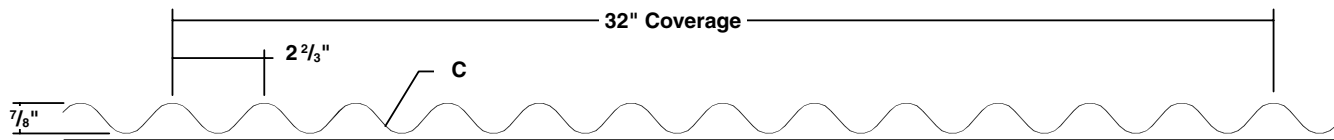


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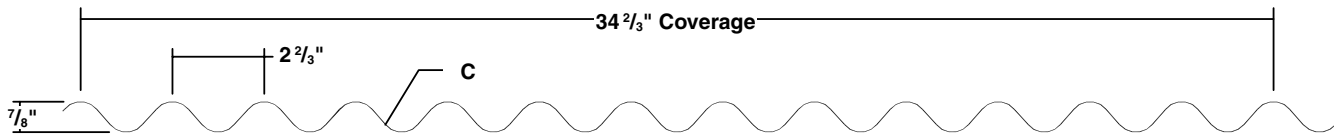
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# 7/8" CORRUGATED PANEL OVERVIEW

## ROOF PANEL PROFILE



## WALL PANEL PROFILE



## SLOPE

The minimum recommended slope for any 7/8" Corrugated panel roofing panel is 1:12.

## SUBSTRATE

7/8" Corrugated panel is designed to be utilized over open structural framing, but can easily be used with a solid substrate. For solid substrate applications, the recommended substrate is 3/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

## COVERAGE

7/8" Corrugated panel roof coverage is 32", and wall coverage is 34<sup>2</sup>/<sub>3</sub>".

## 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 3 for locations).

## AVAILABILITY

Panels are available in 26, 24, 22 Gauge. 20 Gauge optional. Minimum quantity may apply.

## APPLICATION

Commercial, Industrial panel.

## FASTENING SYSTEM

Direct fastened (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

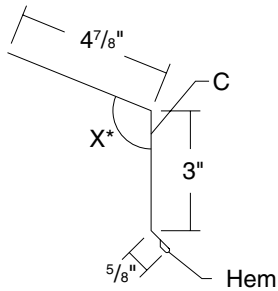
Steel grade 50 for 26, 24, and 22 Gauge. Steel Grade 33 for 20 Gauge, per ASTM A-792.

## FINISH

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

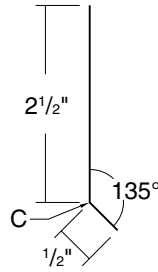
**7/8" CORRUGATED FLASHING PROFILES**

**EAVE**



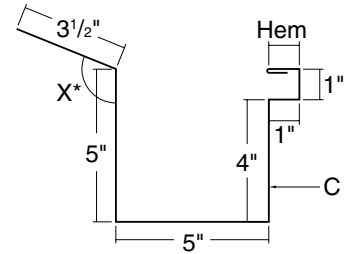
Length 10'-2" - \*Specify Slope Angle

**CLEAT**



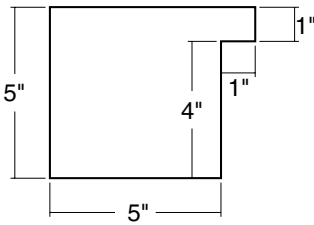
Length 10'-2"

**BOX GUTTER**

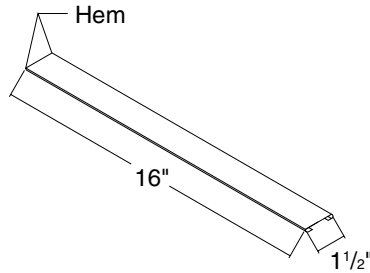


Length 10'-2", 20'-3" - \*Specify Slope Angle

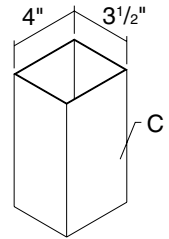
**BOX GUTTER END**



**UNIVERSAL GUTTER/ DOWNSPOUT STRAP**

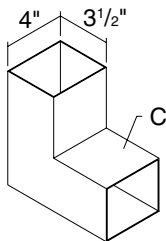


**DOWNSPOUT 4" x 3 1/2"**



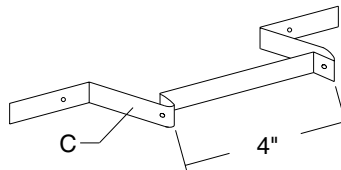
Length 10'-2", 20'-3"  
(Also available 6" x 4")

**95° ELBOW 4" x 3 1/2"**



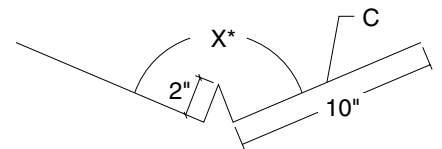
(Also available 6" x 4")  
(Also available in 45°)

**DOWNSPOUT BRACKET**



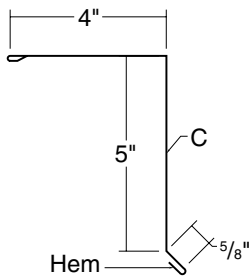
(Also available 6")

**VALLEY**



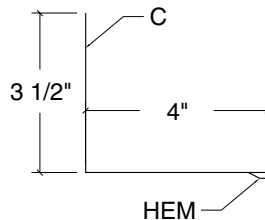
Length 10'-2", 20'-3" - \*Specify Slope Angle

**RAKE**



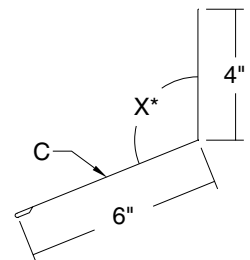
Length 10'-2", 20'-3"

**RAKEWALL**



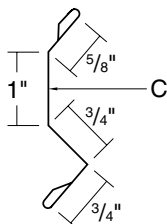
LENGTH 10'-2", 20'-3"

**PITCH BREAK**



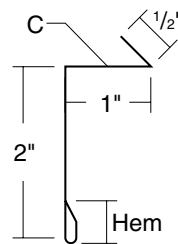
Length 10'-2" - \*Specify Slope Angle

**COUNTER FLASHING**



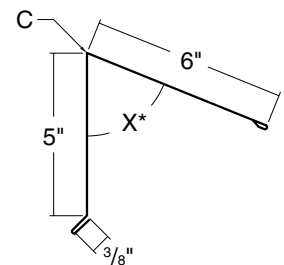
Length 10'-2"

**REGLET FLASHING**



Length 10'-2"

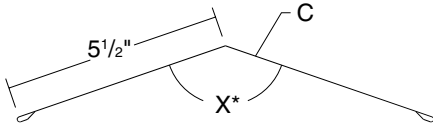
**PEAK**



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

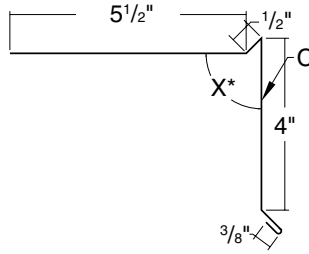
**7/8" CORRUGATED FLASHING PROFILES (CONT.)**

