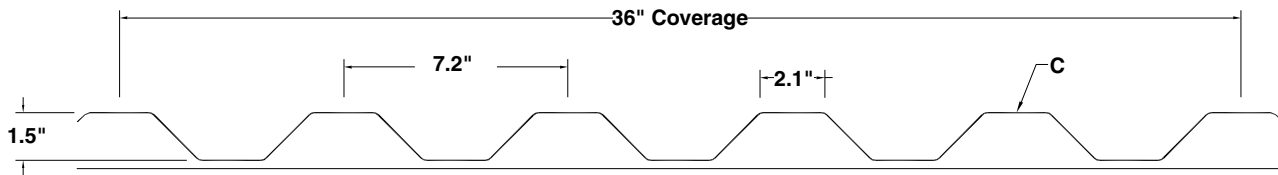


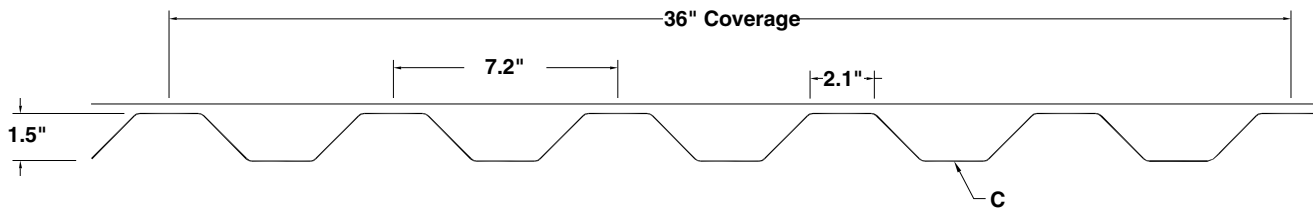
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**ROOF PROFILE**



**WALL PROFILE**



**SLOPE**

The minimum recommended slope for any IC72-Panel roofing 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 5/8" 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 1 1/2" 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 3 for locations).

**AVAILABILITY**

26 and 24 Gauge standard, 22 Ga. optional (Minimum quantities 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**

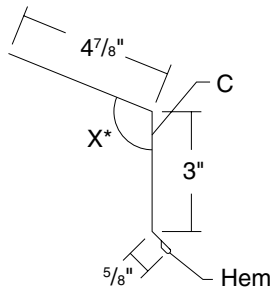
Steel grade 80 for 26 Gauge, Grade 50 for 24 and 22 Gauge, per ASTM A-792

**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.

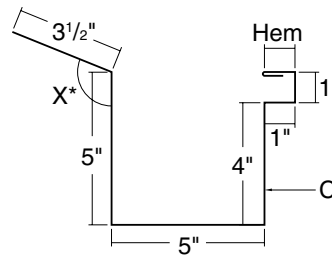
# IC72-PANEL FLASHING PROFILES

## EAVE



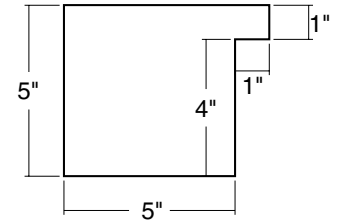
Length 10'-2" - \*Specify Slope Angle

## BOX GUTTER

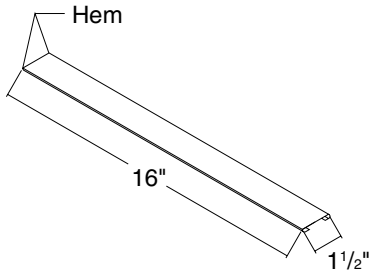


Length 10'-2", 20'-3" - \*Specify Slope Angle

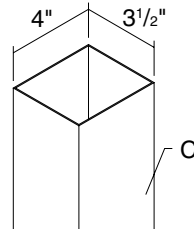
## BOX GUTTER END



## UNIVERSAL GUTTER/ DOWNSPOUT STRAP

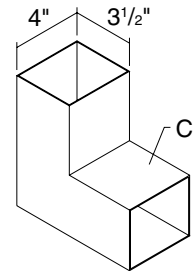


## DOWNSPOUT 4" x 3 1/2"



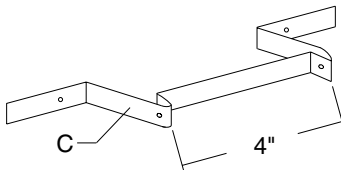
Length 10'-2", 20'-3"  
(Also available 6" x 4")

## 95° ELBOW 4" x 3 1/2"



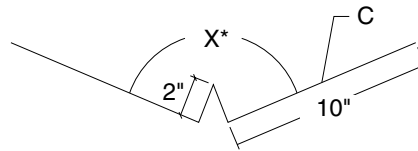
(Also available 6" x 4")

## DOWNSPOUT BRACKET



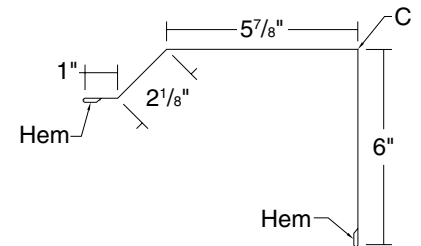
(Also available 6")

## VALLEY



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

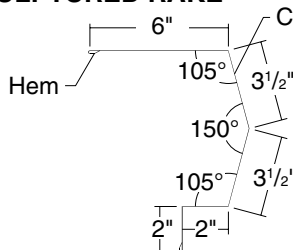
## IC72-PANEL RAKE



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

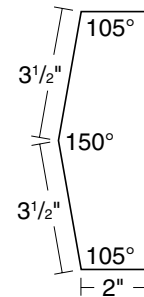
## IC72-PANEL

### SCULPTURED RAKE

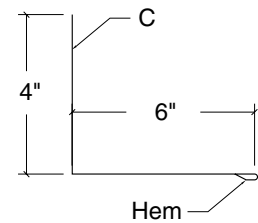


Length 10'-2", 20'-3"

## SCULPTURED RAKE END

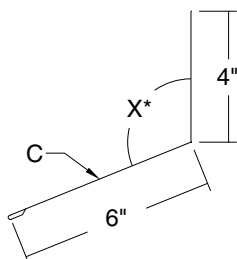


## RAKEWALL



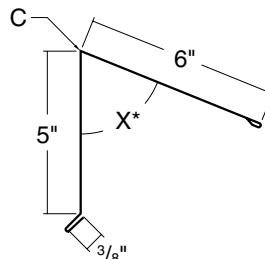
Length 10'-2"

## PITCH BREAK



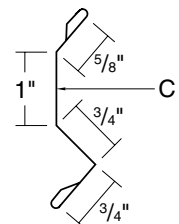
Length 10'-2" - \*Specify Slope Angle

## PEAK



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

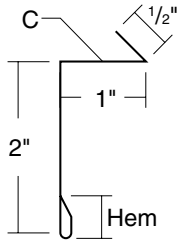
## COUNTER FLASHING



Length 10'-2"

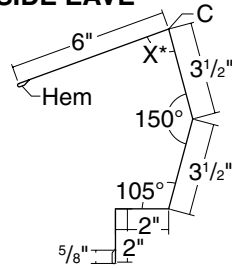
# IC72-PANEL FLASHING PROFILES (CONT.)

## REGLET FLASHING



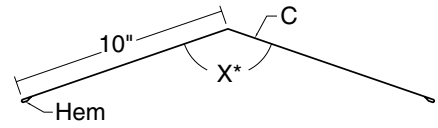
Length 10'-2"

## SCULPTURED HIGH SIDE EAVE



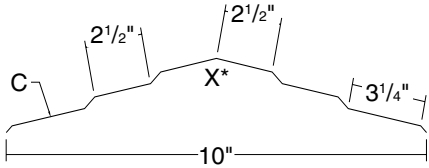
Length 10'-2", 20'-3" - \*Specify Slope Angle

## 20" RIDGE/HIP COVER



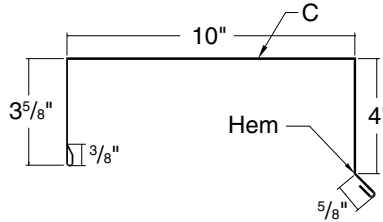
Length 10'-2", 20'-3" - \*Specify Slope Angle

## UNIVERSAL RIDGE



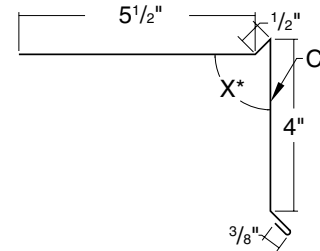
Length 10'-2" - \*Specify Slope Angle

## COPING



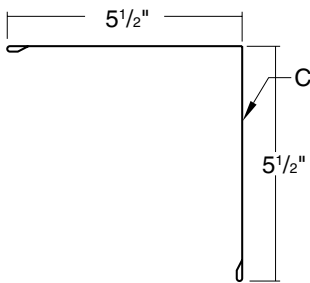
Length 10'-2", 20'-3"

