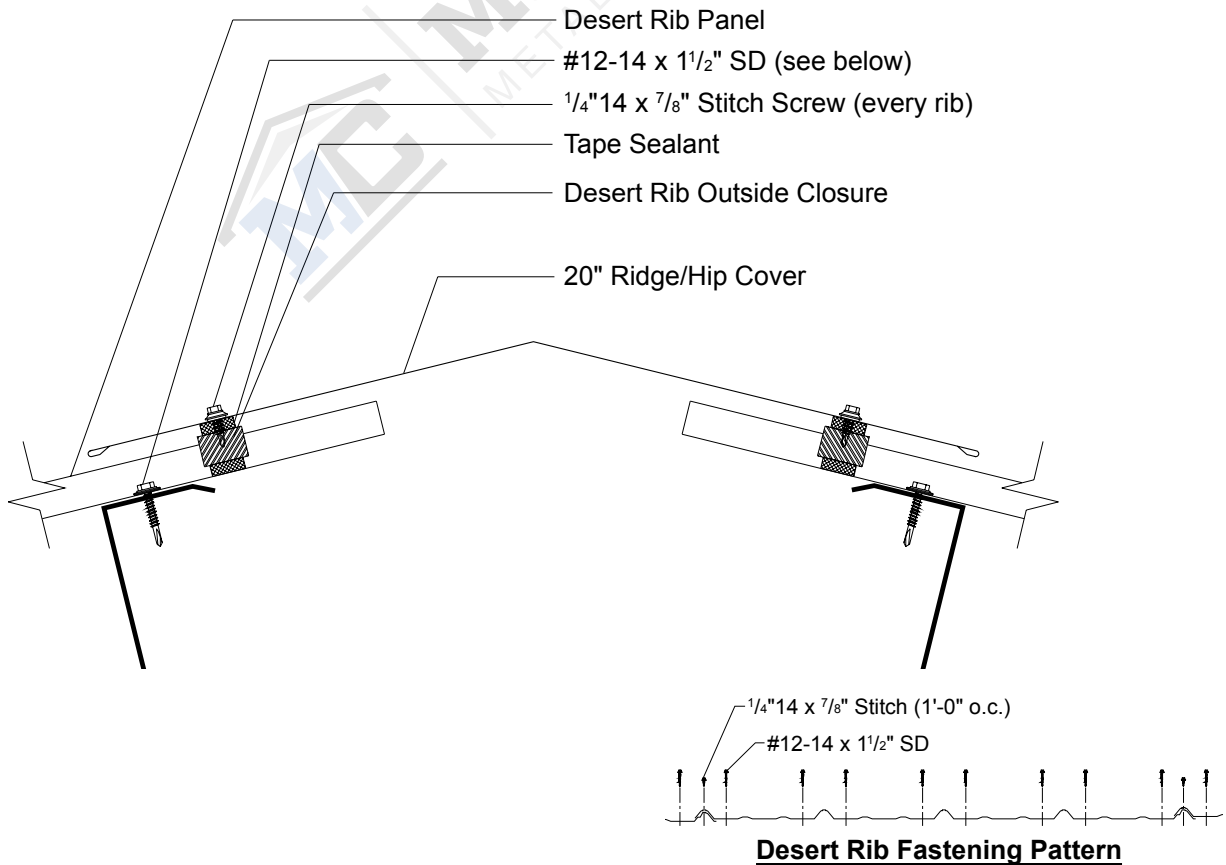


Desert Rib Fastening Pattern

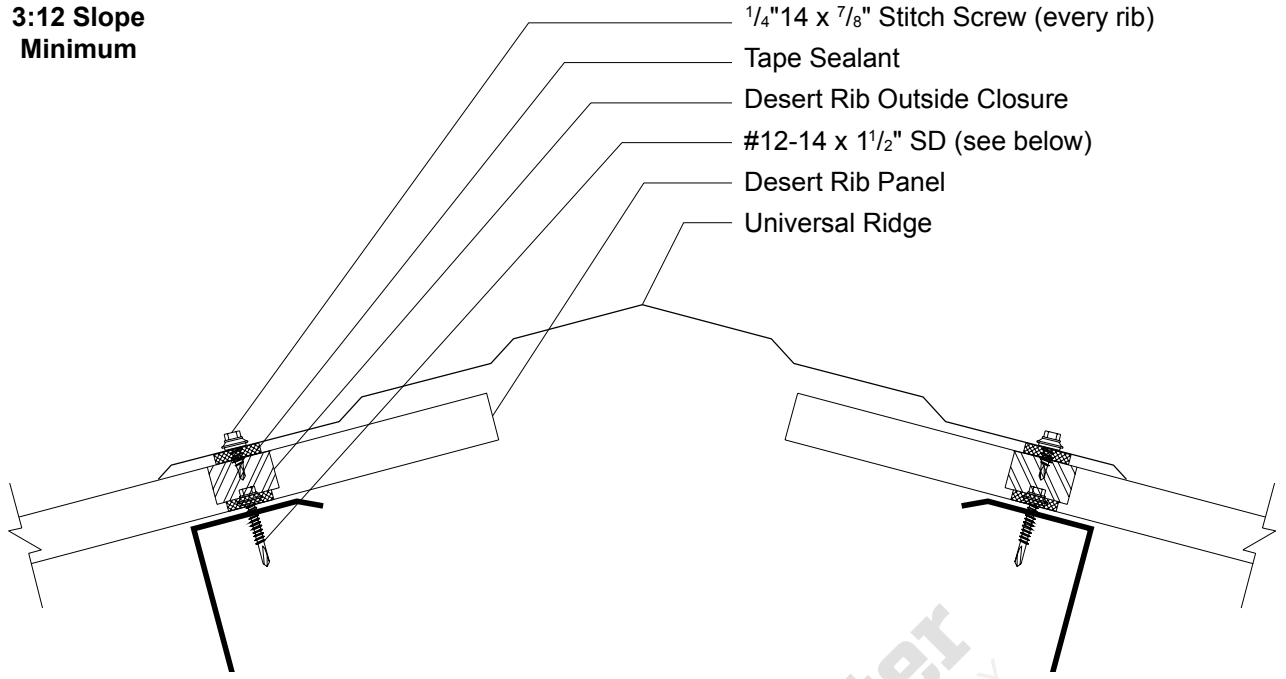
**3:12 Slope
Minimum**



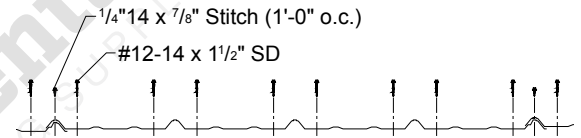
