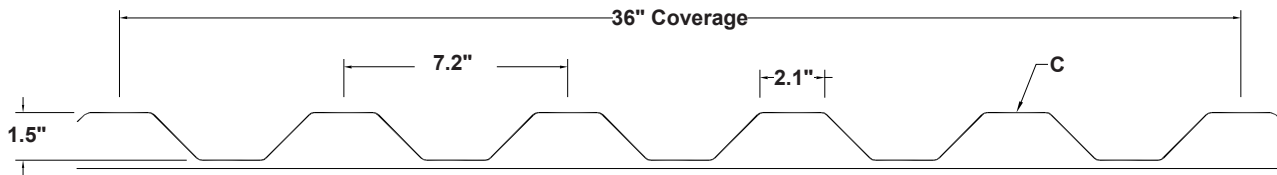


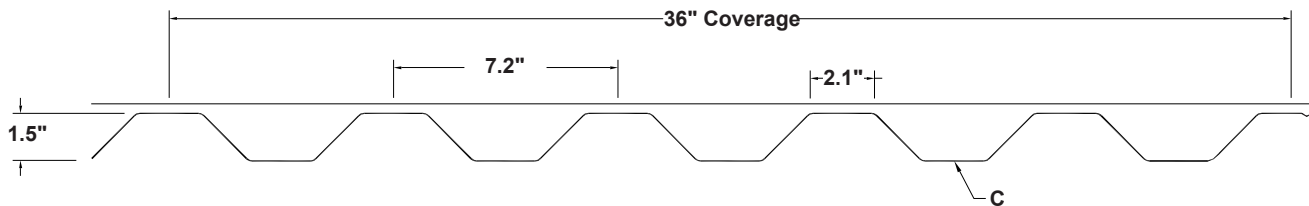
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**ROOF PROFILE**



**WALL PROFILE**



**SLOPE**

The minimum recommended slope for IC72-Panel roof panel is 1:12.

**SUBSTRATE**

IC72-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 <sup>5</sup>/<sub>8</sub>" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure.

**COVERAGE**

IC72-Panel has a coverage of 36" with a 1½" 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**

26, 24 and 22 Gauge (minimum quantities may apply)

**APPLICATION**

Commercial and 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 through PGI-14).

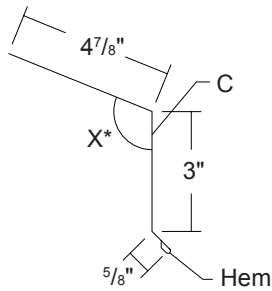
**MATERIALS**

26, 24 and 22 gauge steel: Grade 50 per ASTM A 792

**FINISH**

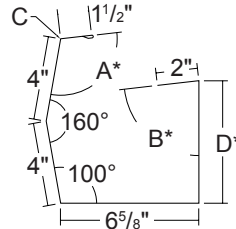
- ▶ \*Acrylic-Coated Galvalume® (ACG), AZ55 per ASTM A 792
- ▶ Prepainted Galvalume®, AZ50 per ASTM A 792
- ▶ \*\*PVDF
  - \* Differential appearance of Acrylic Coated Galvalume® roofing materials is not a cause for rejection.
  - \*\* Meets both Kynar 500® and Hylar 5000® specifications.

**EAVE**



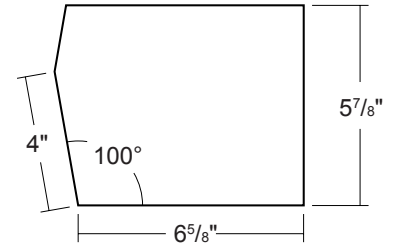
Length 10'-2" - \*Specify Slope Angle

**IC72-PANEL SCULPTURED GUTTER**

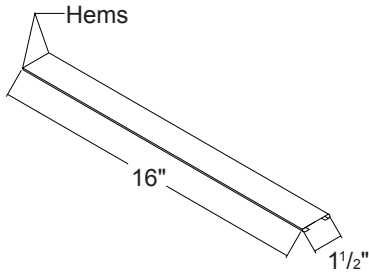


Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle For A and B, and Length for D.

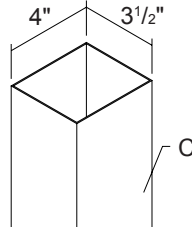
**IC72-PANEL SCULPTURED GUTTER END**



**UNIVERSAL GUTTER/ DOWNSPOUT STRAP**

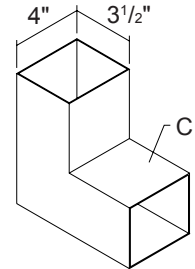


**4" x 3 1/2" DOWNSPOUT**



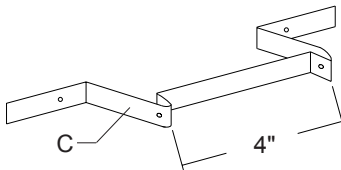
Lengths 10'-2" and 20'-3"  
(6" x 4" is also available)

**4" x 3 1/2" 95° ELBOW**



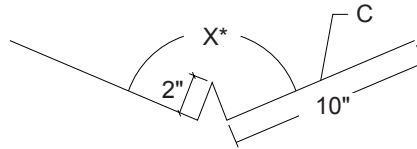
(6" x 4" is also available)

**DOWNSPOUT BRACKET**



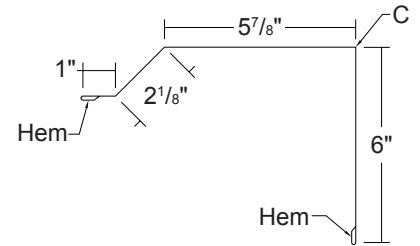
(6" is also available)

**VALLEY**



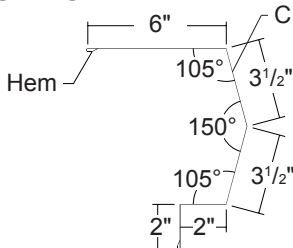
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

**IC72-PANEL RAKE**



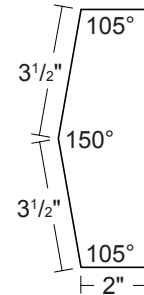
Lengths 10'-2" and 20'-3"

**IC72-PANEL SCULPTURED RAKE**

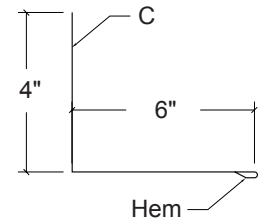


Lengths 10'-2" and 20'-3"

**SCULPTURED RAKE END**

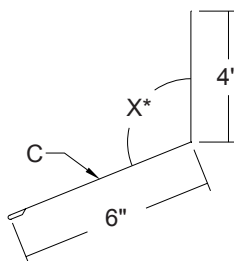


**RAKEWALL**



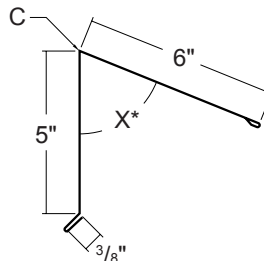
Length 10'-2"

**PITCH BREAK**



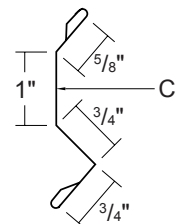
Length 10'-2" - \*Specify Slope Angle

**PEAK**



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

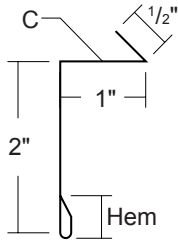
**COUNTER FLASHING**



Length 10'-2"

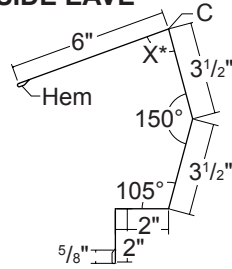
# IC72-PANEL FLASHING PROFILES (CONT.)