**11" RIDGE/HIP COVER**



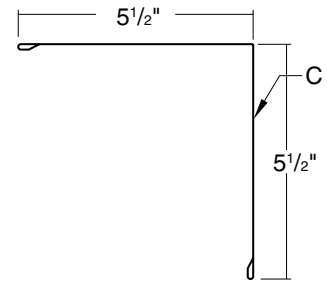
Length 10'-2", 20'-3" - \*Specify Slope Angle

**GRAVEL STOP**



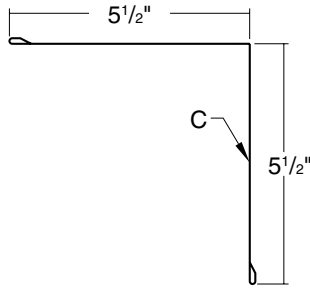
Length 10'-2", 20'-3" - \*Specify Slope Angle

**OUTSIDE CORNER**



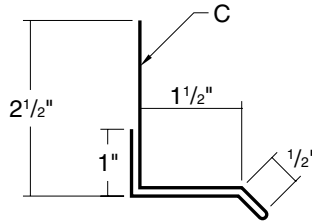
Length 10'-2", 20'-3"

**INSIDE CORNER**



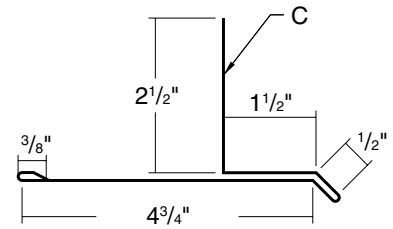
Length 10'-2", 20'-3"

**1.5" SILL/HEAD**



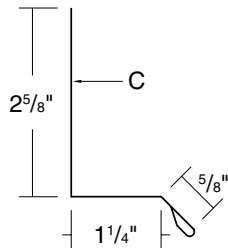
Length 10'-2"

**1.5" SILL TO SOFFIT**



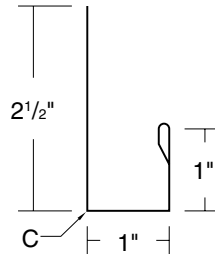
Length 10'-2"

**1.25" BASE**



Length 10'-2"

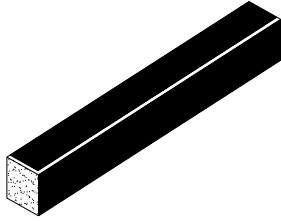
**JAMB**



Length 10'-2"

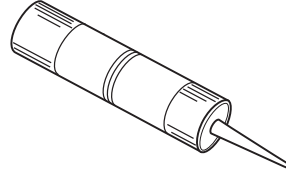
C- Indicates color side of flashing.

**UNIVERSAL CLOSURE**



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

**TUBE SEALANT**



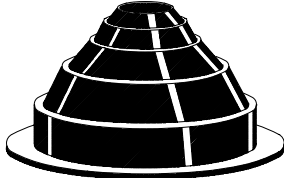
10.3 oz. Cartridge Urethane

**TAPE SEALANT**



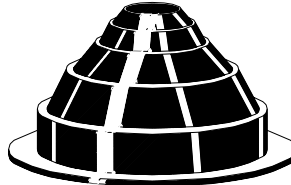
3/8" X 3/32" X 50'  
Single Bead Butyl - Gray

**RUBBER ROOF JACK**



MINI (1/4" to 1 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**



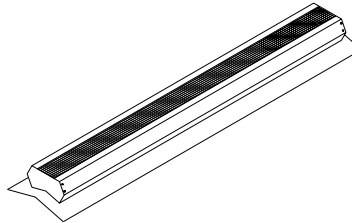
12" x 50'-0" Flash Kit  
18" x 50'-0" Flash Kit

**TOUCH-UP PAINT**



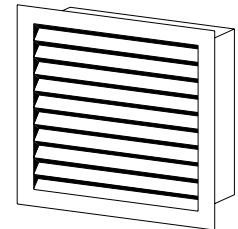
Available in pints  
PVDF / MS CF30

**CONTINUOUS RIDGE VENT**



9" X 10'-0"  
12" X 10'-0"

**LOUVER WITH SCREEN**

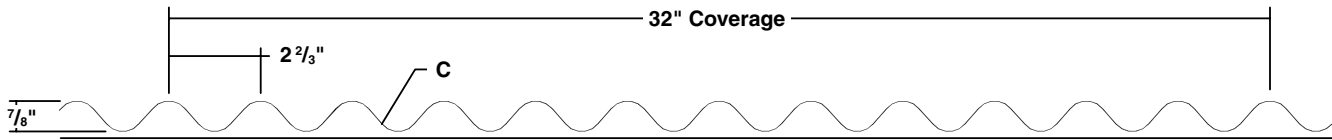


3'-0" X 3'-0"  
3'-0" X 4'-0"

**CORRUGATED CLOSURE**



Polyethylene Foam



**7/8" CORRUGATED (ROOFING) SECTION PROPERTIES**

GAUGE	WIDTH (in)	YEILD KSI	WEIGHT PSF	TOP IN COMPRESSION <sup>1</sup>			BOTTOM IN COMPRESSION <sup>1</sup>		
				Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ma (k-in)	Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ma (k-in)
26	32"	50	1.08	0.0259	0.0599	1.79	0.0259	0.0599	1.79
24	32"	50	1.40	0.0337	0.0777	2.33	0.0337	0.0777	2.33
22	32"	50	1.80	0.0412	0.0994	2.98	0.0412	0.0994	2.98
20	32"	33	2.10	0.0487	0.1151	2.27	0.0487	0.1151	2.27

**ALLOWABLE UNIFORM LIVE LOADS PSF<sup>1,2,3,4</sup>**

1-Span			Inward (Gravity / Deflection) Load <sup>2,4</sup>						Outward Uplift (Stress) Load <sup>3</sup>					
GA.	Width	Ksi	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	32"	50	283	84	35	18	10	7	399	177	100	64	44	33
24	32"	50	369	109	46	24	14	9	517	230	129	83	57	42
22	32"	50	451	134	56	29	17	11	661	294	165	106	73	54
20	32"	33	379	158	67	34	20	12	506	225	126	81	56	41

2-Equal Spans			Inward (Gravity / Deflection) Load <sup>2,4</sup>						Outward Uplift (Stress) Load <sup>3</sup>					
GA.	Width	Ksi	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	32"	50	292	131	74	44	25	16	390	175	99	64	44	32
24	32"	50	375	170	96	57	33	21	500	226	128	82	57	42
22	32"	50	480	217	123	69	40	25	640	290	164	105	73	54
20	32"	33	369	166	94	60	42	30	492	222	126	81	56	41


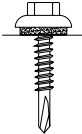
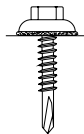
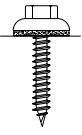
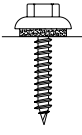
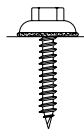
3 or more-Equal Spans			Inward (Gravity / Deflection) Load <sup>2,4</sup>						Outward Uplift (Stress) Load <sup>3</sup>					
GA.	Width	Ksi	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	32"	50	339	153	71	36	21	13	452	204	115	74	52	38
24	32"	50	434	197	92	47	27	17	579	263	149	96	67	49
22	32"	50	555	252	113	58	33	21	740	336	191	123	85	63
20	32"	33	428	194	110	68	40	25	570	258	146	94	65	48

- 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.