**3:12 Slope
Minimum**



**3:12 Slope
Minimum**

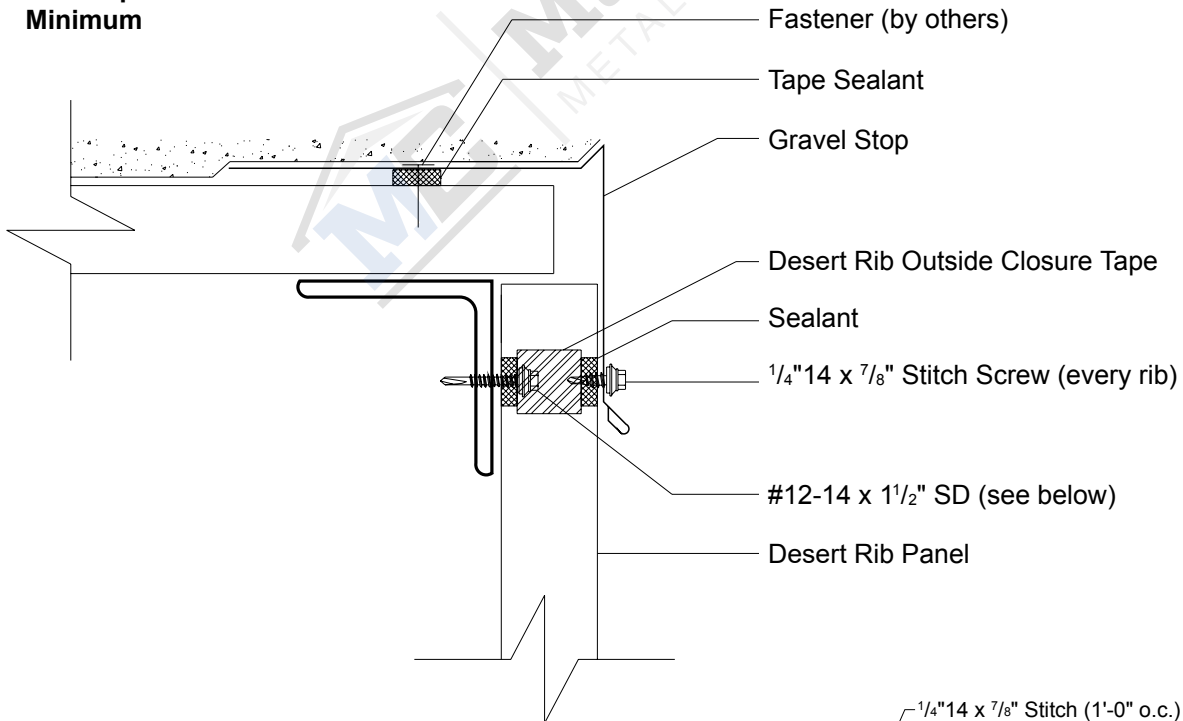


- 1/4"14 x 7/8" Stitch Screw (every rib)
- Tape Sealant
- Desert Rib Outside Closure
- #12-14 x 1 1/2" SD (see below)