## REGLET FLASHING



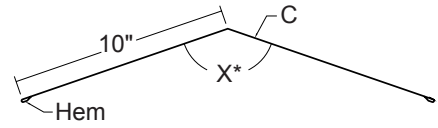
Length 10'-2"

## SCULPTURED HIGH SIDE EAVE



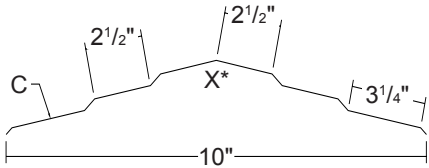
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

## 20" RIDGE/HIP COVER



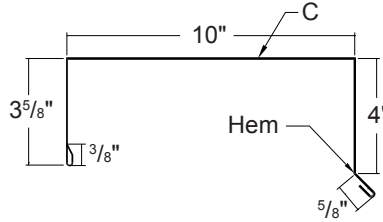
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

## UNIVERSAL RIDGE



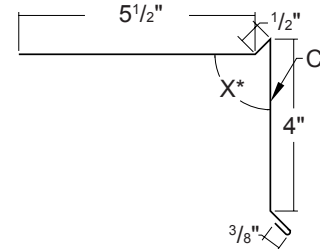
Length 10'-2" - \*Specify Slope Angle

## COPING



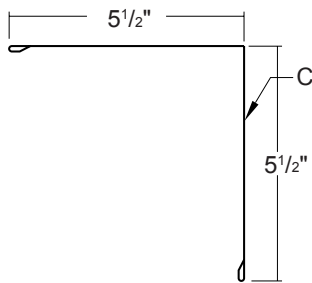
Lengths 10'-2" and 20'-3"

## GRAVEL STOP



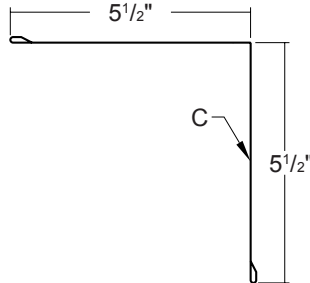
Lengths 10'-2" and 20'-3"  
\*Specify Slope Angle

## OUTSIDE CORNER



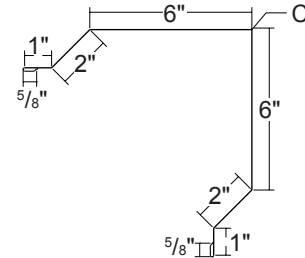
Lengths 10'-2" and 20'-3"

## INSIDE CORNER



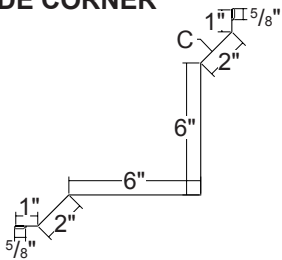
Lengths 10'-2" and 20'-3"

## IC72-PANEL OUTSIDE CORNER



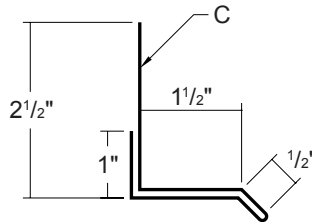
Lengths 10'-2", 14'-2" and 20'-3"

## IC72-PANEL INSIDE CORNER



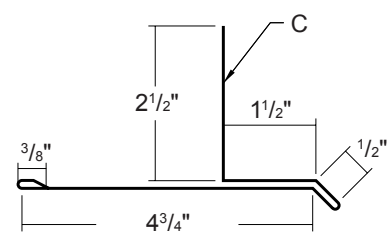
Lengths 10'-2", 14'-2" and 20'-3"

## 1.5" SILL/HEAD



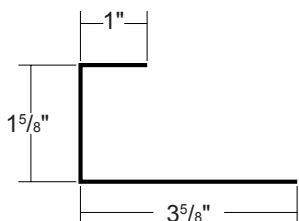
Length 10'-2"

## 1.5" SILL TO SOFFIT



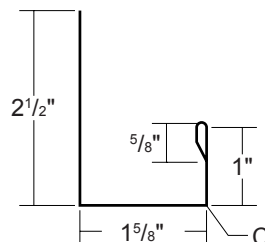
Length 10'-2"

## IC72-PANEL C-CLOSURE



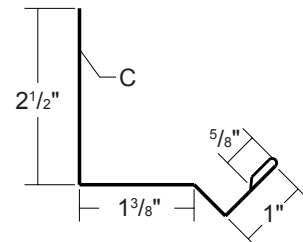
Length 10'-2"

## IC72-PANEL JAMB



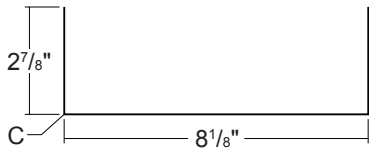
Lengths 7'-3", 10'-2" and 14'-2"

## HEAD CHANNEL



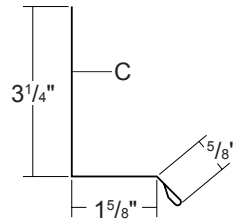
Length 10'-2"

**HEAD/JAMB COVER**



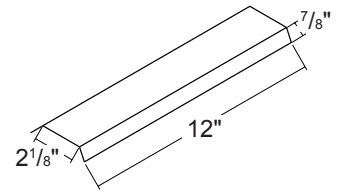
Lengths 10'-2" and 14'-2"

**BASE**



Length 10'-2"

**IC72-PANEL GUTTER HANGER**

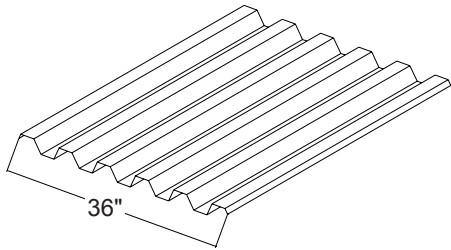


Length 1'-0"

**IC72-PANEL**

**ACCESSORY PROFILES**

**IC72-PANEL LIGHT TRANSMITTING PANEL**

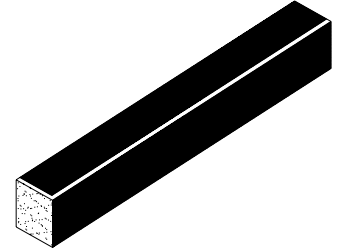


**IC72-PANEL CLOSURES**



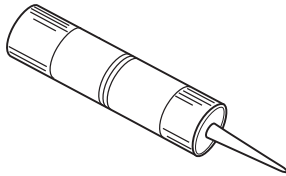
Inside and Outside Polyethylene Foam

**UNIVERSAL CLOSURE**



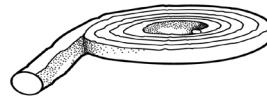
1" x 1 1/2" x 50' Polyethylene Foam  
1" x 1 1/2" x 10' Polyethylene Foam

**TUBE SEALANT**



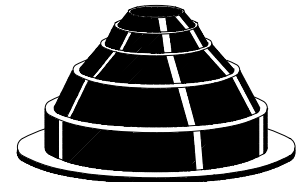
10.3 oz. Cartridge Urethane

**TAPE SEALANT**



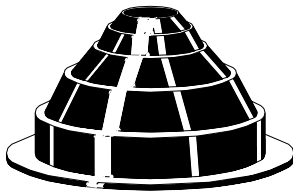
3/8" X 3/32" X 50'  
Single Bead Tape Sealant  
Butyl - Gray

**RUBBER ROOF JACK**



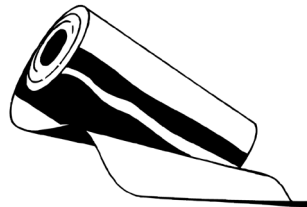
Mini (1/4" to 1 1/8" O.D. Pipe)  
#2 (1 3/4" to 3" O.D. Pipe)  
#4 (3" to 6" O.D. Pipe)  
#6 (6" to 9" O.D. Pipe)  
#8 (7" to 13" O.D. Pipe)

**RETRO ROOF JACK**



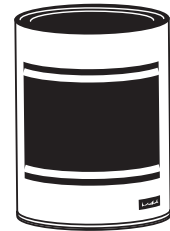
#801<sub>RETRO</sub> (3/4" to 2 3/4" O.D. Pipe)  
#802<sub>RETRO</sub> (2" to 7 1/4" O.D. Pipe)  
#803<sub>RETRO</sub> (3 1/4" to 10" O.D. Pipe)

**RUBBER ROOF FLASH KIT**



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

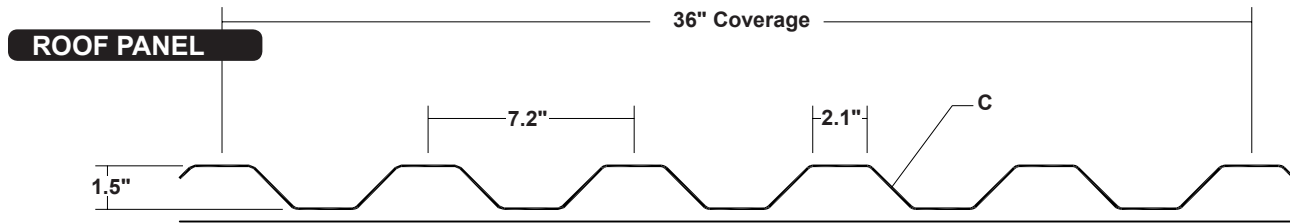
**TOUCH-UP PAINT**



Available in 2 oz Bottles  
PVDF / MS Colorfast45®

C- Indicates color side of flashing.