## GRAVEL STOP



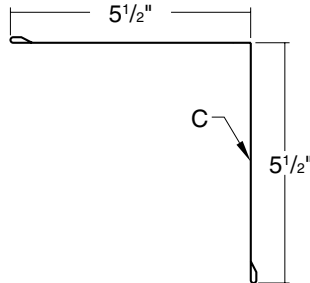
Length 10'-2", 20'-3" - \*Specify Slope Angle

## OUTSIDE CORNER



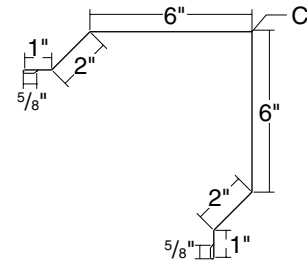
Length 10'-2", 20'-3"

## INSIDE CORNER



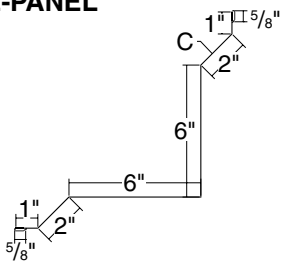
Length 10'-2", 20'-3"

## OUTSIDE CORNER IC72-PANEL



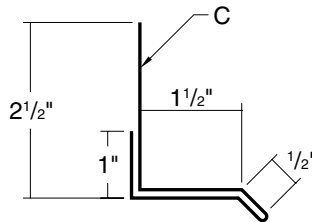
Length 10'-2", 14'-2", 20'-3"

## INSIDE CORNER IC72-PANEL



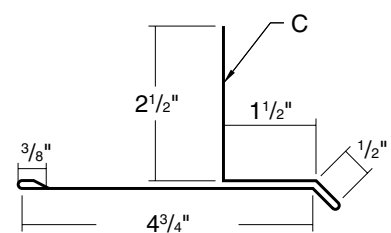
Length 10'-2", 14'-2", 20'-3"

## 1.5" SILL/HEAD



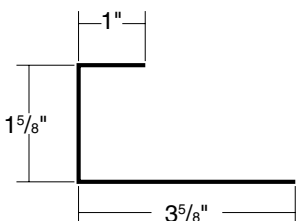
Length 10'-2"

## 1.5" SILL TO SOFFIT



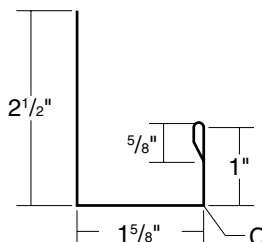
Length 10'-2"

## IC72-PANEL C-CLOSURE



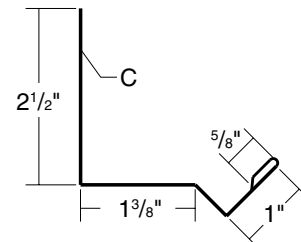
Length 10'-2"

## IC72-PANEL JAMB



Length 7'-3", 10'-2", 14'-2"

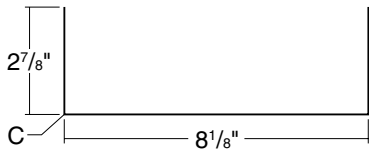
## HEAD CHANNEL



Length 10'-2"

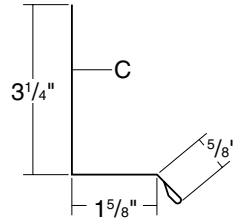
# IC72-PANEL FLASHING PROFILES (CONT.) / ACCESSORY PROFILES

## HEAD/JAMB COVER



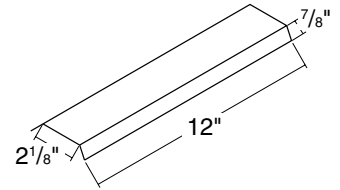
Length 10'-2", 14'-2"

## BASE



Length 10'-2"

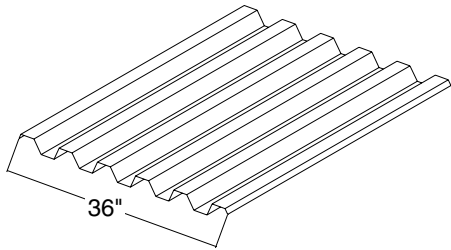
## IC72-PANEL GUTTER HANGER



Length 1'-0"

# IC72-PANEL ACCESSORY PROFILES

## LIGHT TRANSMITTING IC72-PANELS

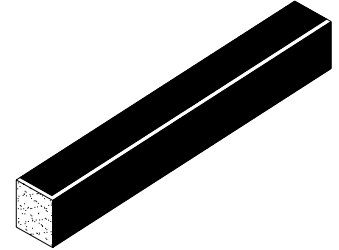


## IC72-PANEL CLOSURE INSIDE/OUTSIDE



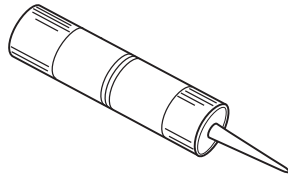
Polyethylene Foam

## UNIVERSAL CLOSURE



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

## TUBE SEALANT



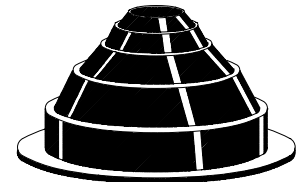
10.3 oz. Cartridge Urethane

## TAPE SEALANT



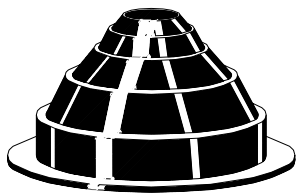
3/8" X 3/32" X 50'  
Single Bead Butyl - Gray

## 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



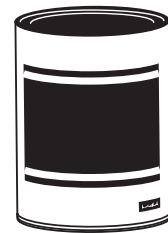
#801<sub>RETRO</sub> (3/4" to 2 3/4" O.D. Pipe)  
#802<sub>RETRO</sub> (2" to 7 1/4" O.D. Pipe)  
#803<sub>RETRO</sub> (3 1/4" to 10" O.D. Pipe)

## RUBBER ROOF FLASH KIT



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

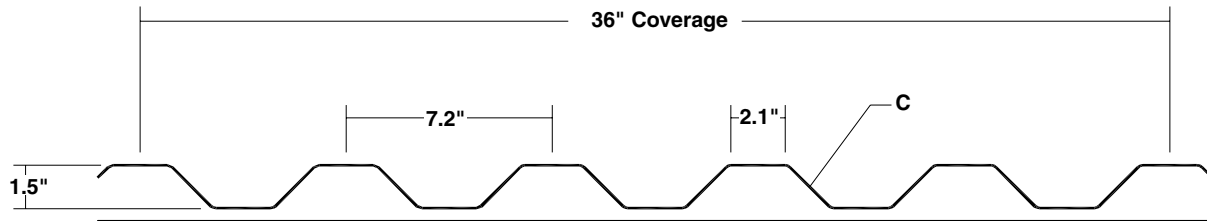
## TOUCH-UP PAINT



Available in pints  
PVDF / MS CF30

C- Indicates color side of flashing.

# IC72-PANEL SECTION PROPERTIES AND LOAD TABLES



## IC72-PANEL 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	36"	80	.95	.0657	.0733	2.633	.0607	.0601	2.12
24	36"	50	1.23	.1000	.1206	3.61	.0987	.1078	3.23
22	36"	50	1.59	.1400	.1750	5.24	.1367	.1550	4.64
20	36"	50	1.85	.1733	.2192	6.56	.1700	.1939	5.81

## 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	5'	6'	7'	8'	9'	10'	5'	6'	7'	8'	9'	10'
26	36"	80	46	27	17	11	8	6	77	53	39	30	24	19
24	36"	50	70	41	26	17	12	9	115	80	59	45	35	29
22	36"	50	98	57	36	24	17	12	165	115	84	64	51	41
20	36"	50	121	70	44	30	21	15	206	143	105	81	64	52

2-Equal Spans			Inward (Gravity / Deflection) Load <sup>2,4</sup> :						Outward Uplift (Stress) Load <sup>3</sup> :					
GA.	Width	Ksi	5'	6'	7'	8'	9'	10'	5'	6'	7'	8'	9'	10'
26	36"	80	54	38	28	22	17	14	85	61	45	35	28	23
24	36"	50	84	59	43	33	26	21	124	87	64	49	39	32
22	36"	50	122	85	63	48	38	29	183	128	94	72	57	46
20	36"	50	153	107	78	60	48	36	229	160	118	91	72	58

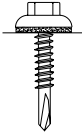
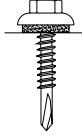
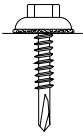
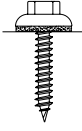
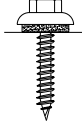
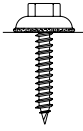
3 or more-Equal Spans			Inward (Gravity / Deflection) Load <sup>2,4</sup> :						Outward Uplift (Stress) Load <sup>3</sup> :					
GA.	Width	Ksi	5'	6'	7'	8'	9'	10'	5'	6'	7'	8'	9'	10'
26	36"	80	62	44	33	22	16	11	97	70	52	41	32	26
24	36"	50	97	68	50	34	24	17	143	101	75	57	46	37
22	36"	50	142	99	71	48	33	24	212	149	110	84	67	54
20	36"	50	178	124	88	59	41	30	267	186	137	105	83	68

- 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.

