

COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENED

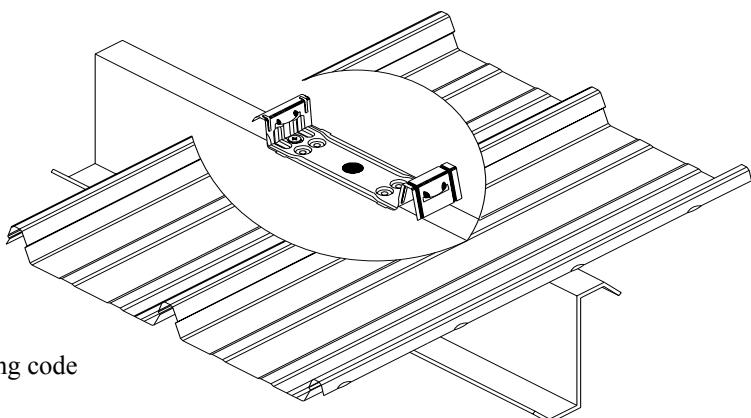
16"
COVERAGE

MINIMUM
SLOPE
1:12

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- Finishes: PVDF and Acrylic-Coated Galvalume®
- Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
AZ50 per ASTM A 792 for painted Galvalume®
G90 per ASTM A 653 for Galvanized
- Gauges: 26 ga and 24 ga standard; 22 ga optional
- 16" panel coverage, 1 5/8" rib height
- Panel Length: Minimum: 5'; Maximum: 45' recommended
- Commercial, structural integral standing rib roof system
- Snap-together side lap
- Minimum roof slope: 1:12
- Accommodates up to 4" blanket insulation

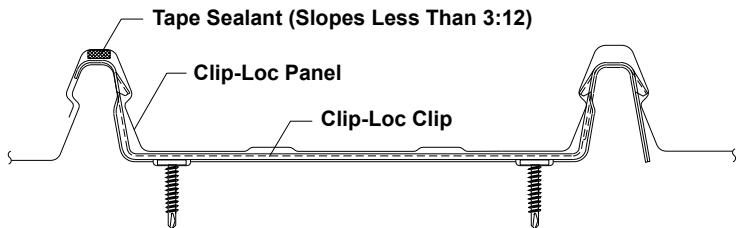


TESTING AND APPROVALS

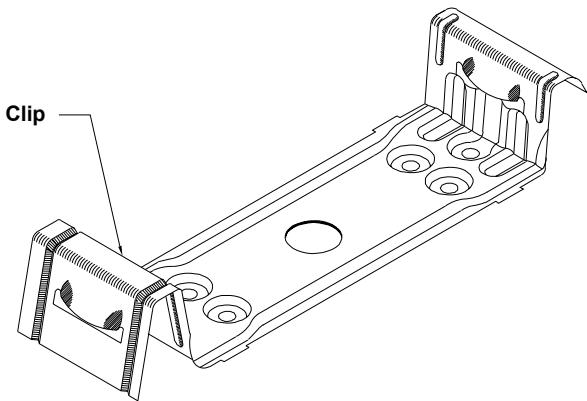
- UL 2218 Impact Resistance - Class 4
- UL 790 Fire Resistance Rating - Class A, per building code
- UL 263 Fire Resistance Rating - per assembly
- ASTM E 283 Air Leakage - 0.056 cfm/ft² at 6.24 psf*
- ASTM E 331 Water Penetration - none at 6.24 psf*
- ASTM E 1680 Air Leakage - 0.056 cfm/ft² at 6.24 psf*
- ASTM E 1646 Water Penetration - none at 2.86 psf*
- ASTM E 1592 Structural Performance
- UL 580 Uplift Resistance - Class 90 Constructions: #586, #586A and #609
- ICC Evaluation Report - ESR-2385
- AISI 1996 Cantilever Diaphragm test

* with single bead tape sealant in side lap

ATTACHMENT DETAIL



PANEL CLIP



FASTENING INFORMATION

► Clips

Clip spacing is based upon the design loads, the spanning capacity of the panels, the fasteners and the support members.

Clip is 20 ga, G90 galvanized.

Clips can accommodate thermal expansion and contraction.

► Fasteners

Overdriven fasteners will cause panel distortions.

Fasteners should extend 1/2" or more past the inside face of the support material.

Clip Fasteners:

Attaching to Wood:

#10-12 Pancake Head Wood Screw

Attaching to Steel:

<18 ga: 1/4"-14 Deck Screw

>=18 ga, <=12 ga: #10-16 Pancake Head Driller

Exposed End Fasteners:

Attaching to Wood:

#10-14 XL Wood Screw

Attaching to Steel:

<=12 ga: #12-14 XL Driller

Trim Fasteners:

1/4"-14 x 7/8" XL Stitch Screw

SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS, psf For various clip spacings

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Inward Load					Outward Load						
				I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2.5'	3'	3.5'	4'	4.5'	5'	2.5'	3'	3.5'	4'	4.5'	5'
								208	146	108	83	65	53	45	42	40	37	35	32
26	16	50	1.00	0.0919	0.0761	0.0473	0.0573	274	192	142	109	86	70	58	49	42	37	32	29
24	16	50	1.30	0.1185	0.0983	0.0638	0.0756	363	255	188	145	115	93	56	47	40	35	31	28
22	16	50	1.69	0.1523	0.1272	0.0878	0.1005												

- Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I_{xx} and S_{xx} are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending and shear and deflection. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners, support material 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 for wind.