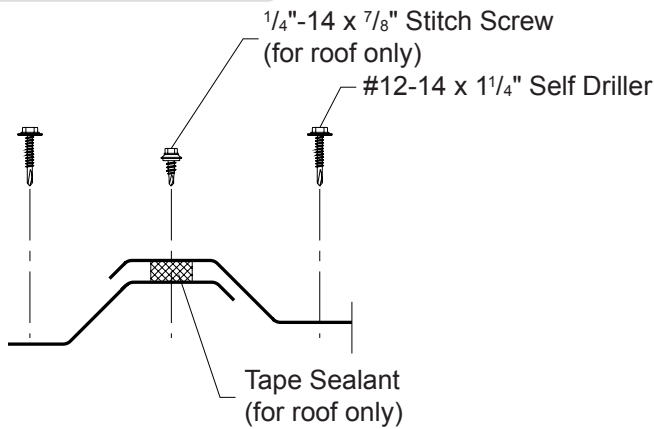
# IC72-PANEL SECTION PROPERTIES AND GENERAL INFORMATION



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	5'	6'	7'	8'	9'	10'	5'	6'	7'	8'	9'	10'
26	36	50	0.88	0.0706	0.0817	0.0653	0.0663	58	41	31	24	19	15	70	50	37	29	22	16
24	36	50	1.15	0.1000	0.1208	0.0987	0.1076	97	68	50	39	29	21	108	76	56	42	29	21
22	36	50	1.51	0.1408	0.1757	0.1391	0.1557	142	100	73	54	38	28	160	112	82	55	38	28

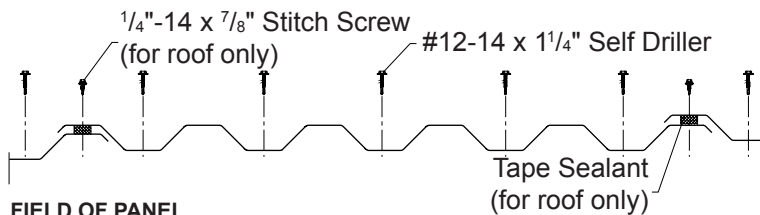
- Theoretical section properties have been calculated per AISI 2012 "Specifications for the Design of Cold-formed Steel Structural Members." Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2012 specifications considering 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.

## ATTACHMENT DETAIL

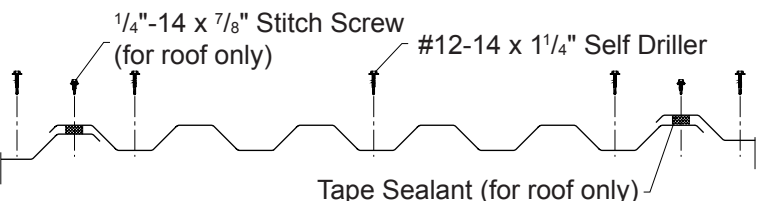


## FASTENING PATTERNS

### ENDS OF PANEL



### FIELD OF PANEL



## GENERAL INFORMATION

### ► Slope

The minimum recommended slope for IC72-Panel is 1:12. Metal Sales recommends that in all roof applications sealants be used on all sidelaps with stitch screw 1'-0" on center.

### ► Substructure

IC72-Panel 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

IC72-Panel is available in a 1 1/2" rib height with a 36" width coverage.

### ► 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.*

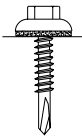
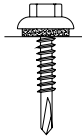
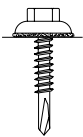
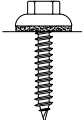
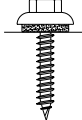
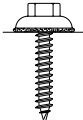
### ► Availability

Finishes: Acrylic-Coated Galvalume® and PVDF  
Gauges: 26 ga, 24 ga and 22 ga

**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.

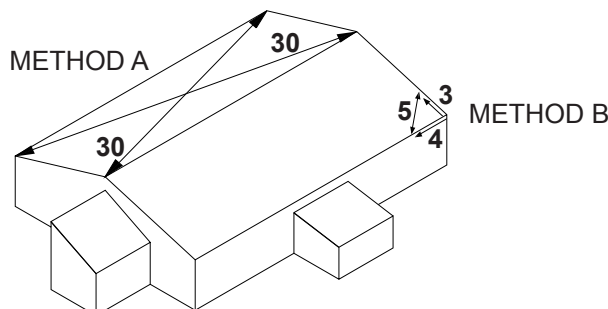
**CONDITION OF SUBSTRUCTURE**

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 IC72-Panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

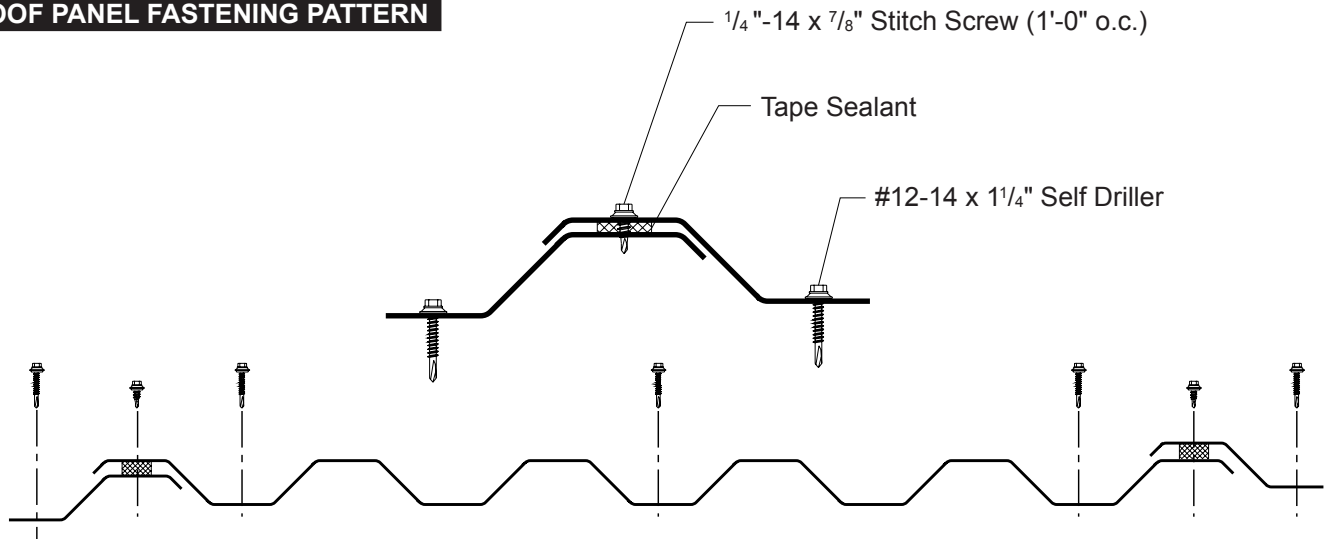
**METHOD "A"** - One method for checking the roof for squareness is to measure diagonally across one slope of the roof from similar points at the ridge and eave and obtain the same dimension.