	<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.
<b>SELF DRILLER</b>			
<b>WOODSCREW</b>			

**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.

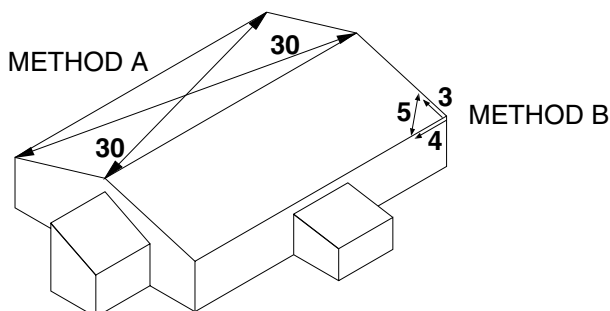
**CONDITION OF SUBSTRUCTURE**

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

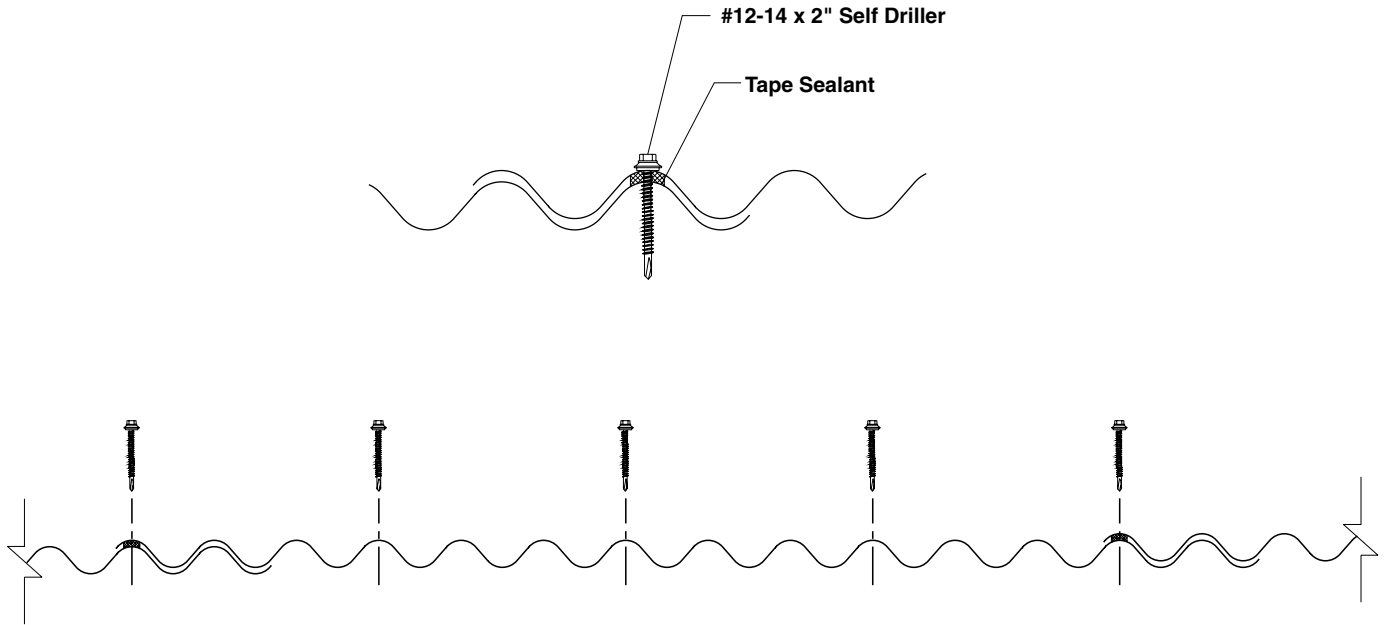
The installer should check the roof deck for squareness before installing Corrugated panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

**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.

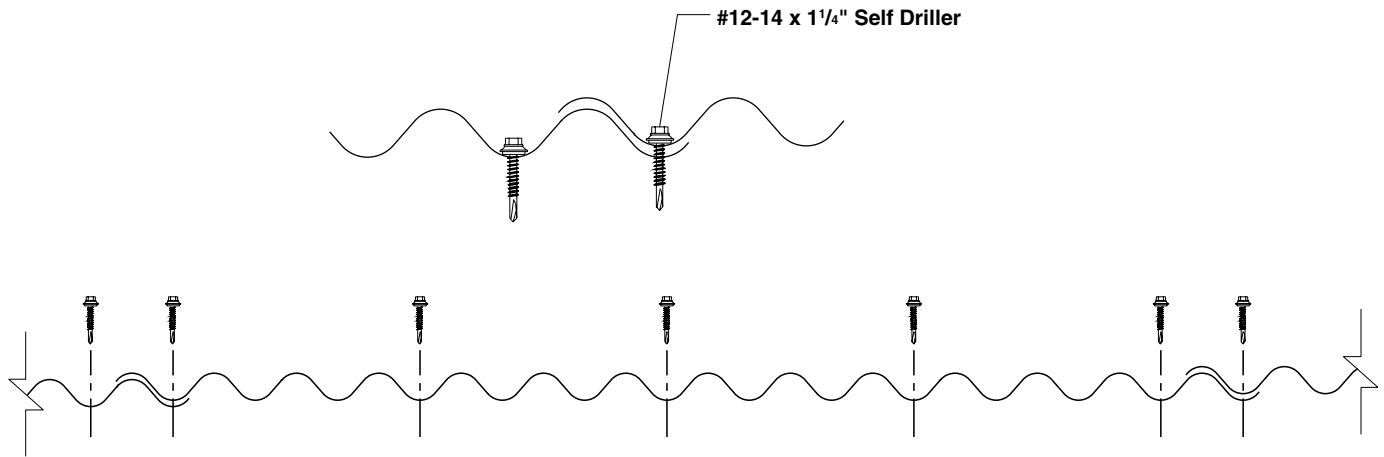
**METHOD "B"** - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established,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



**ROOF PANEL FASTENING PATTERN**



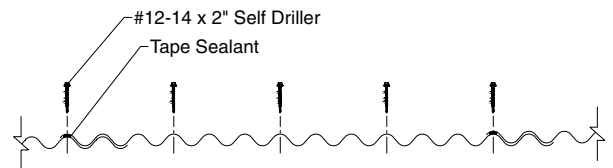
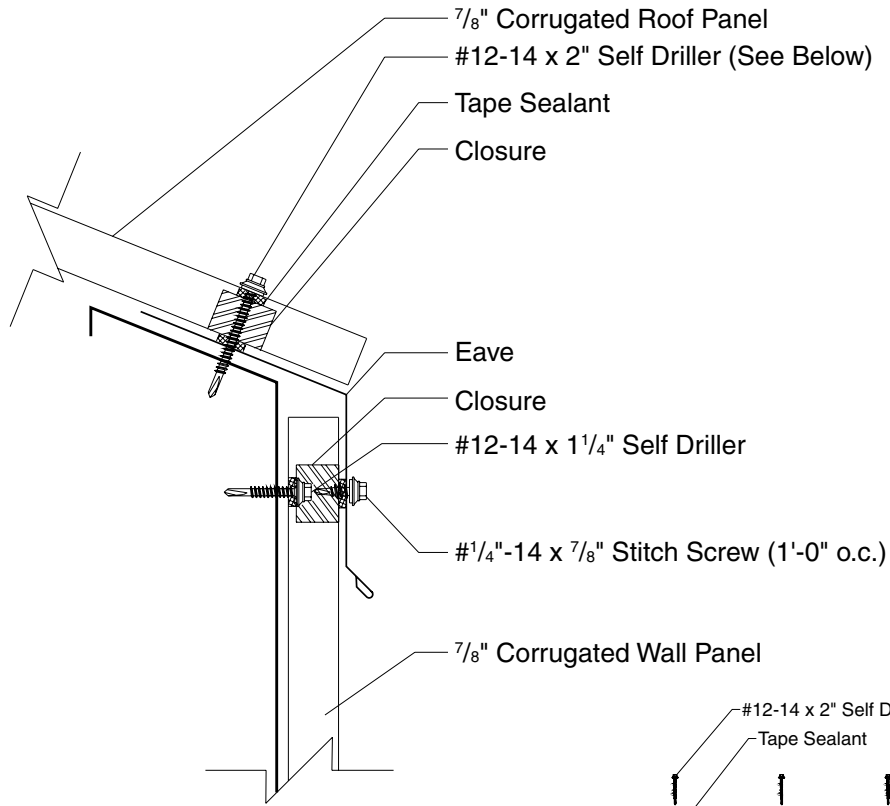
**WALL PANEL FASTENING PATTERN**