- Desert Rib Panel
- Universal Ridge



Desert Rib Fastening Pattern

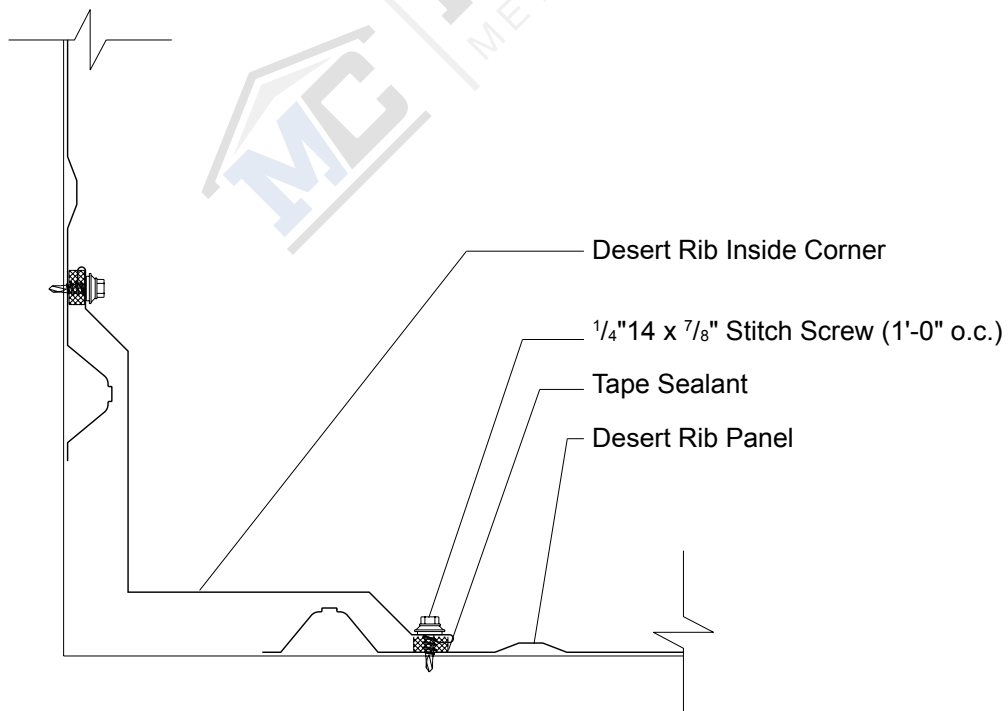
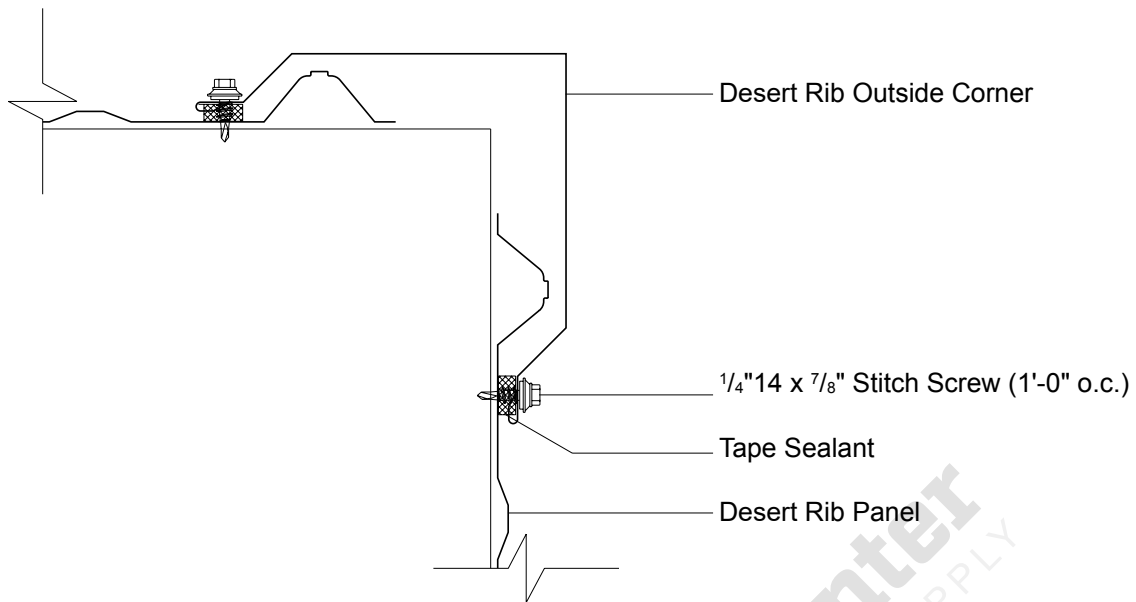
**3:12 Slope
Minimum**