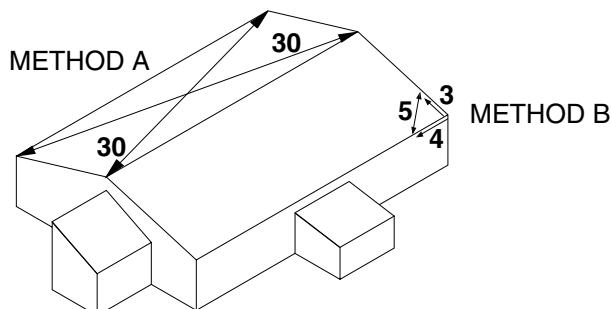
**CONDITION OF SUBSTRUCTURE**

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

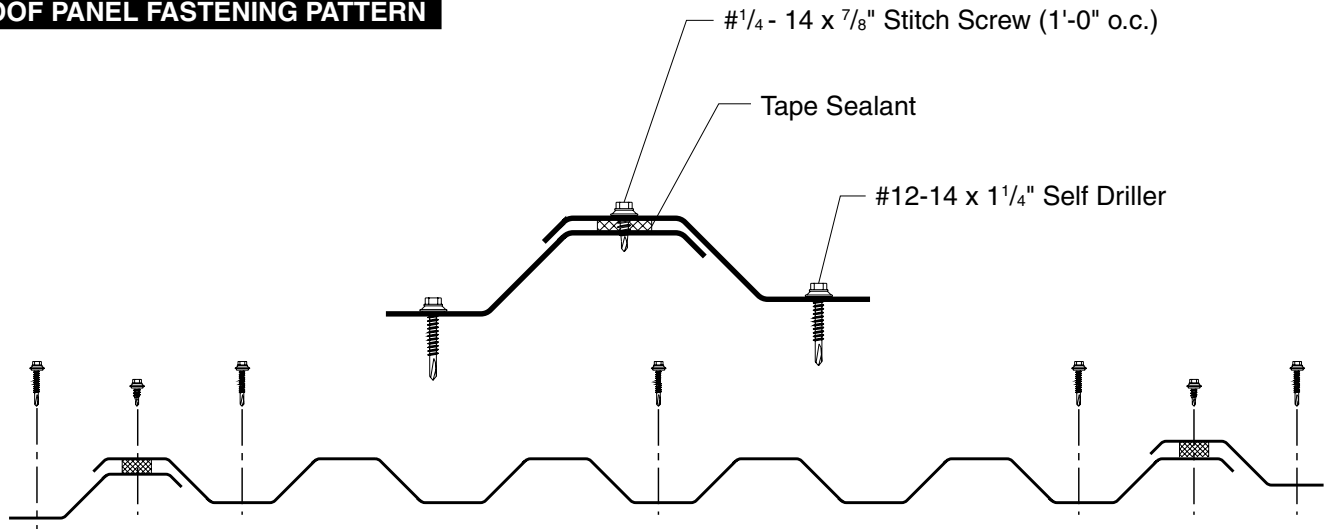
The installer should check the roof deck for squareness before installing IC72 panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

**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.

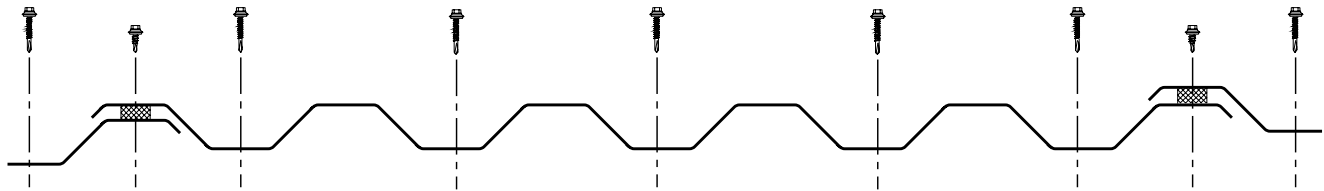
**METHOD "B"** - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established,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



**ROOF PANEL FASTENING PATTERN**



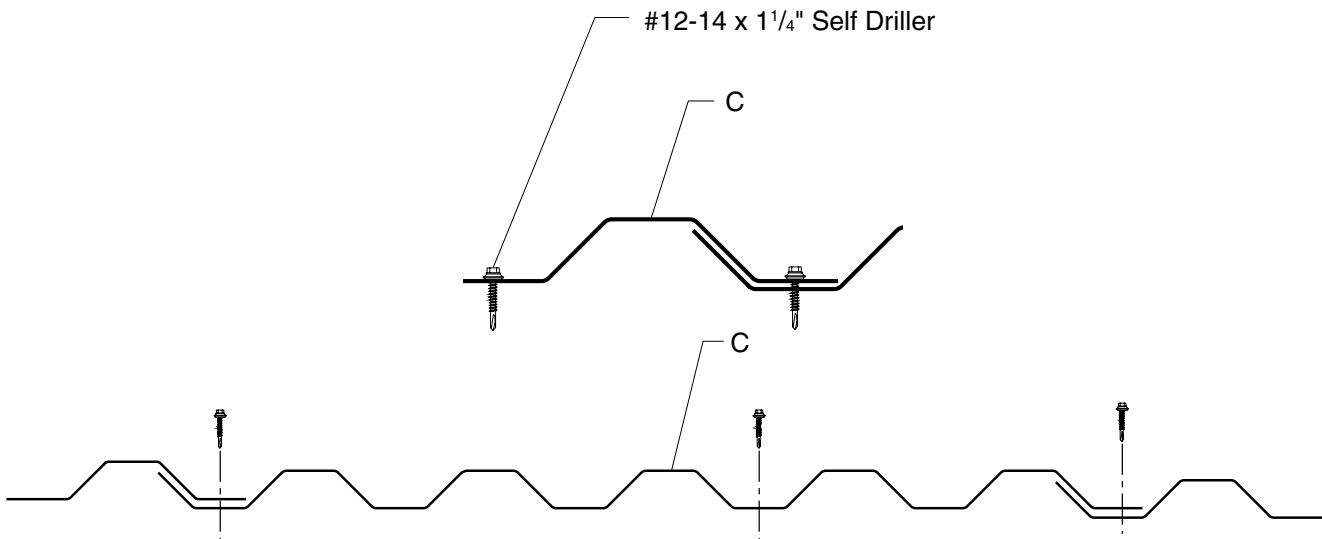
**IC72-Panel Fastening Pattern - Interior**