**7/8" CORRUGATED EAVE DETAIL**

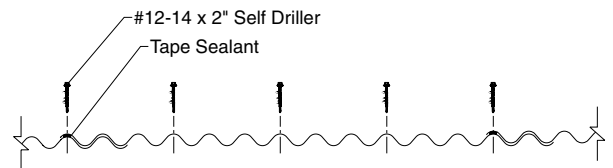
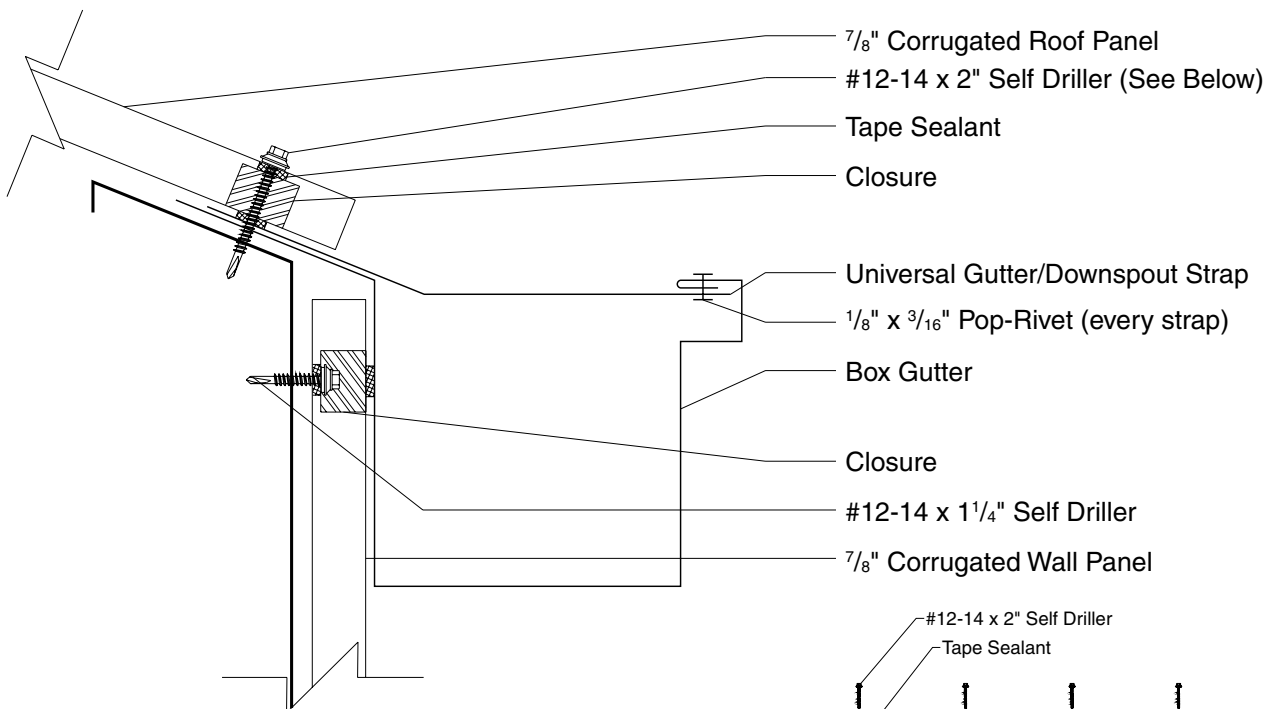
**1:12 Slope  
Minimum**