**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.

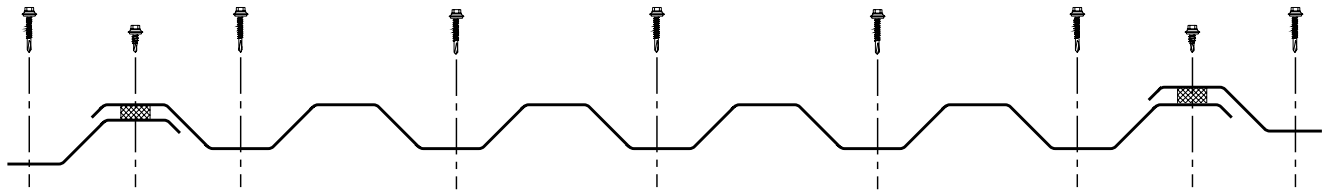


# IC72-PANEL DESIGN / INSTALLATION CONSIDERATIONS (CONT.)

## ROOF PANEL FASTENING PATTERN

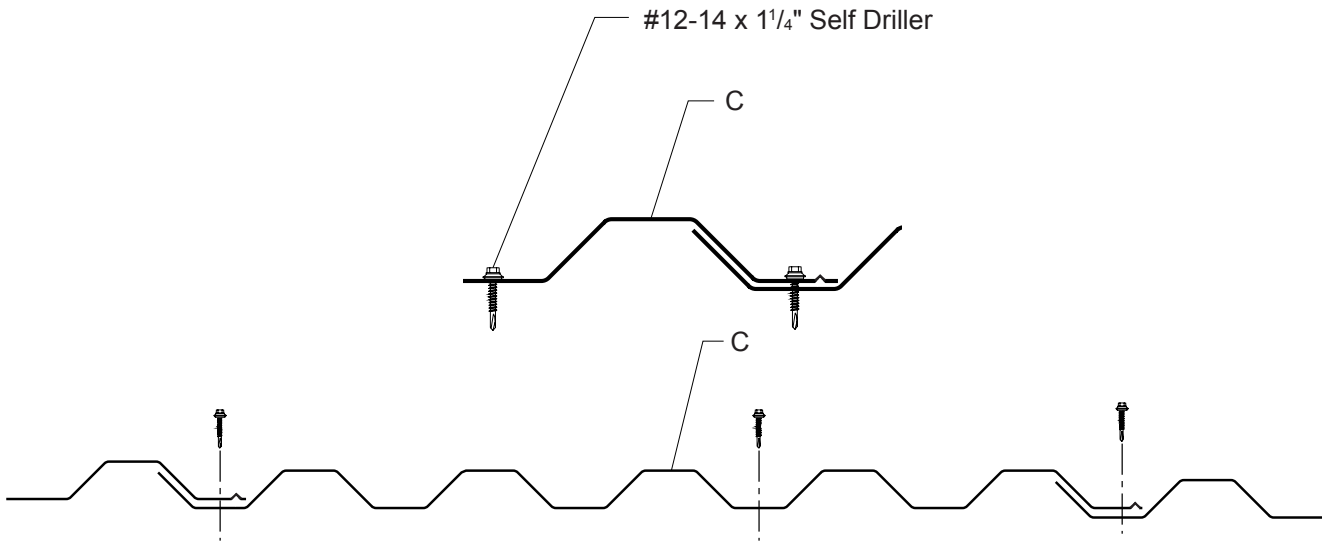


## IC72-Panel Fastening Pattern - Interior

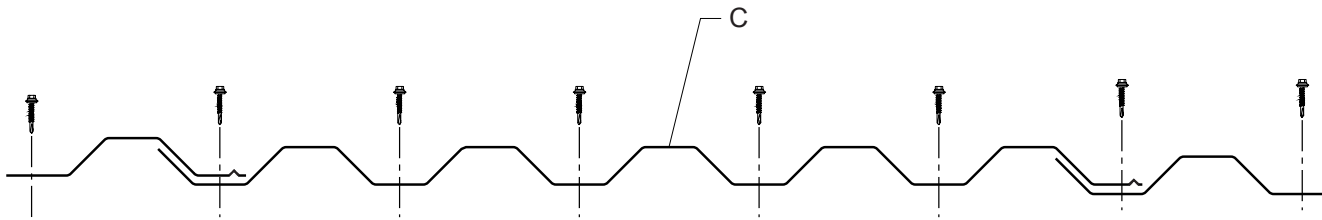


## IC72-Panel Fastening Pattern - Ends

## WALL PANEL FASTENING PATTERN



## IC72-Panel Fastening Pattern - Interior



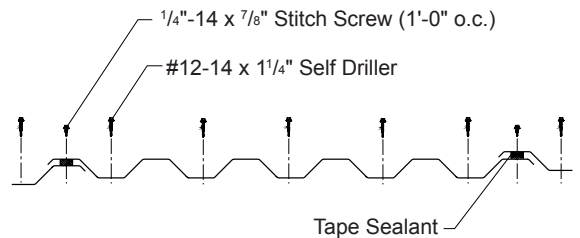
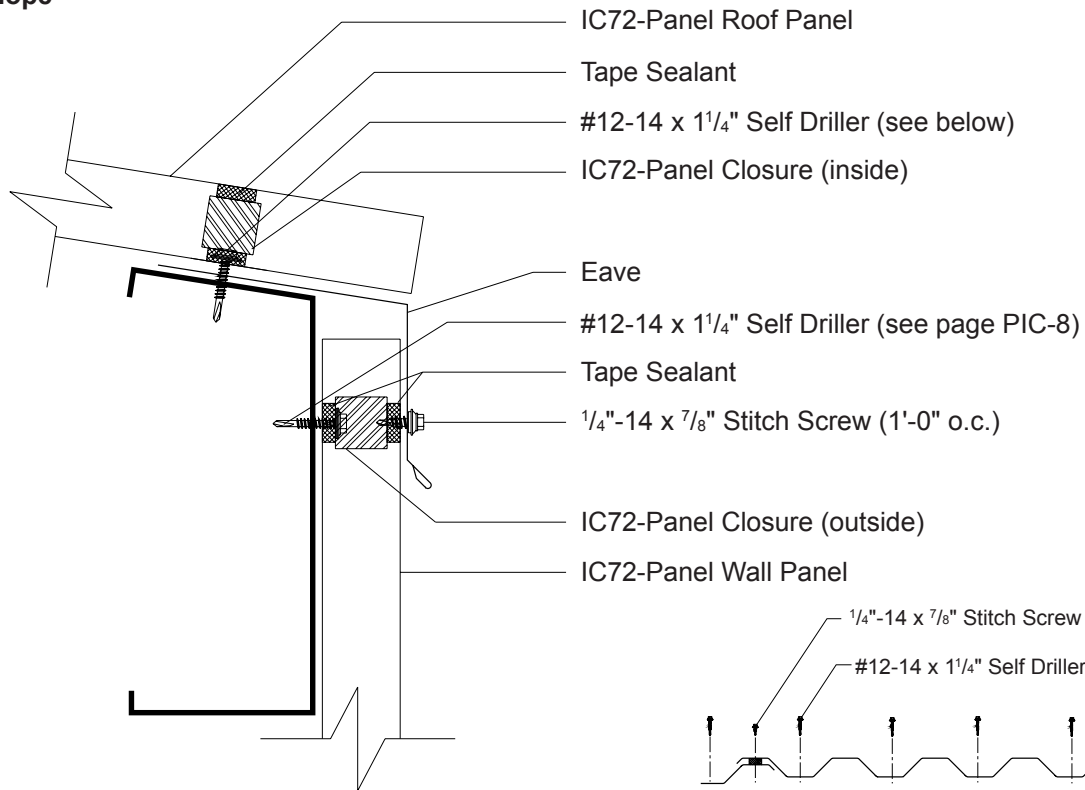
## IC72-Panel Fastening Pattern - Ends