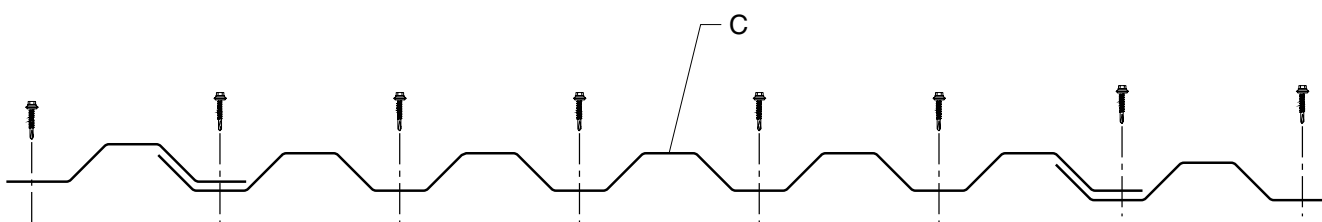
**IC72-Panel Fastening Pattern - Ends**



**WALL PANEL FASTENING PATTERN**



**IC72-Panel Fastening Pattern - Interior**



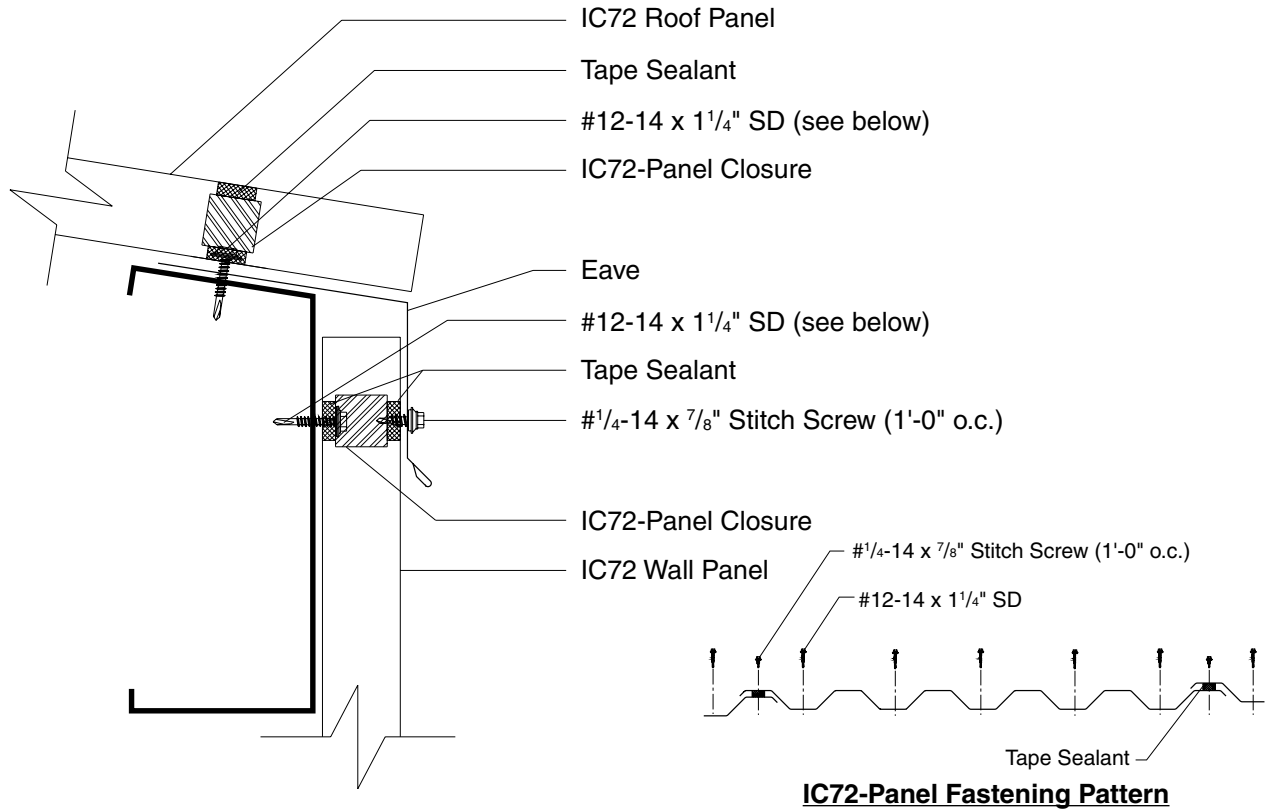
**IC72-Panel Fastening Pattern - Ends**





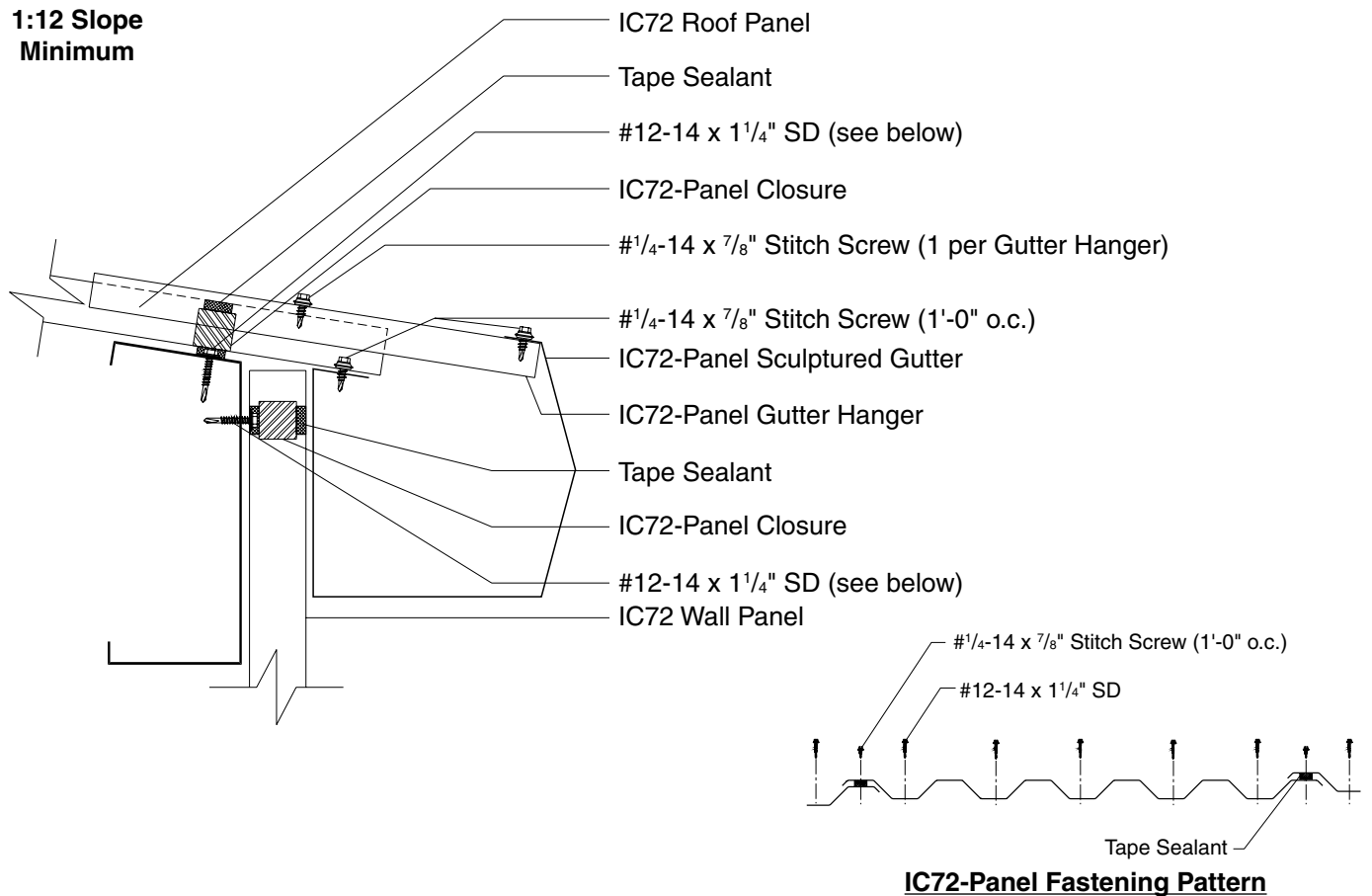
# IC72-PANEL EAVE DETAIL

1:12 Slope  
Minimum



# IC72-PANEL SCULPTURED GUTTER DETAIL

1:12 Slope  
Minimum

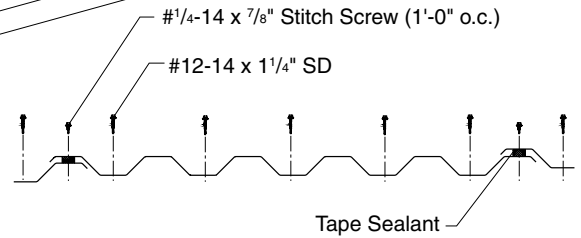
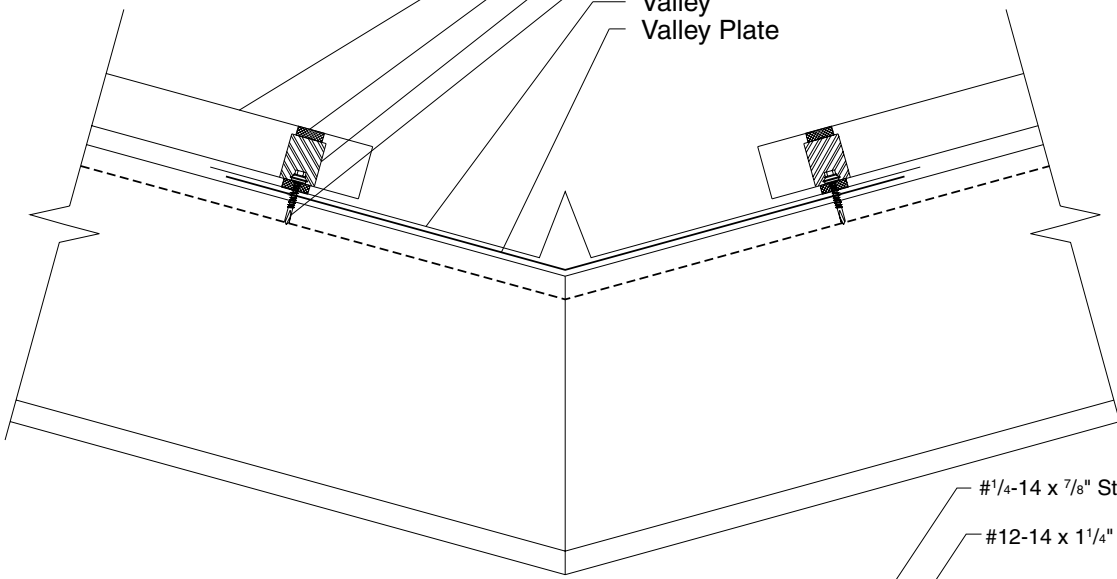