**7/8" Corrugated Roof Fastening Pattern**

**7/8" CORRUGATED BOX GUTTER DETAIL**

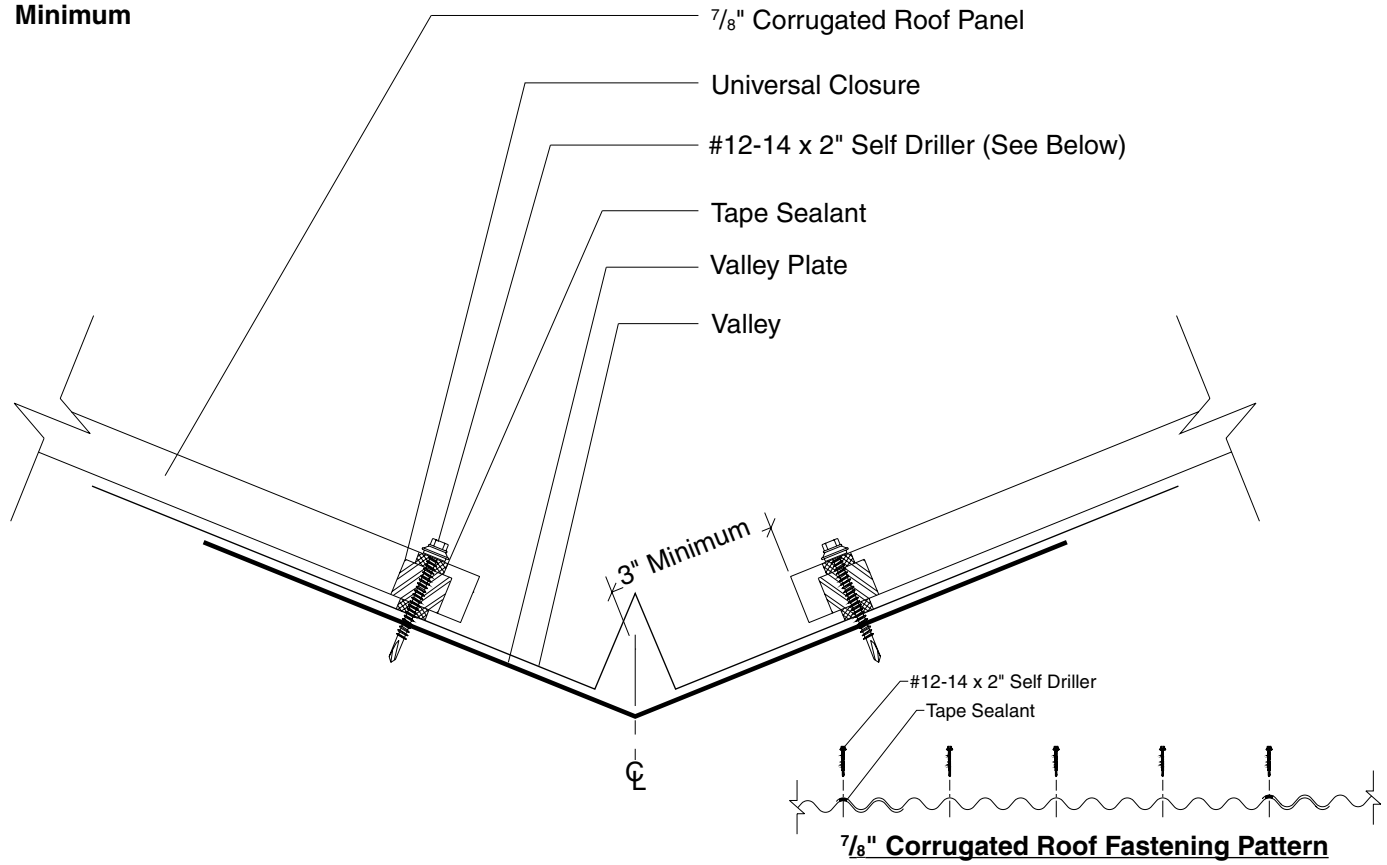
**1:12 Slope  
Minimum**



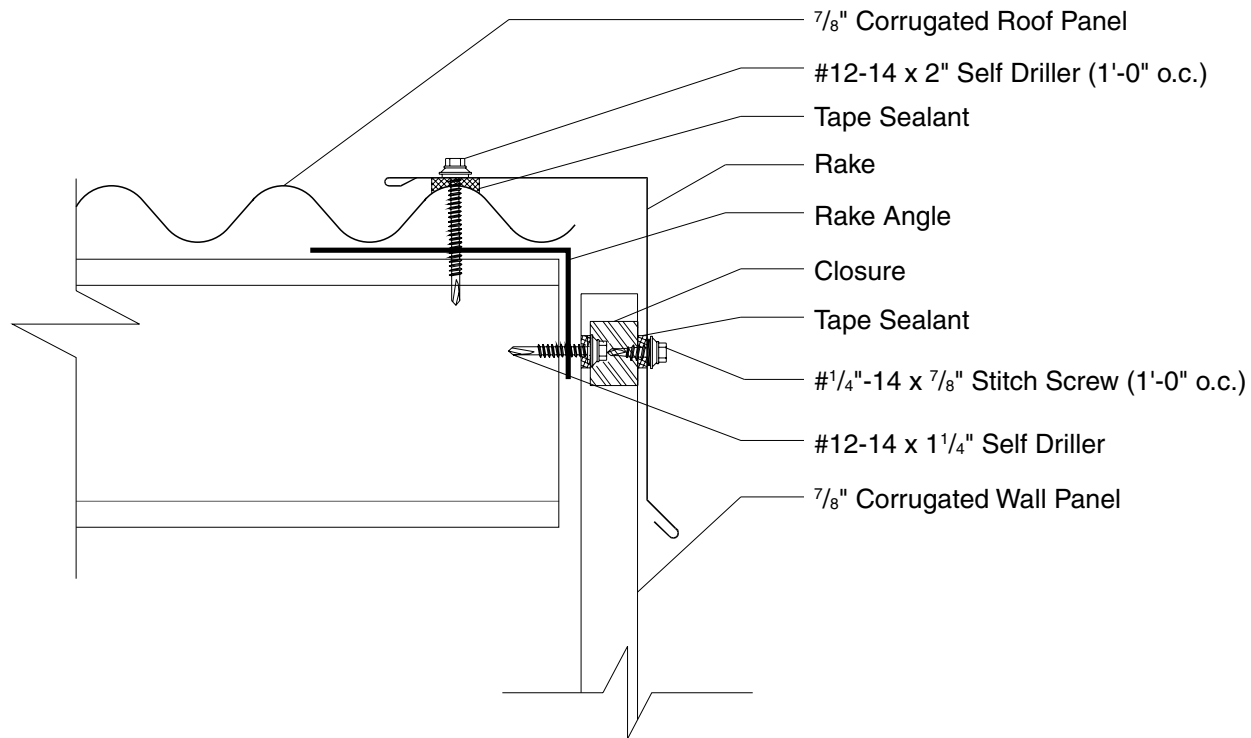
**7/8" Corrugated Roof Fastening Pattern**