# IC72-PANEL

## EAVE DETAIL

1:12 Minimum  
Roof Slope

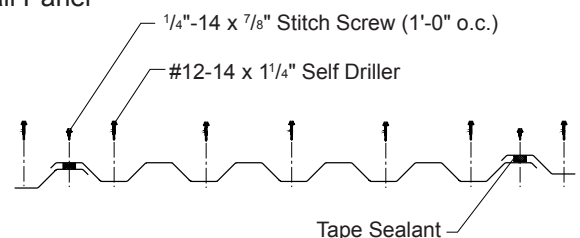
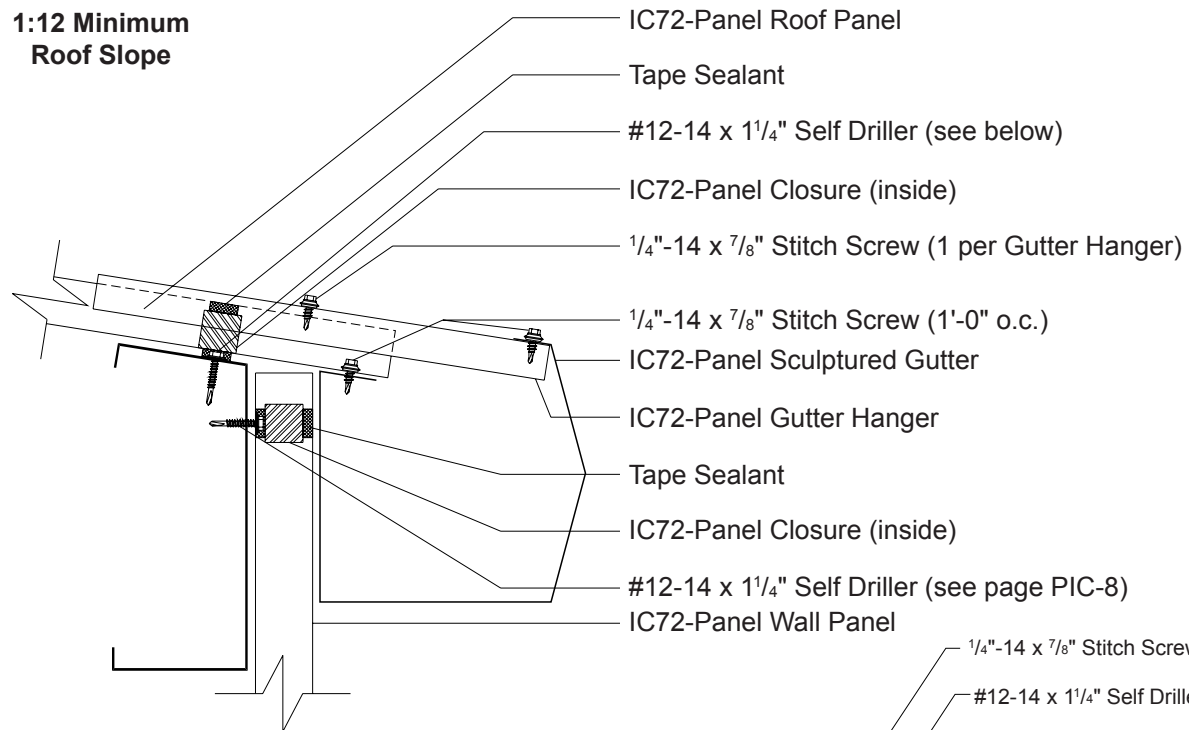


**IC72-Panel Roof Fastening Pattern**

# IC72-PANEL

## SCULPTURED GUTTER DETAIL

1:12 Minimum  
Roof Slope

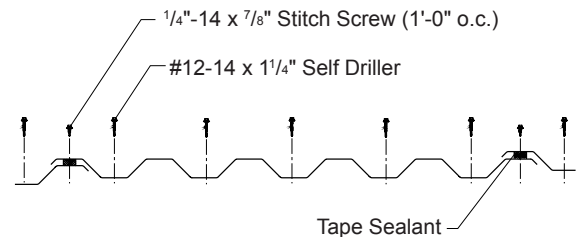
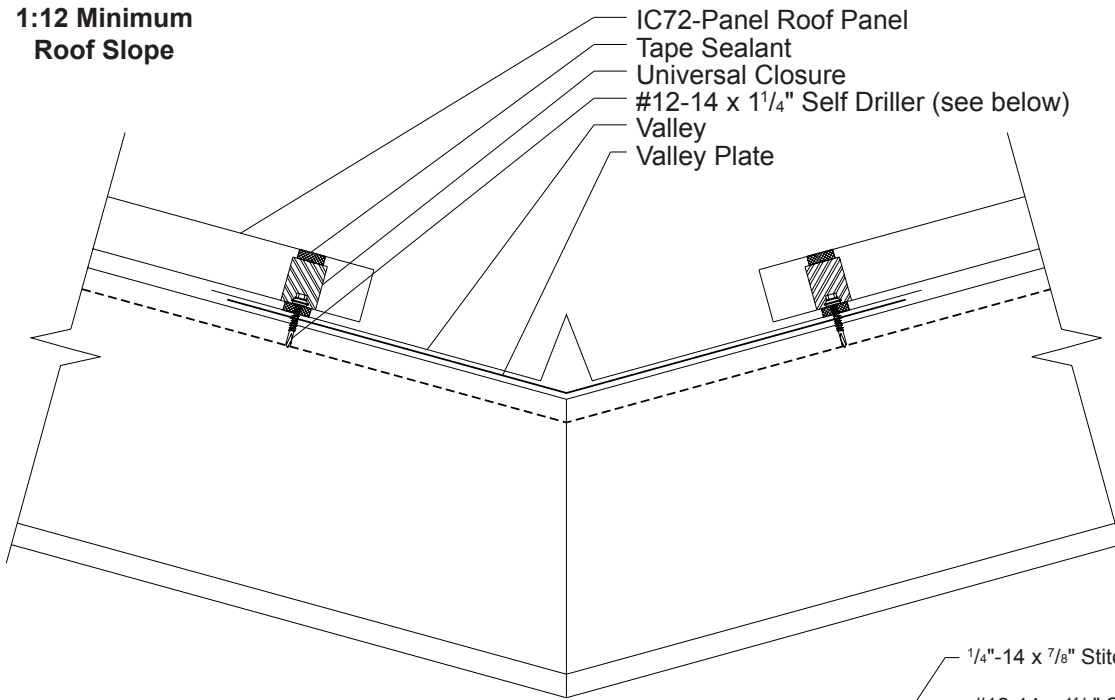