# IC72-PANEL

## VALLEY DETAIL

1:12 Slope  
Minimum

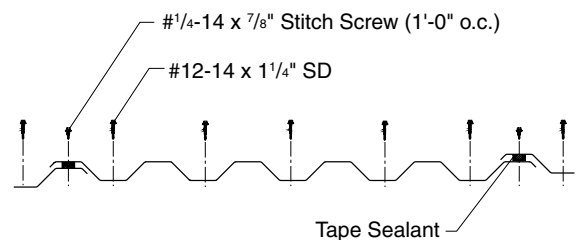
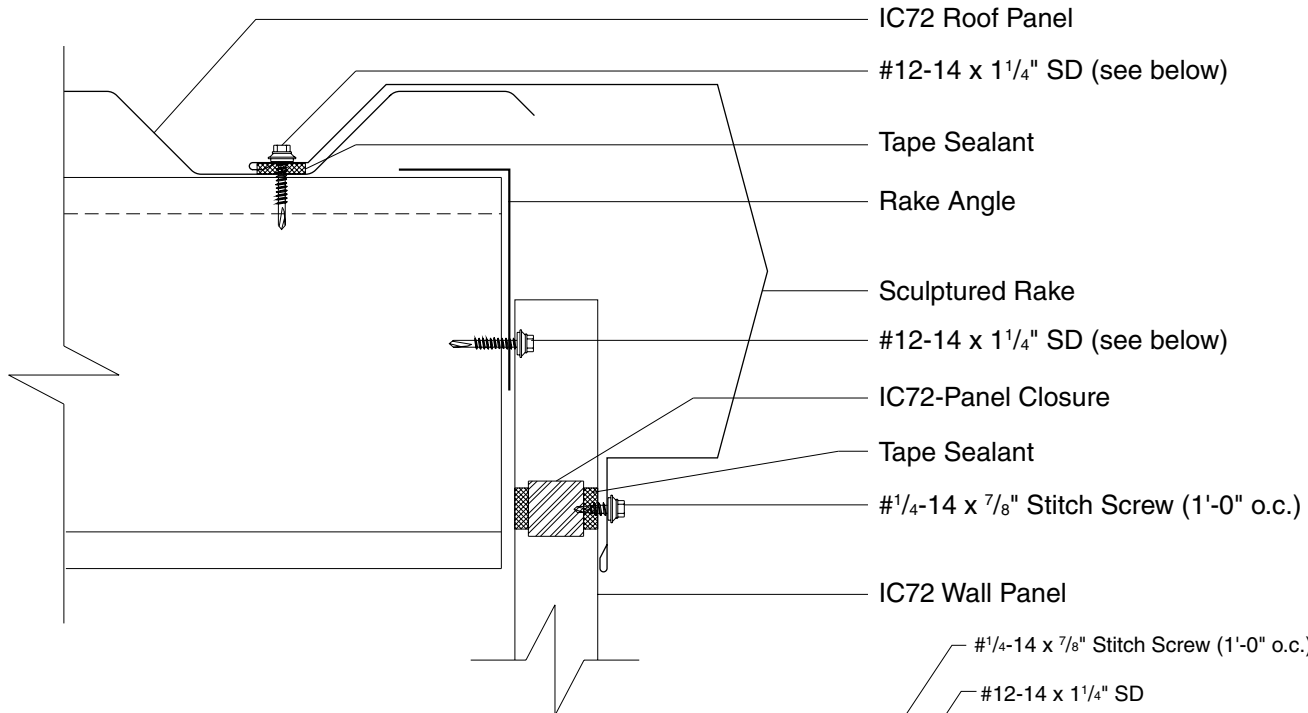
- IC72 Roof Panel
- Tape Sealant
- Universal Closure
- #12-14 x 1 1/4" SD (see below)
- Valley
- Valley Plate



**IC72-Panel Fastening Pattern**

# IC72-PANEL

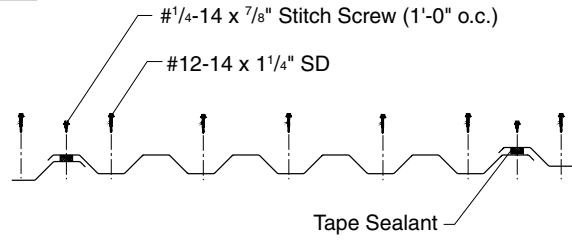
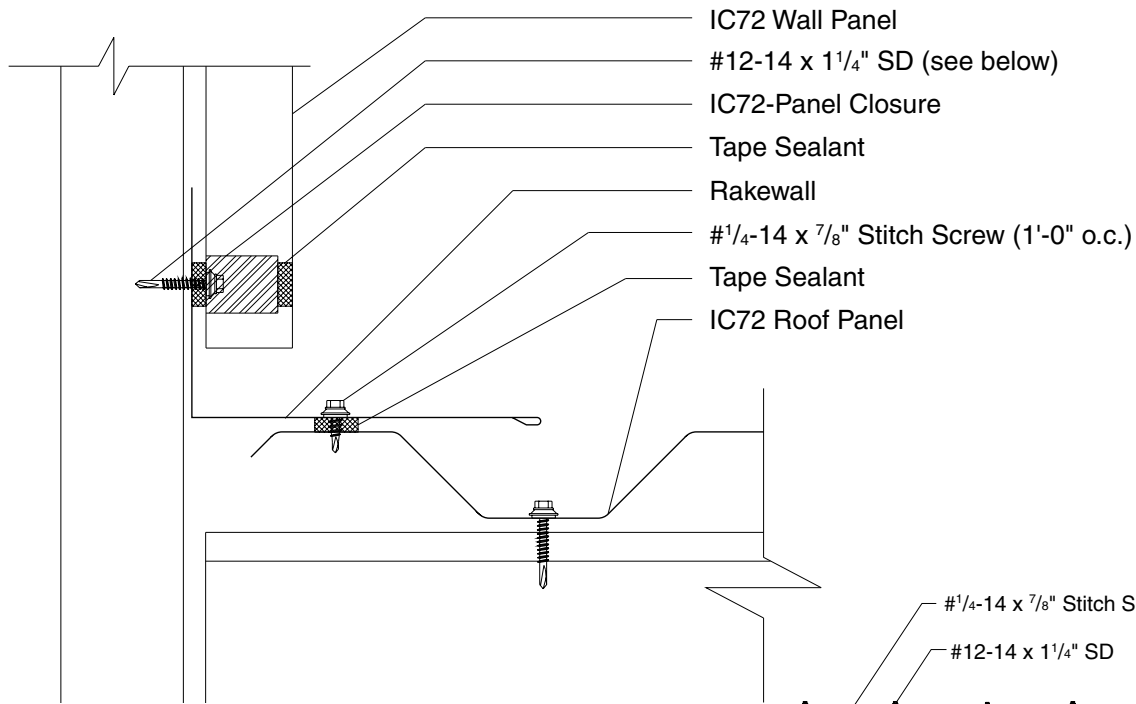
## SCULPTURED RAKE DETAIL