**7/8" CORRUGATED VALLEY DETAIL**

**1:12 Slope  
Minimum**

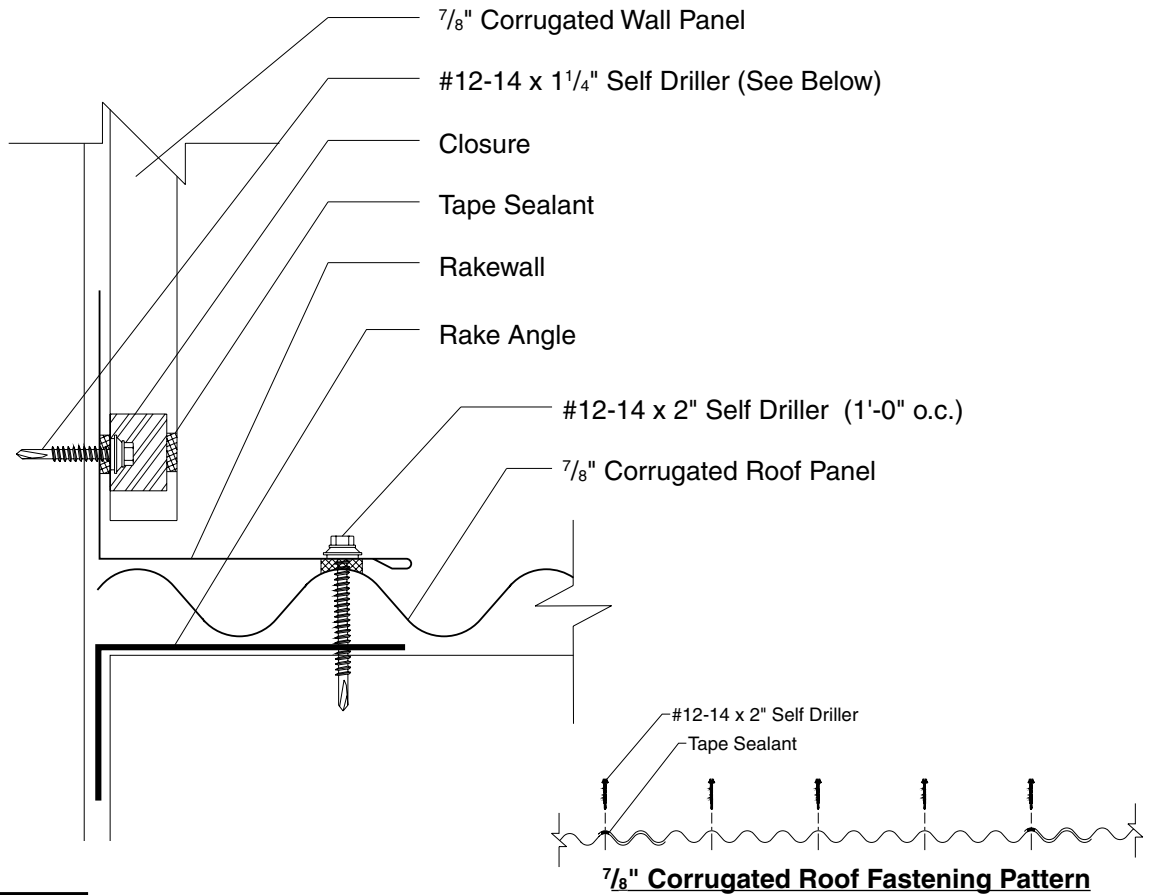


**7/8" CORRUGATED RAKE DETAIL**



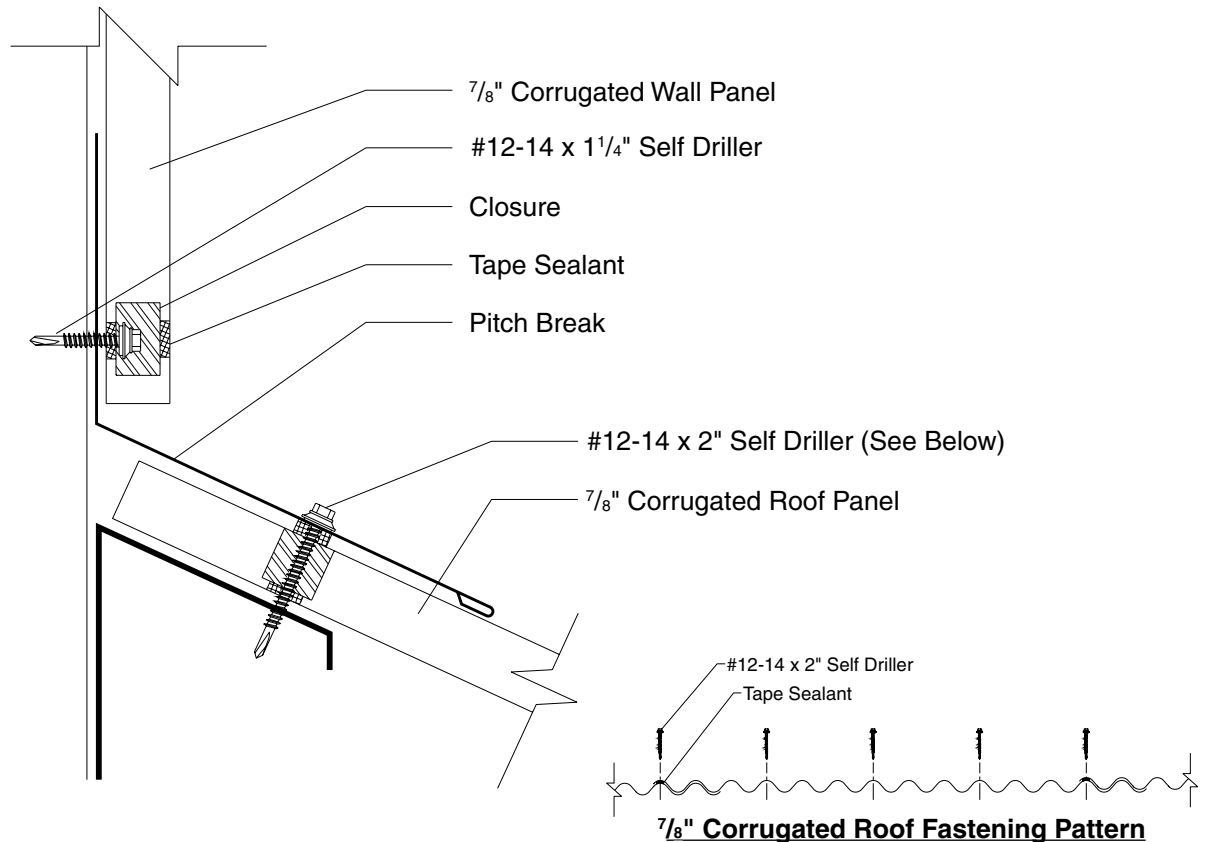
# 7/8" CORRUGATED RAKEWALL WITH WALL PANEL DETAIL

1:12 Slope  
Minimum



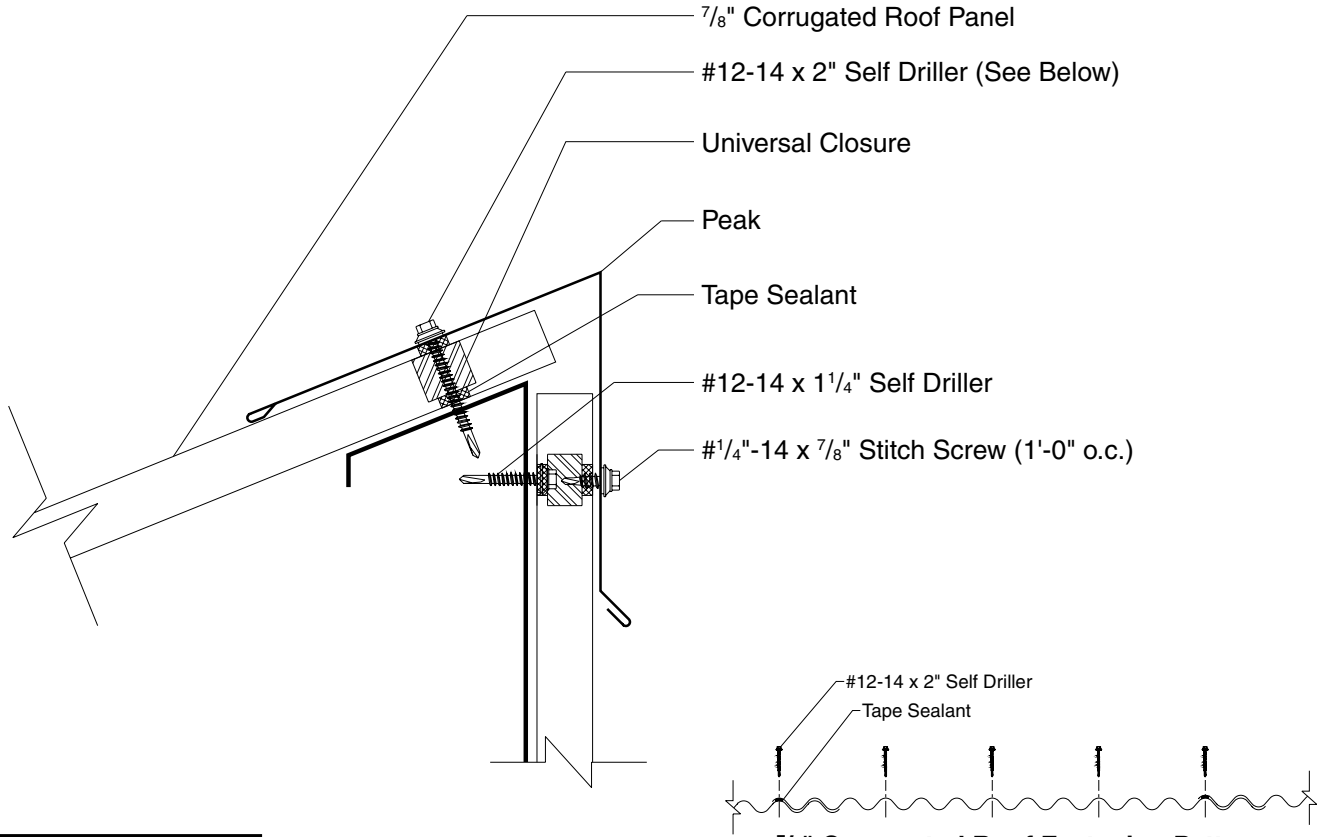
# 7/8" CORRUGATED ENDWALL WITH WALL PANEL DETAIL