**IC72-Panel Roof Fastening Pattern**

# IC72-PANEL

## VALLEY DETAIL

1:12 Minimum  
Roof Slope

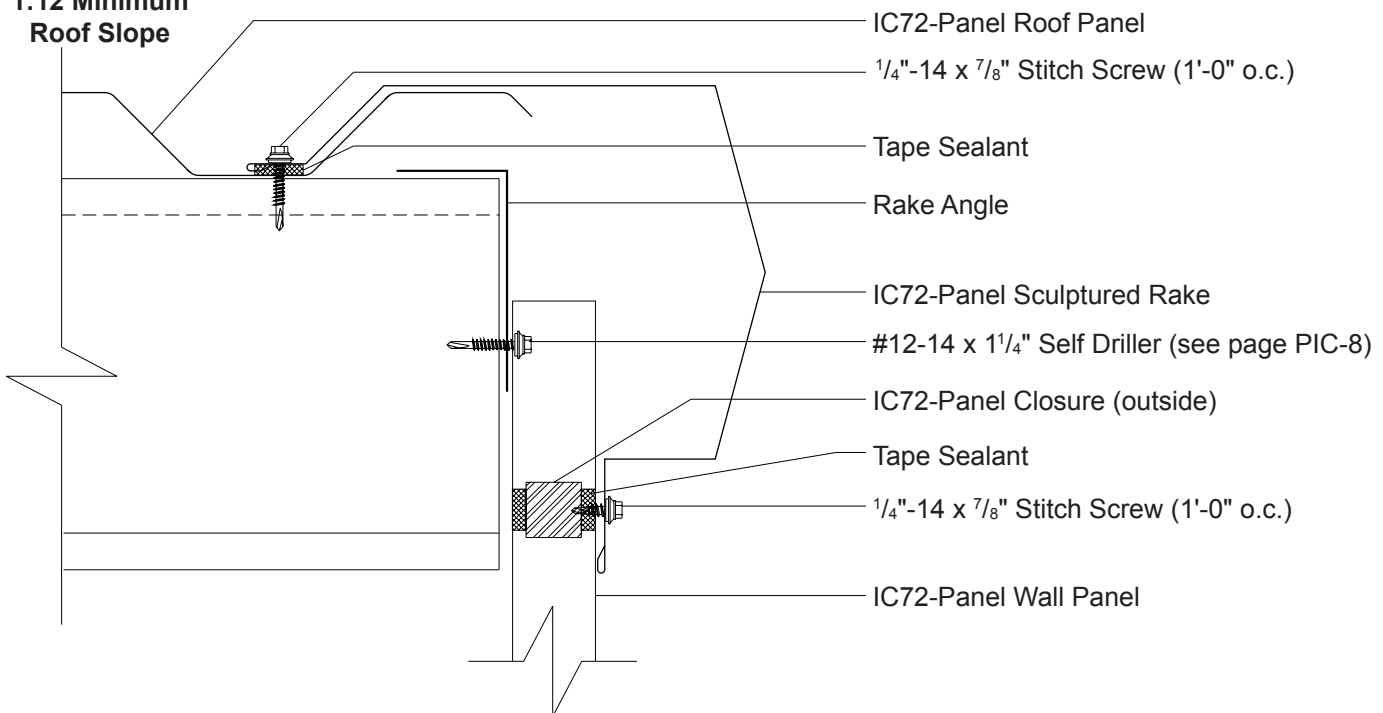


**IC72-Panel Roof Fastening Pattern**

# IC72-PANEL

## SCULPTURED RAKE DETAIL

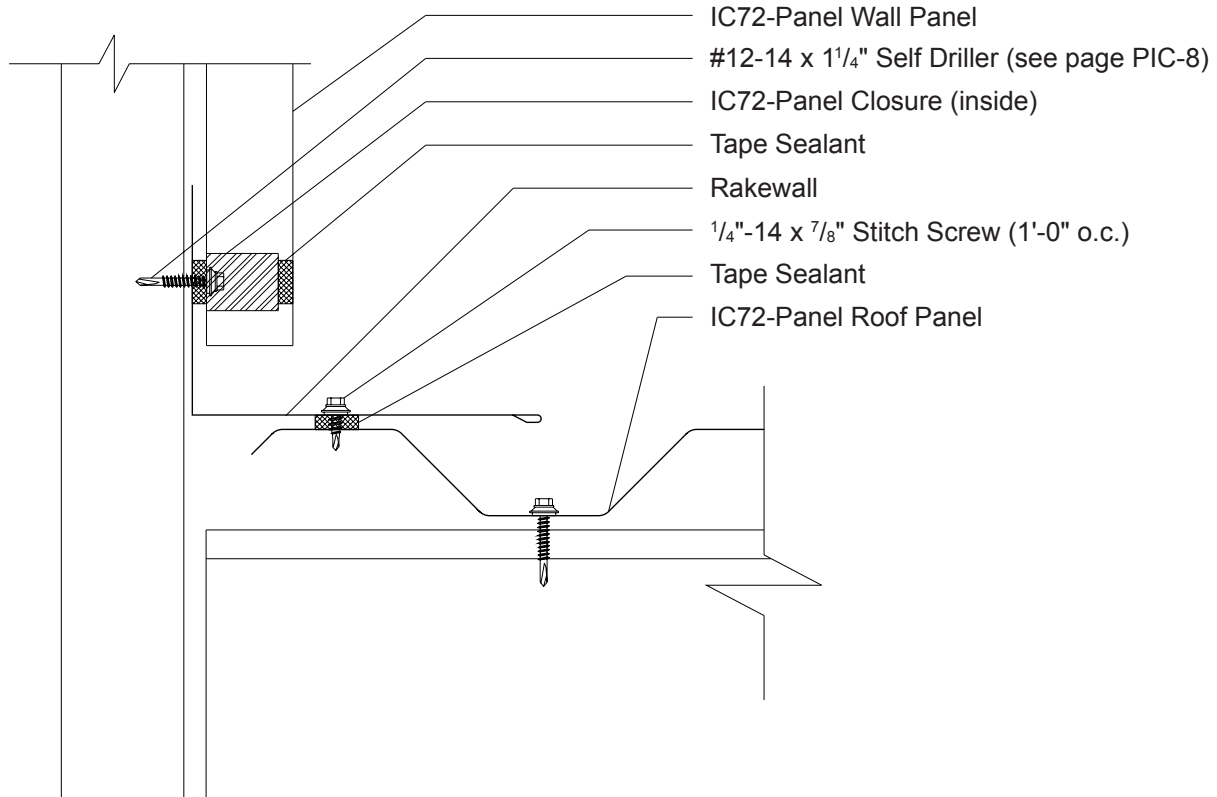
1:12 Minimum  
Roof Slope



# IC72-PANEL

# RAKEWALL DETAIL

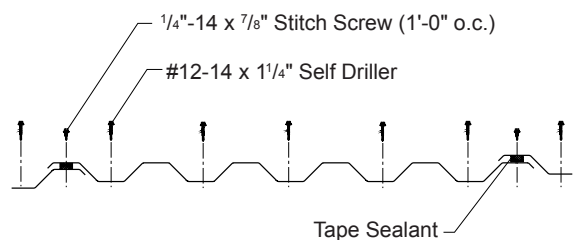
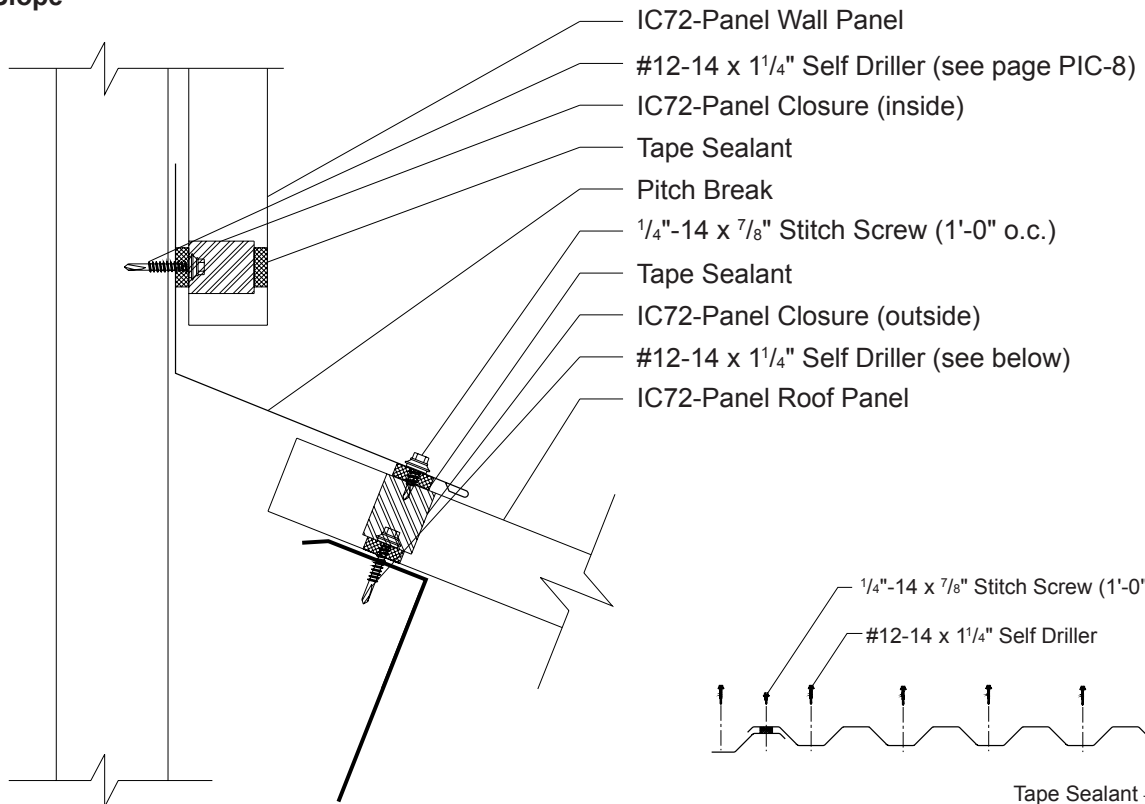
1:12 Minimum  
Roof Slope