**IC72-Panel Fastening Pattern**

# IC72-PANEL

## RAKEWALL DETAIL

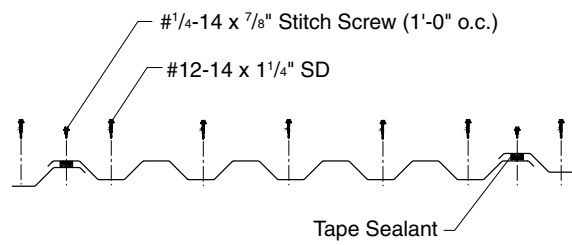
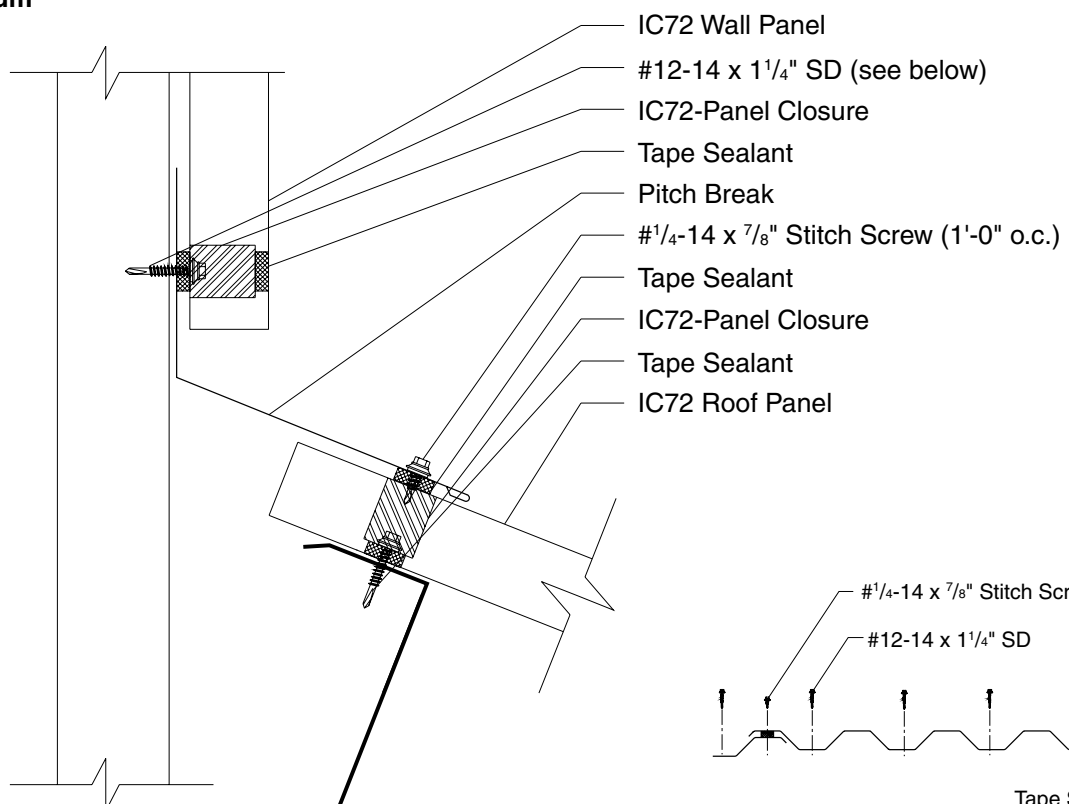


**IC72-Panel Fastening Pattern**

# IC72-PANEL

## ENDWALL DETAIL

1:12 Slope  
Minimum



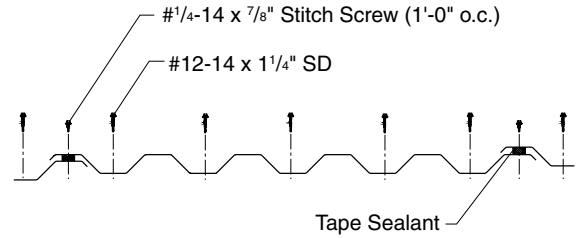
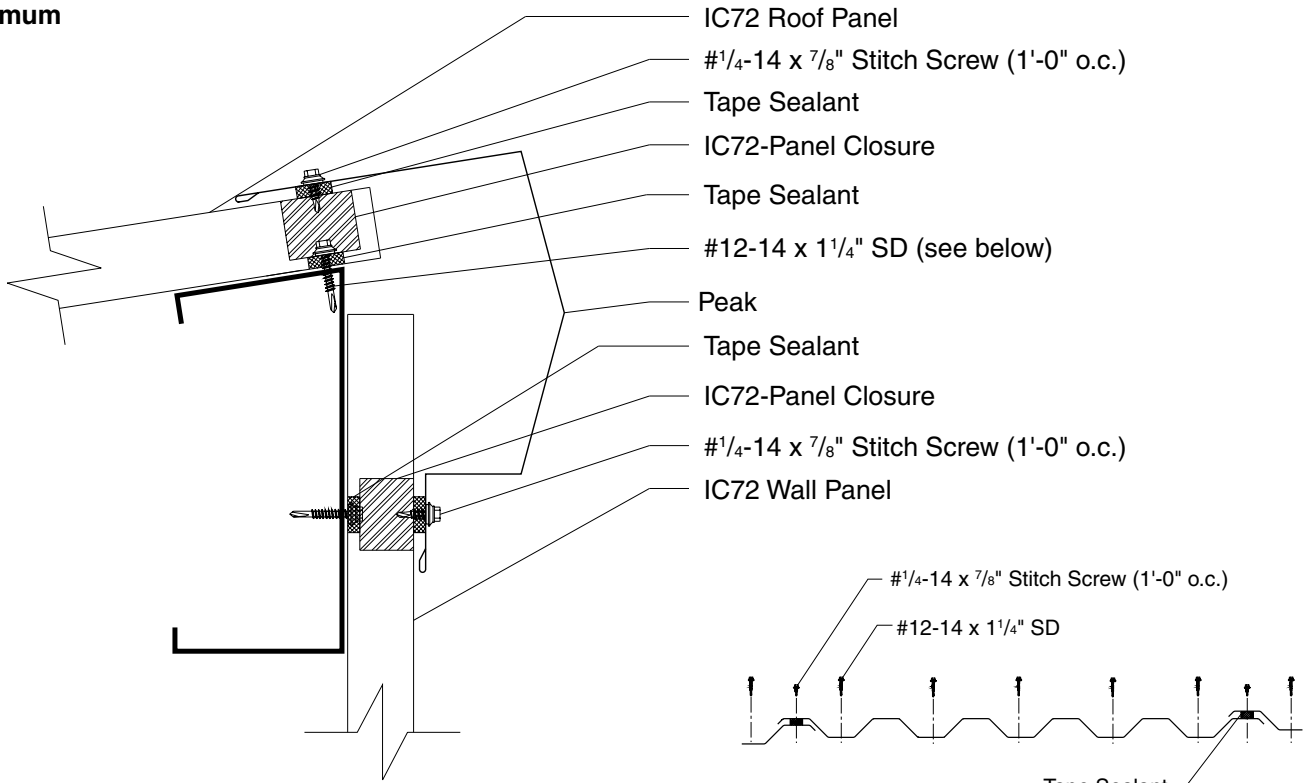
**IC72-Panel Fastening Pattern**



# IC72-PANEL

## PEAK DETAIL

1:12 Slope  
Minimum

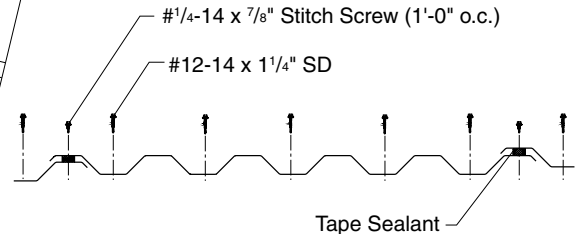
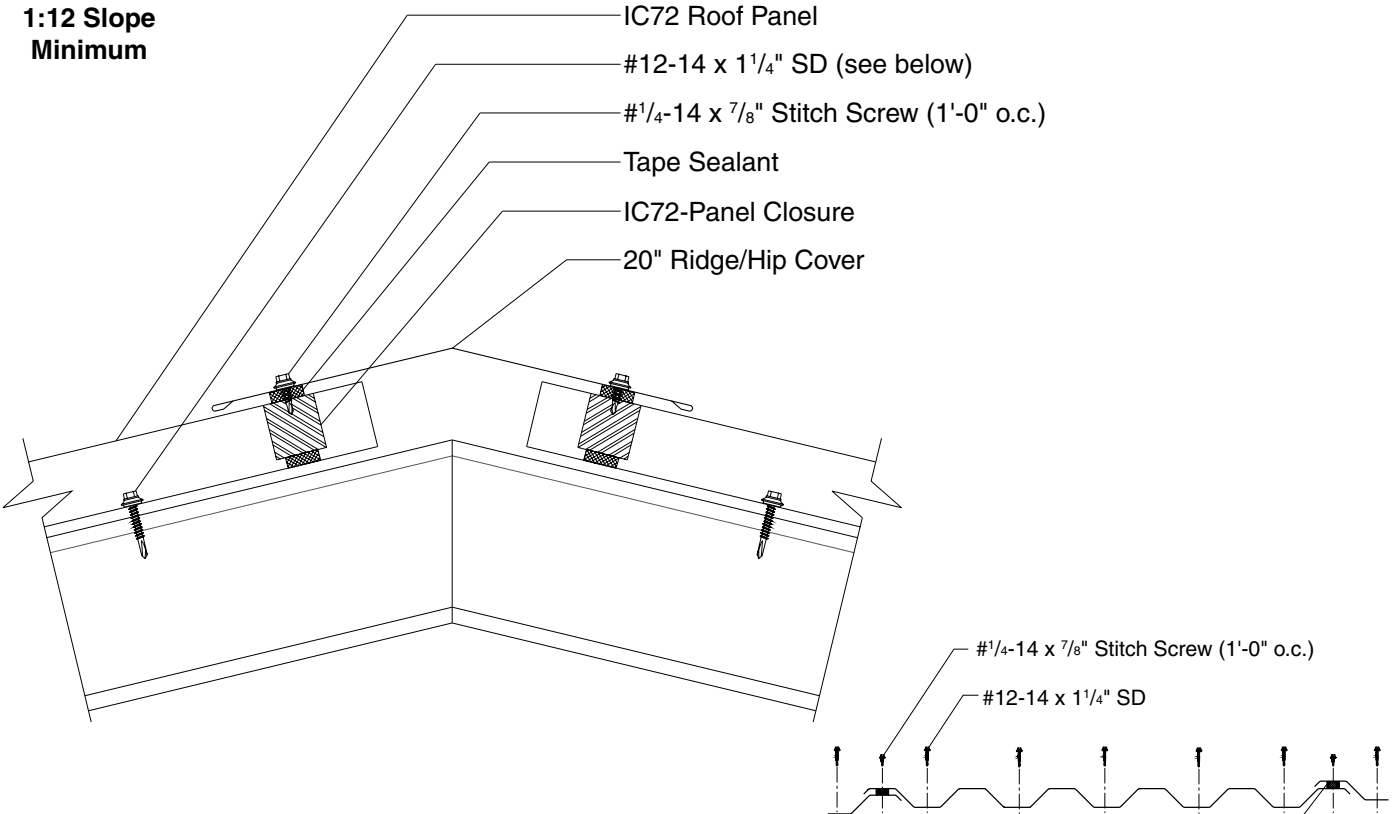