1:12 Slope  
Minimum



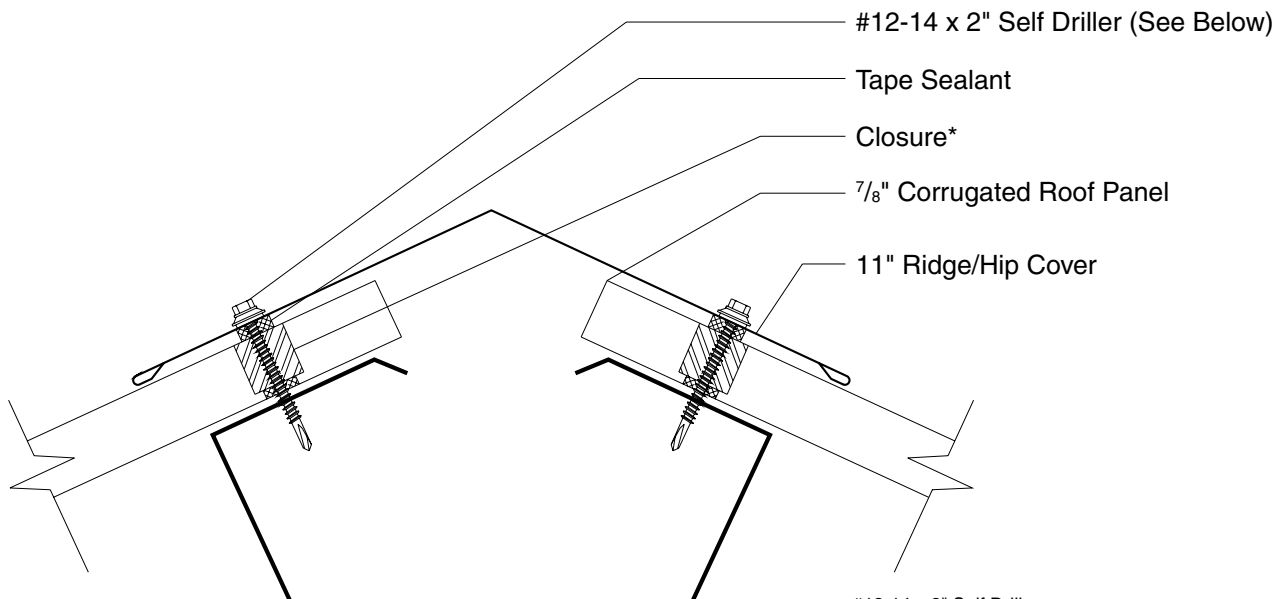
**7/8" CORRUGATED PEAK DETAIL**

1:12 Slope  
Minimum

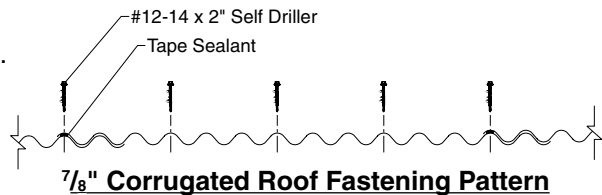


**7/8" CORRUGATED RIDGE/HIP DETAIL**

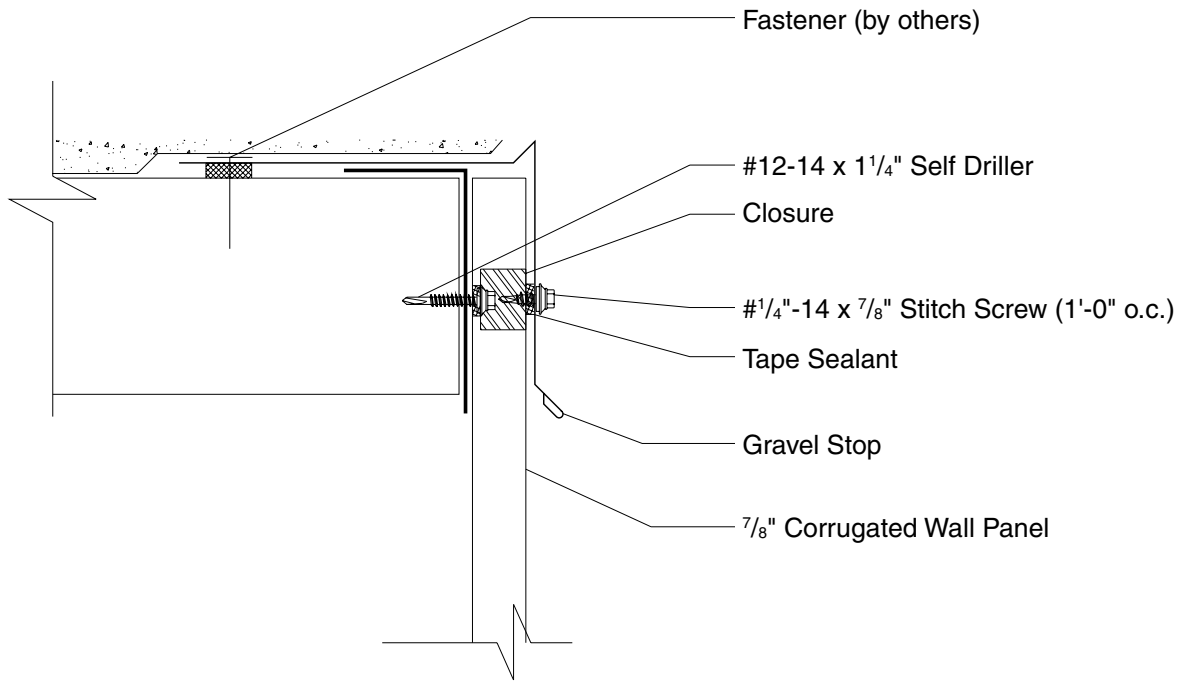
1:12 Slope  
Minimum



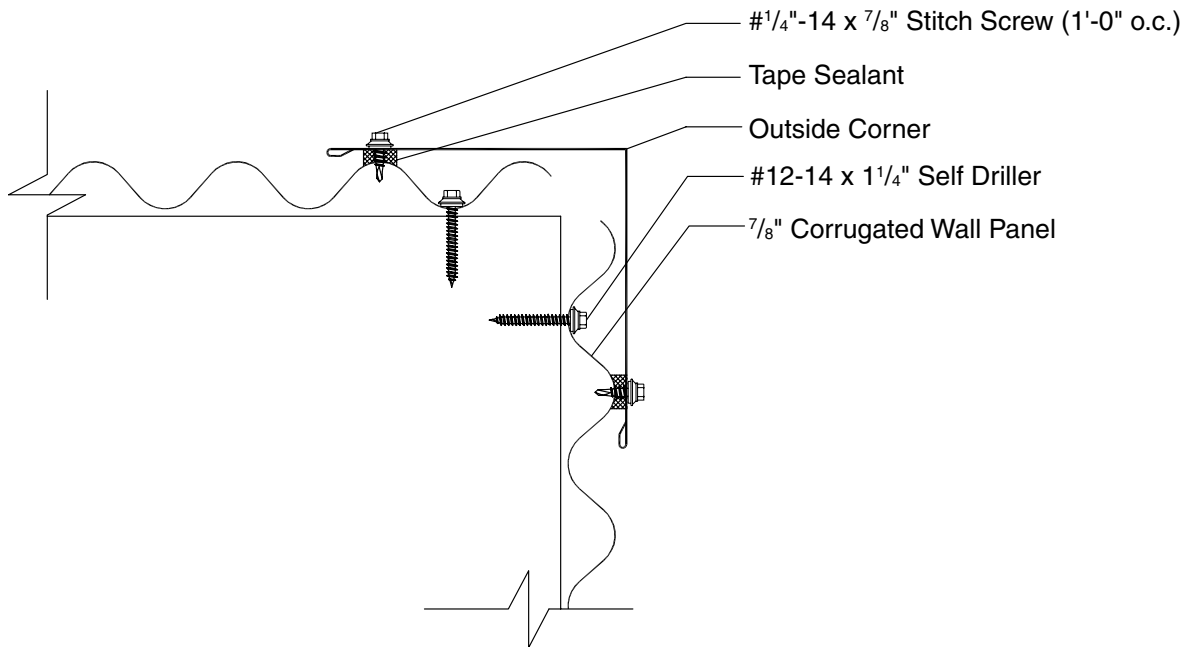
\* Standard Formed Closure for ridge.  
Universal Closure for hip.