# IC72-PANEL

# ENDWALL DETAIL

1:12 Minimum  
Roof Slope

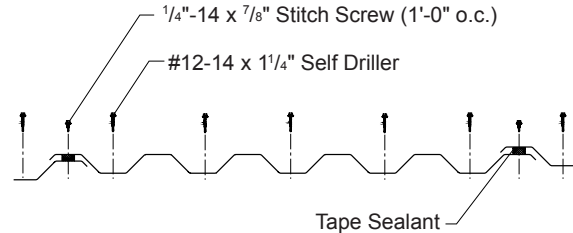
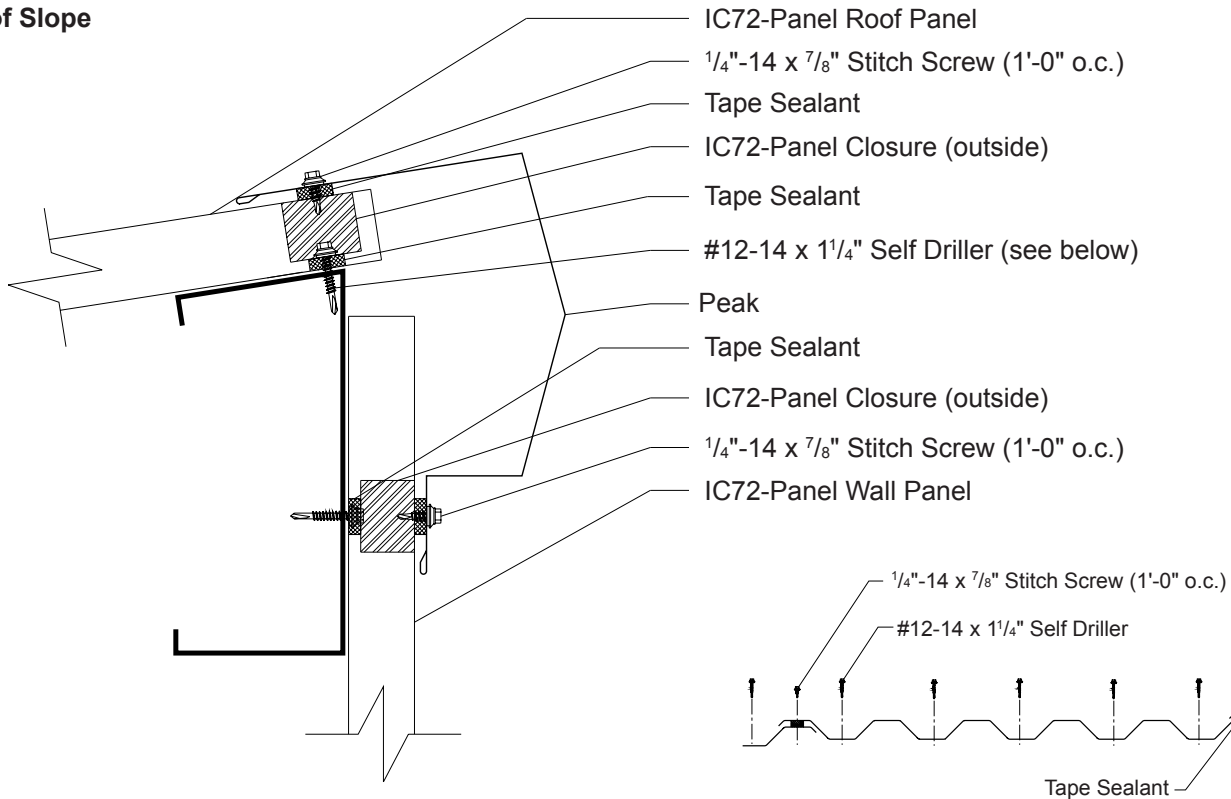


**IC72-Panel Roof Fastening Pattern**

# IC72-PANEL

## PEAK DETAIL

1:12 Minimum  
Roof Slope

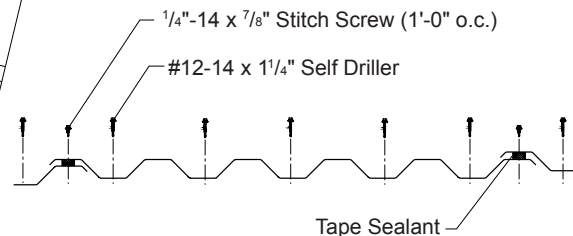
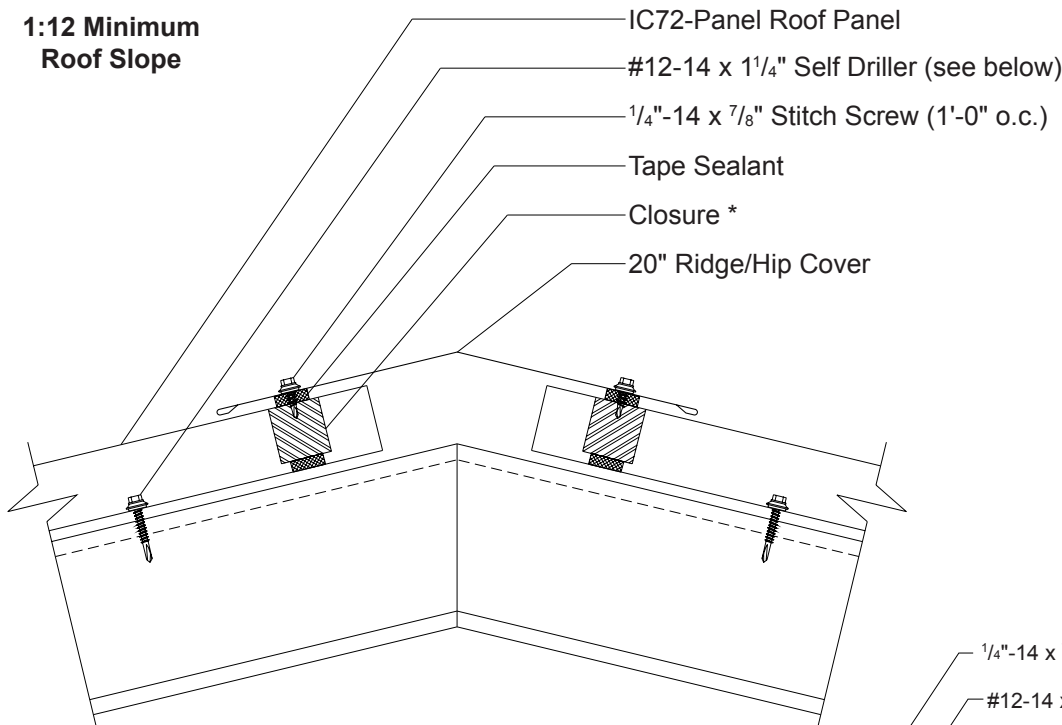