**IC72-Panel Fastening Pattern**

# IC72-PANEL

## RIDGE/HIP DETAIL

1:12 Slope  
Minimum

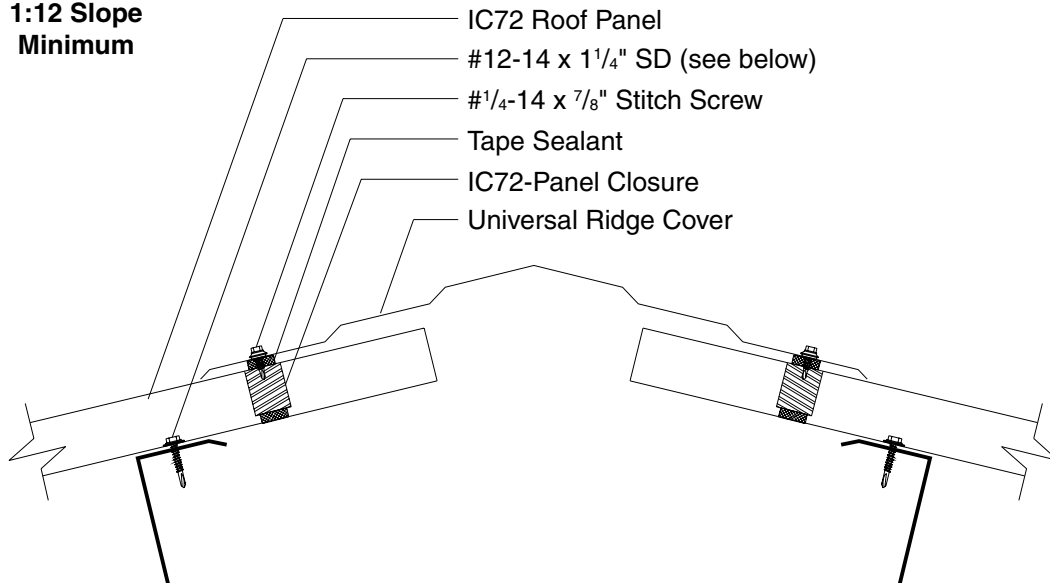


**IC72-Panel Fastening Pattern**

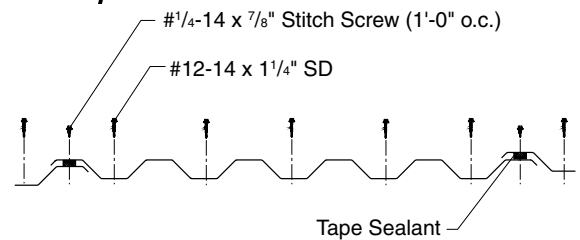
# IC72-PANEL

# UNIVERSAL RIDGE DETAIL

1:12 Slope  
Minimum



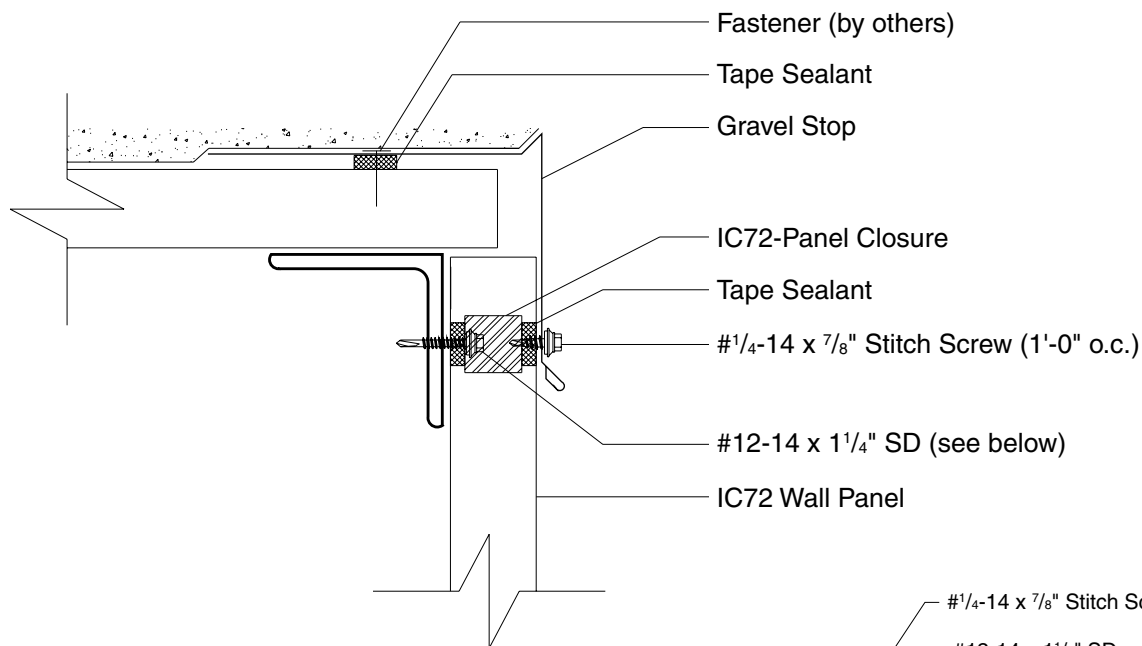
- IC72 Roof Panel
- #12-14 x 1 1/4" SD (see below)
- #1/4-14 x 7/8" Stitch Screw
- Tape Sealant
- IC72-Panel Closure
- Universal Ridge Cover