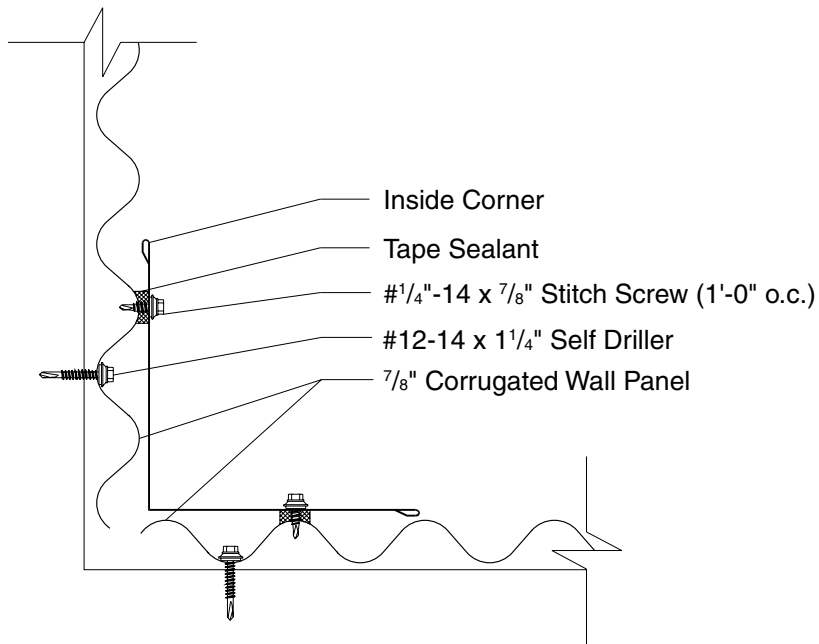
**7/8" CORRUGATED GRAVEL STOP DETAIL**



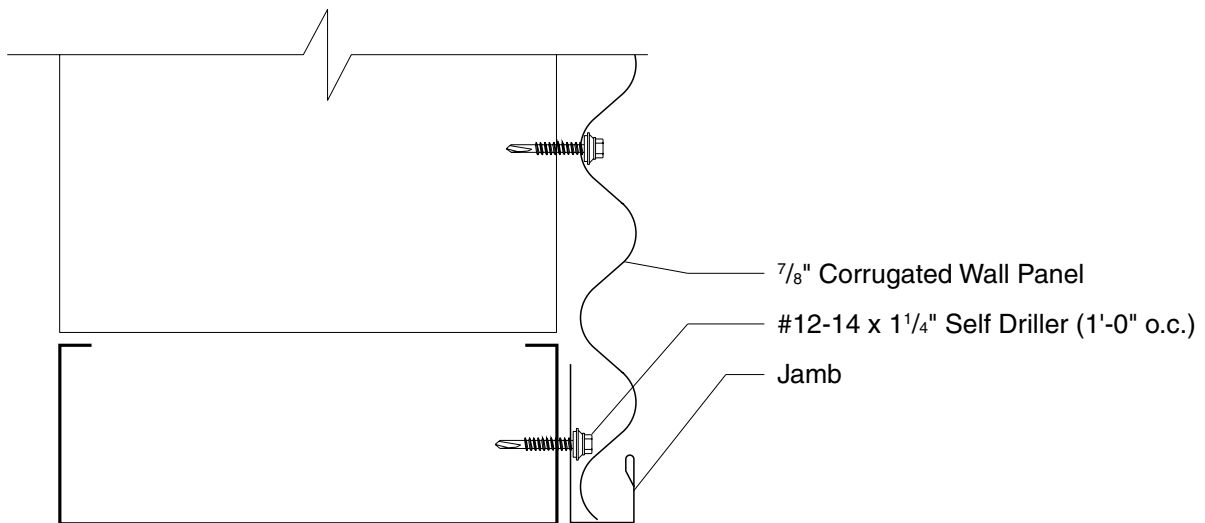
**7/8" CORRUGATED OUTSIDE CORNER DETAIL**



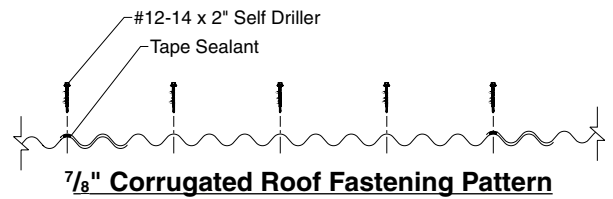
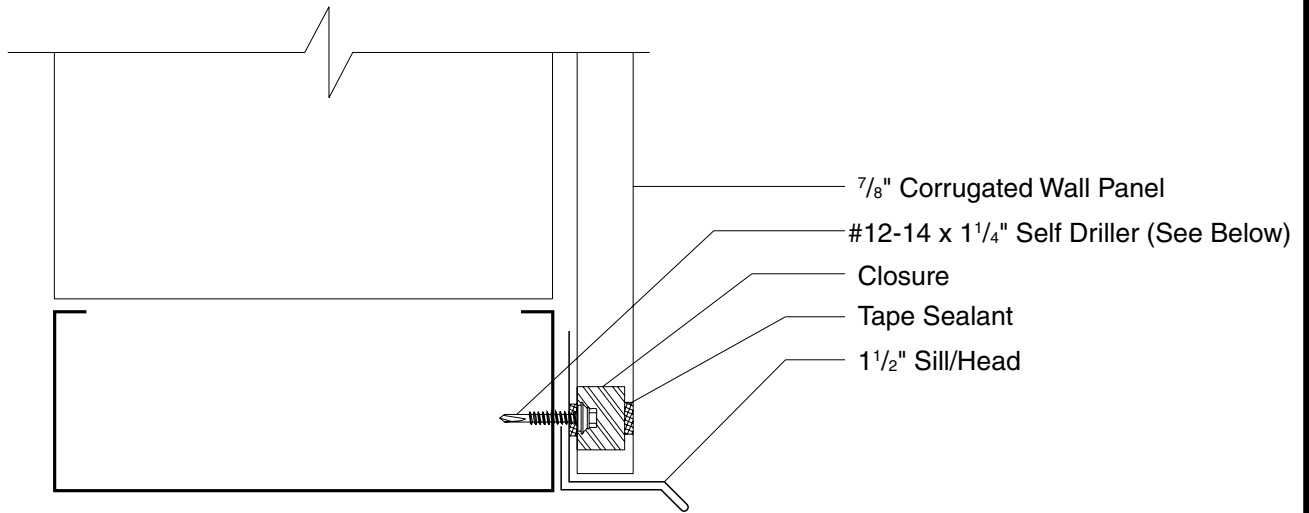
**7/8" CORRUGATED INSIDE CORNER DETAIL**



**7/8" CORRUGATED JAMB DETAIL**



**7/8" CORRUGATED SILL/HEAD DETAIL**



**7/8" CORRUGATED BASE DETAIL**