**IC72-Panel Roof Fastening Pattern**

# IC72-PANEL

## RIDGE/HIP DETAIL

1:12 Minimum  
Roof Slope



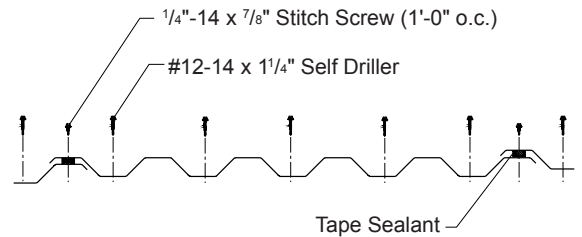
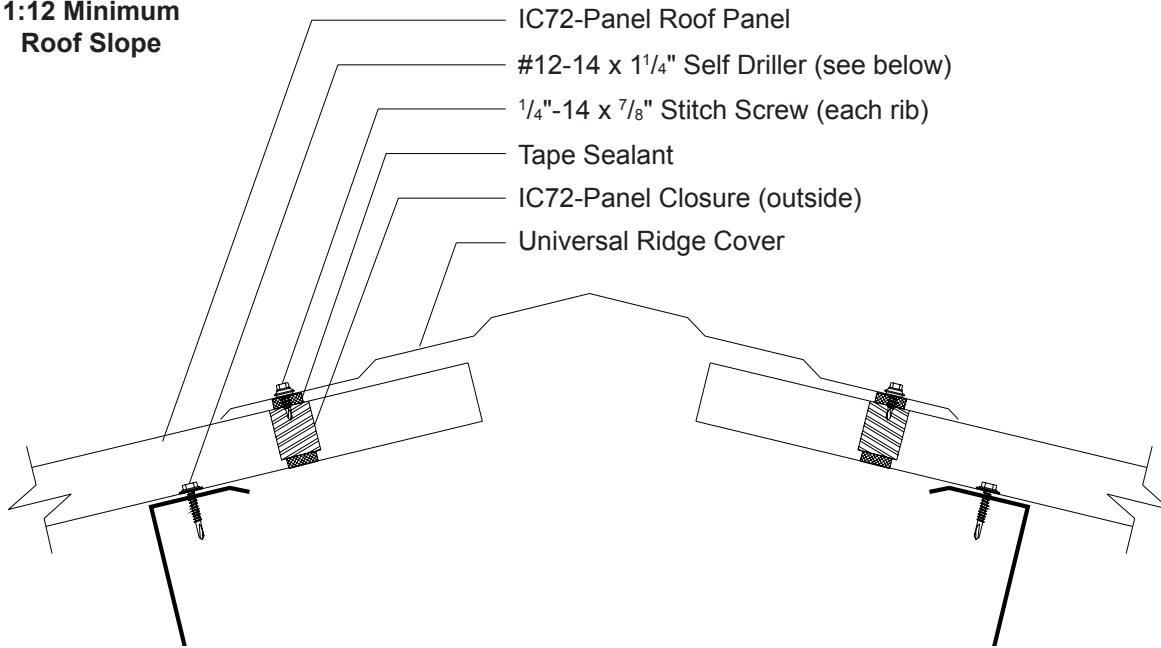
**IC72-Panel Roof Fastening Pattern**

\* For Ridge, use IC72-Panel Closure (Outside).  
For Hip, use Universal Closure.

# IC72-PANEL

# UNIVERSAL RIDGE DETAIL

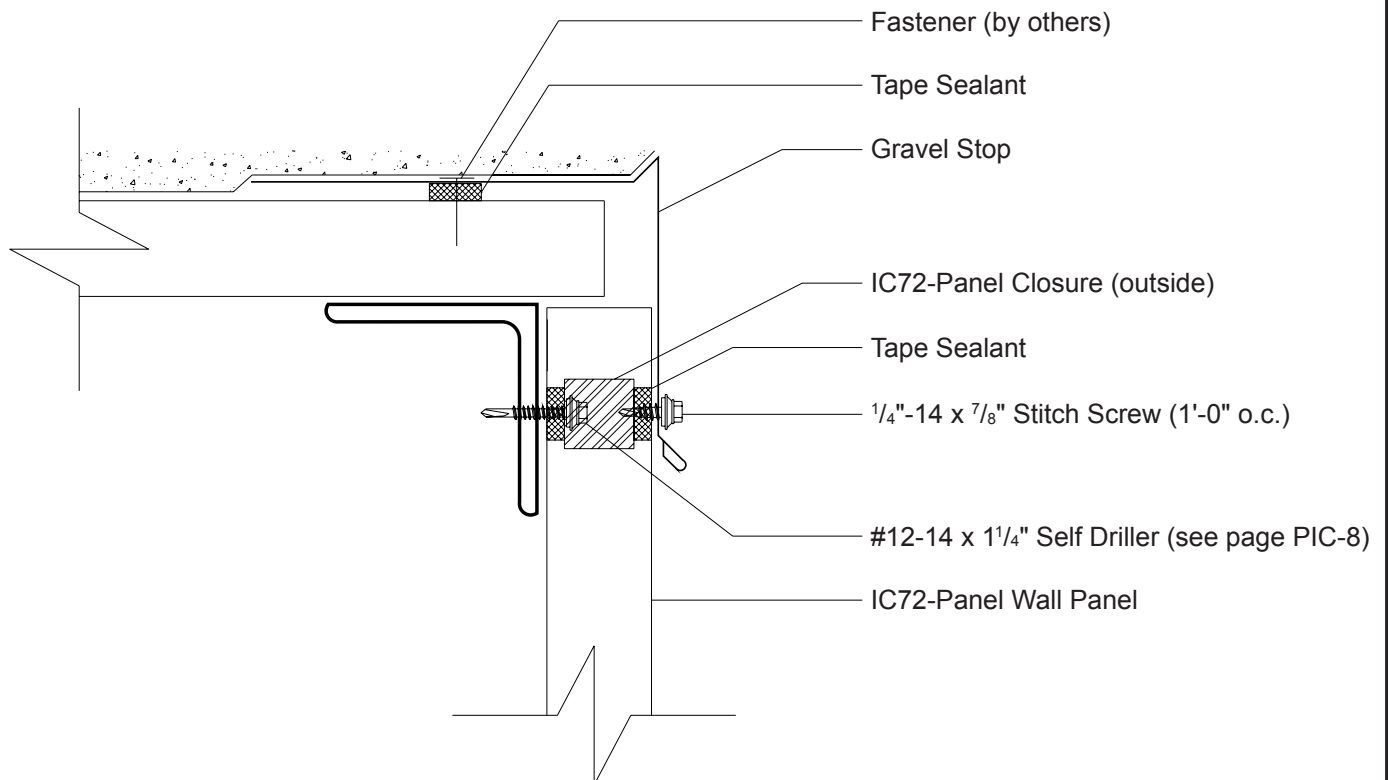
1:12 Minimum  
Roof Slope



**IC72-Panel Roof Fastening Pattern**

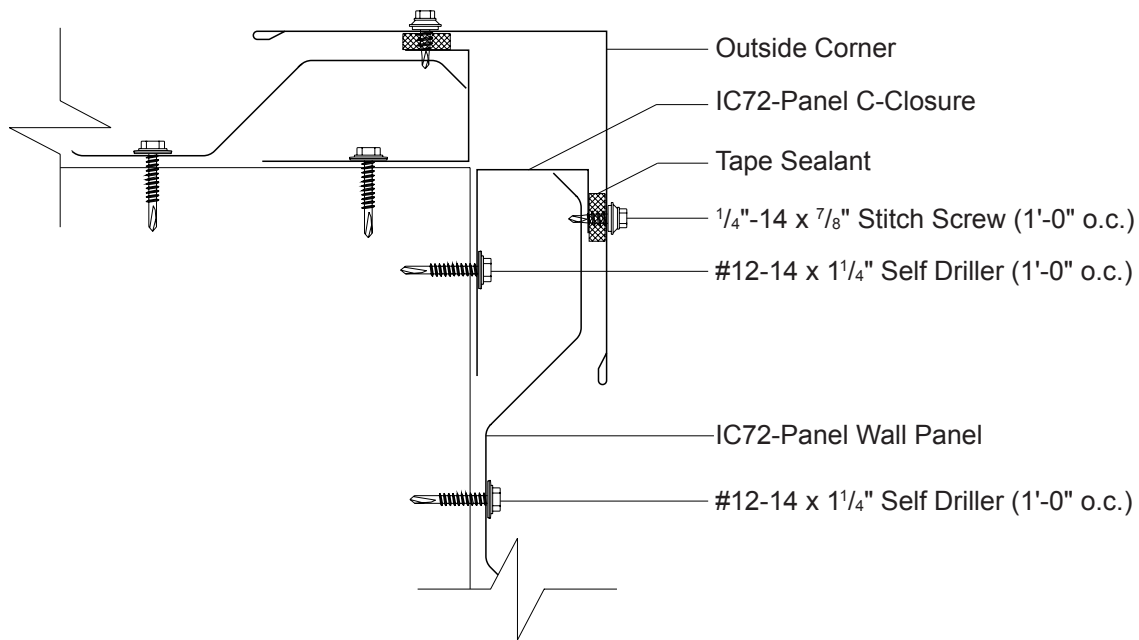
# IC72-PANEL

# GRAVEL STOP DETAIL



# IC72-PANEL

## OUTSIDE CORNER DETAIL



# IC72-PANEL

## INSIDE CORNER DETAIL