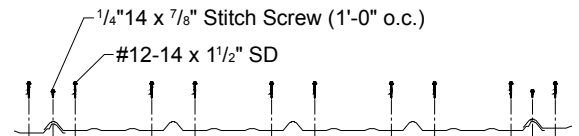
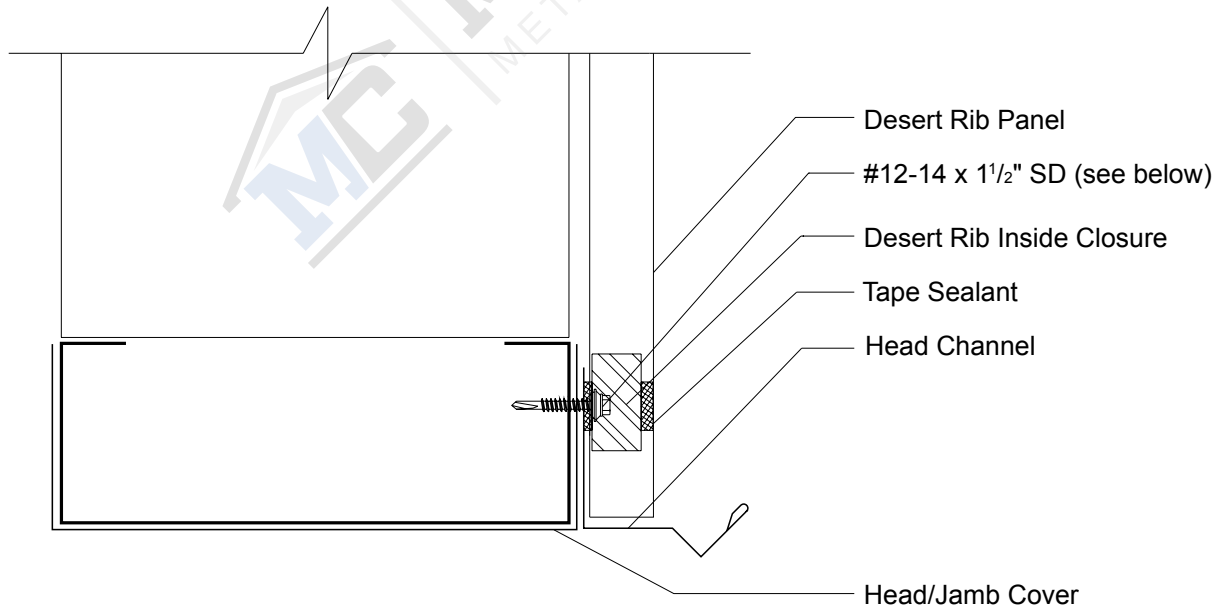
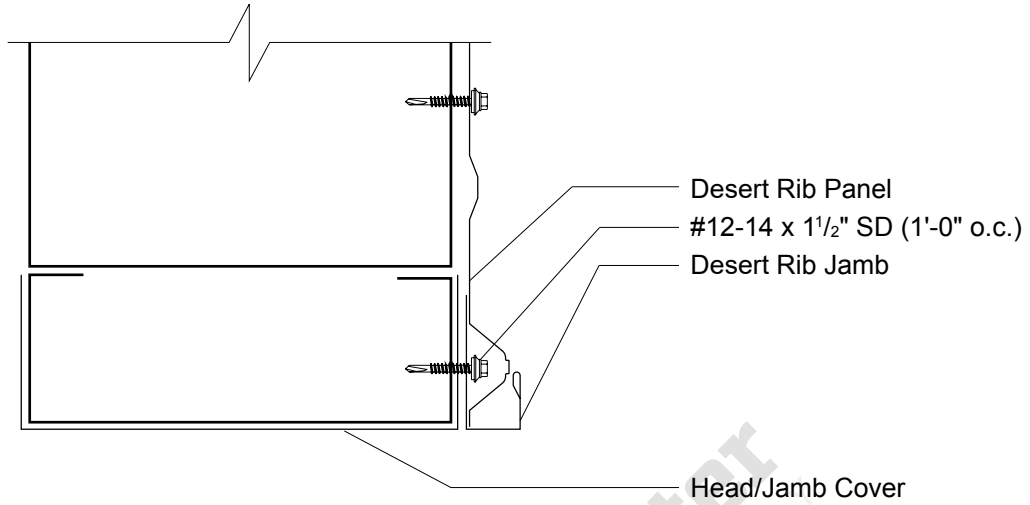