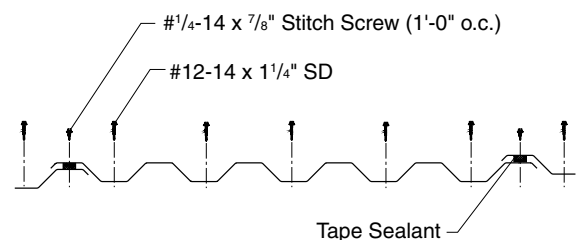
**IC72-Panel Fastening Pattern**

# IC72-PANEL

# GRAVEL STOP DETAIL

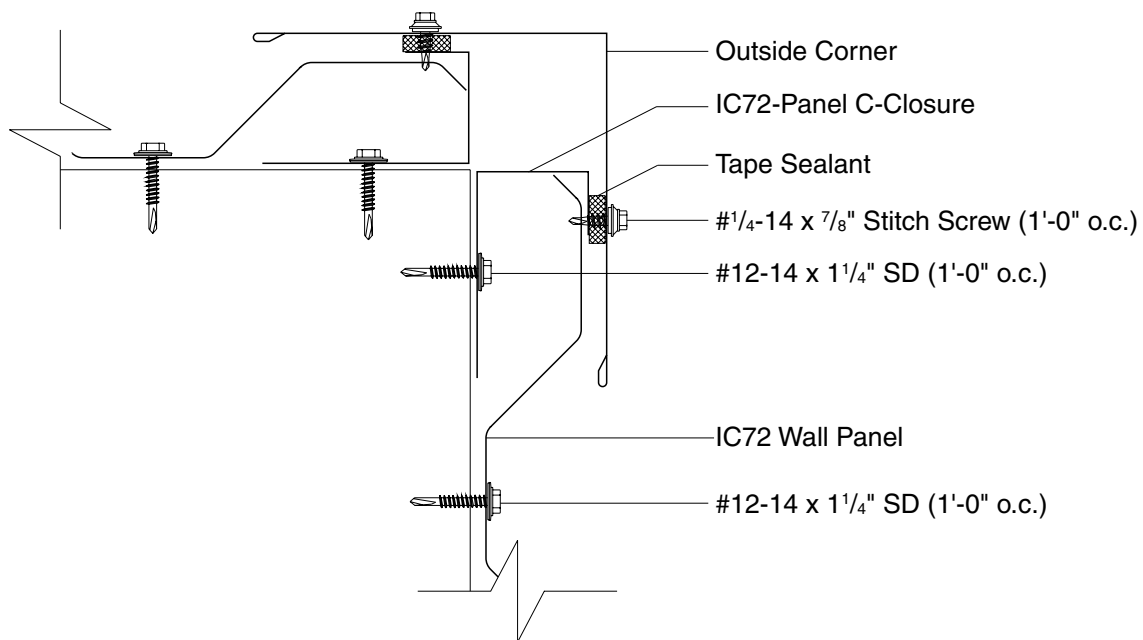


- Fastener (by others)
- Tape Sealant
- Gravel Stop
- IC72-Panel Closure
- Tape Sealant
- #1/4-14 x 7/8" Stitch Screw (1'-0" o.c.)
- #12-14 x 1 1/4" SD (see below)
- IC72 Wall Panel

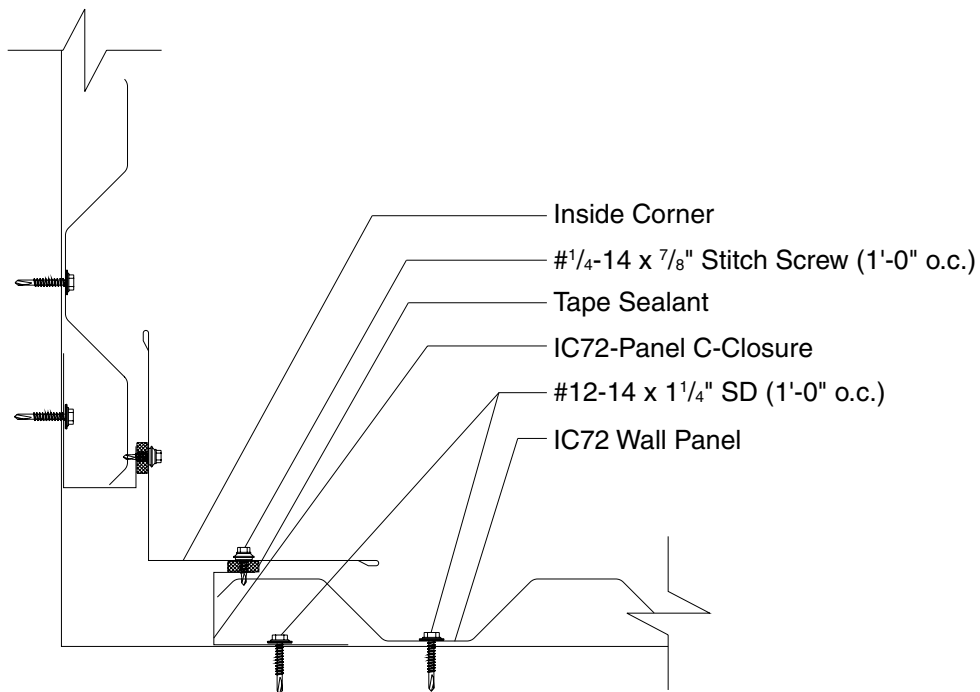


**IC72-Panel Fastening Pattern**

# IC72-PANEL OUTSIDE CORNER DETAIL

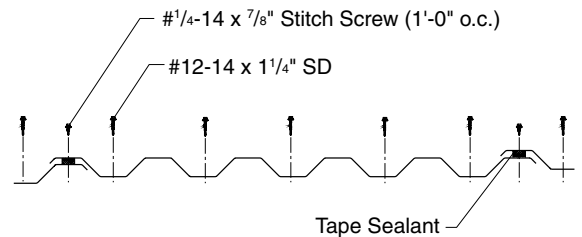
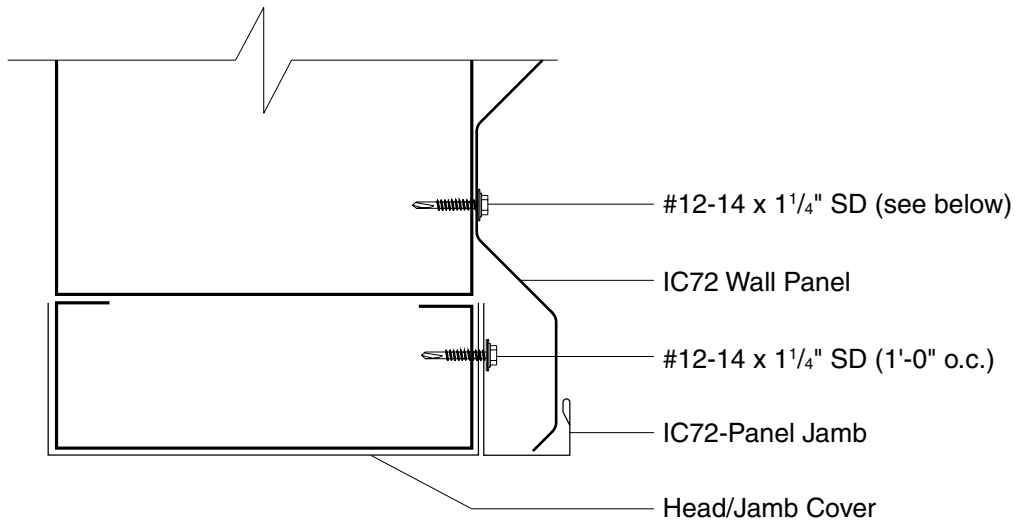


# IC72-PANEL INSIDE CORNER DETAIL



# IC72-PANEL

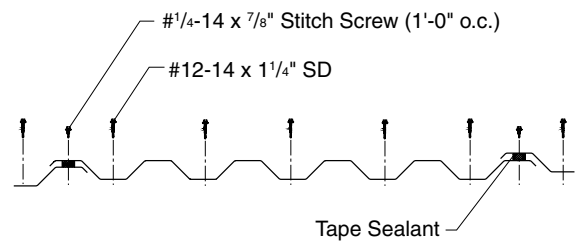
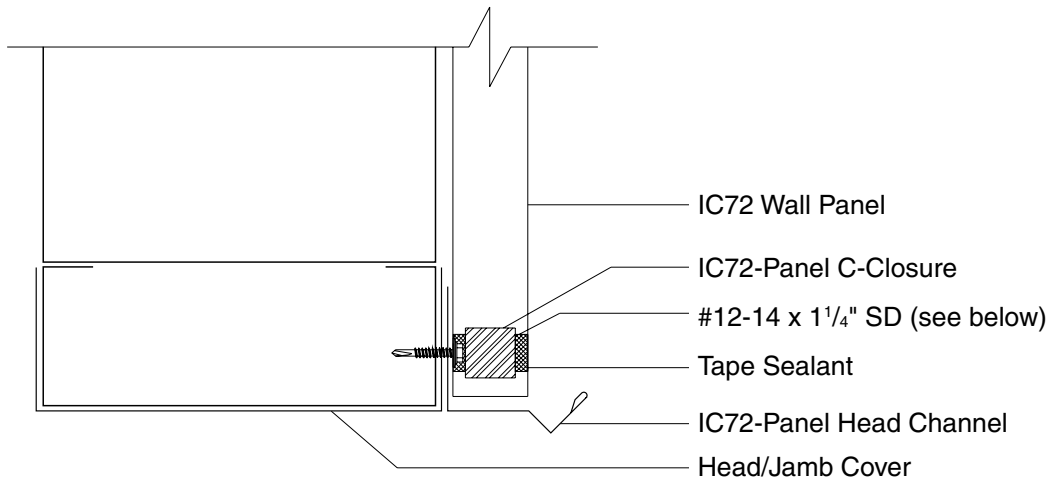
## JAMB DETAIL



**IC72-Panel Fastening Pattern**

# IC72-PANEL

## HEAD DETAIL



**IC72-Panel Fastening Pattern**