- Fastener (by others)
- Tape Sealant
- Gravel Stop
- Desert Rib Outside Closure Tape
- Sealant
- 1/4"14 x 7/8" Stitch Screw (every rib)
- #12-14 x 1 1/2" SD (see below)
- Desert Rib Panel

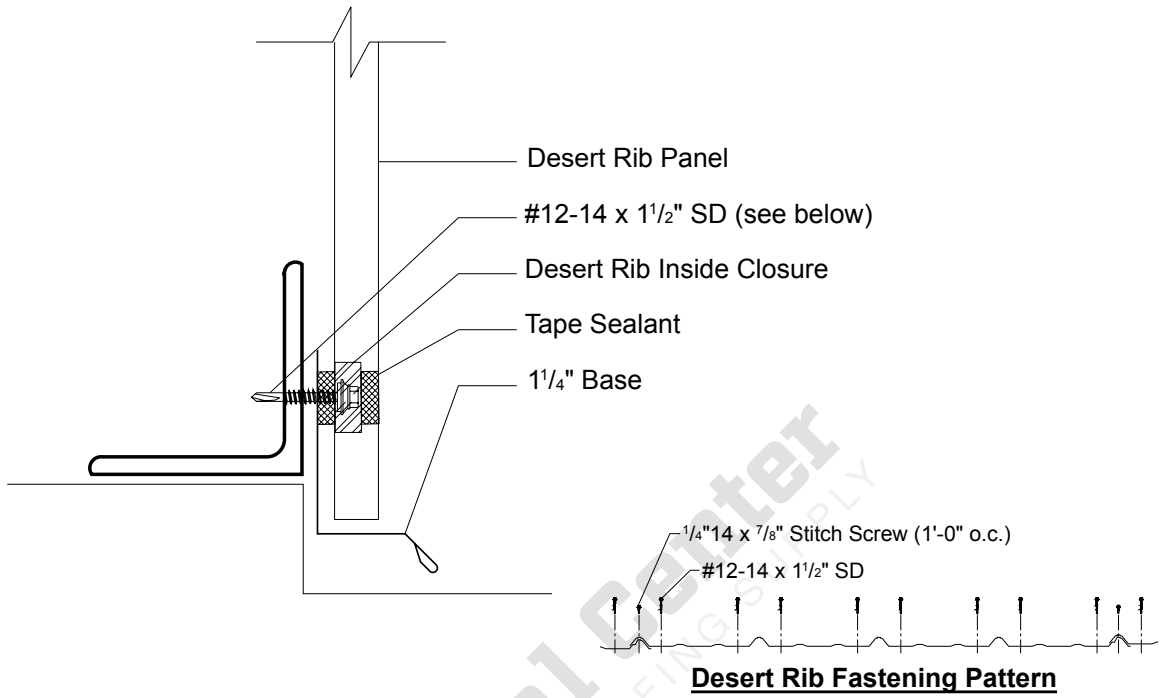


Desert Rib Fastening Pattern





Desert Rib Fastening Pattern



DESERT RIB

NOTES