

**ARCHITECTURAL
COMMERCIAL
PANEL**

**EXPOSED
FASTENED**

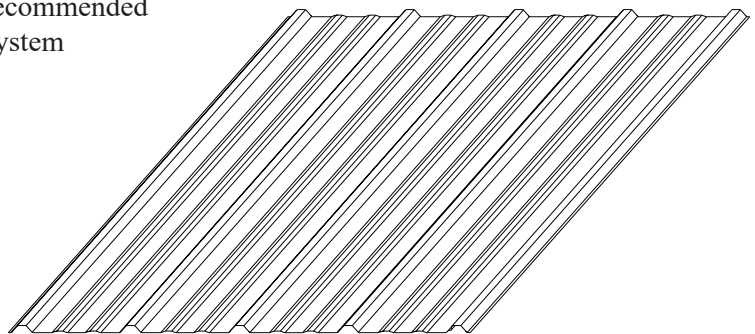
**36"
COVERAGE**

**MINIMUM
SLOPE
3:12**

**OPEN FRAMING OR
SOLID SUBSTRATE**

PANEL OVERVIEW

- ▶ Finishes: MS Colorfast45®, ColorFit40™, MS Crinkle Finish and Acrylic-Coated Galvalume®
- ▶ Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
AZ50 per ASTM A 792 for painted Galvalume®
G60, G90 or G100 per ASTM A 653 for Galvanized
- ▶ Gauges: 29 ga and 26 ga standard
- ▶ 36" panel coverage, 5/8" rib height
- ▶ Panel Length: Minimum: 5'; Maximum: 45' recommended
- ▶ Exposed fastened, low profile roof and wall system
- ▶ Trapezoidal rib on 9" centers
- ▶ Minimum roof slope: 3:12



TESTING AND APPROVALS

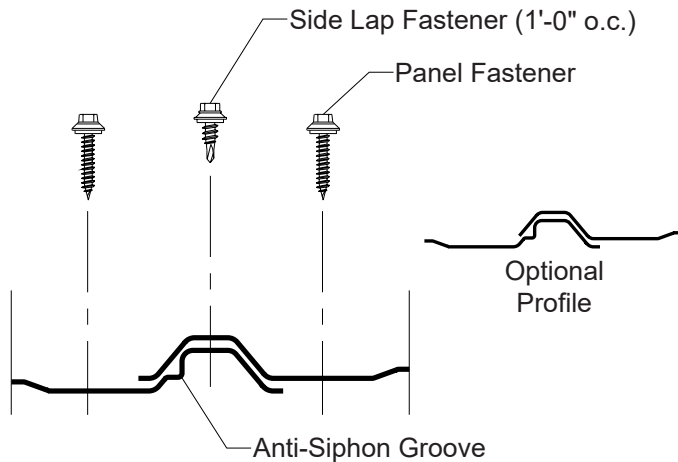
- ▶ UL 2218 Impact Resistance - Class 4
- ▶ UL 790 Fire Resistance Rating - Class A, per building code
- ▶ UL 263 Fire Resistance Rating - per assembly
- ▶ ASTM E 283 Air Leakage - 0.0076 cfm/ft² at 6.24 psf *
- ▶ ASTM E 331 Water Penetration - none at 12 psf*
- ▶ ASTM E 330 Structural Performance
- ▶ ASTM E 455 Diaphragm Capacity
- ▶ 2023 FBC Approval - FL14645.12 and FL46539.2

* uses tape sealant and stitch screws 1' on center in side lap

PRO-PANEL II®

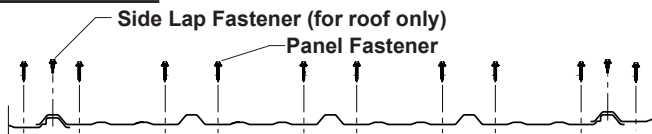
Condensed Technical Reference

ATTACHMENT DETAIL

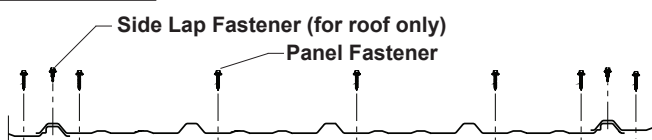


FASTENING PATTERN

Ends of Panel



Field of Panel



FASTENER INFORMATION

Overdriven fasteners will cause panel distortions.

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

Thick supports (ex. 1/2" steel) may require predrilling of holes for screws.

Applications with large internal suction pressure, such as partially enclosed structures and those with forced air ventilation, should add sidelap sealant to improve weather resistance.

The minimum roof slope permitted by IBC for metal panels with no sidelap sealant is 3:12. For metal panels with sidelap sealant, IBC permits a minimum slope as low as 1/2:12.

Panel Fasteners:

Attaching to Wood:

#10-14 Wood Screw
#10-14 XL Wood Screw

Attaching to Steel:

#12-14 Self Drilling Screw
#12-14 XL Self Drilling Screw

Side Lap Fastener: Spaced 12" on center

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

Trim Fastener:

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

SECTION PROPERTIES

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression	
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ixx in ⁴ /ft	Sxx in ³ /ft
29	36	80	0.62	0.0060	0.0123	0.0043	0.0128
26	36	80	0.79	0.0083	0.0171	0.0057	0.0165

ALLOWABLE UNIFORM LOADS, psf For various fastener spacings

Inward Load						Outward Load					
1.5'	2'	2.5'	3'	3.5'	4'	1.5'	2'	2.5'	3'	3.5'	4'
155	88	57	40	27	18	150	85	55	38	27	18
200	114	73	51	34	23	207	118	76	53	34	23

- Theoretical section properties have been calculated per AISI 2016 'North American Specification 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 2016 specifications considering bending, shear, combined bending & shear and deflection. Allowable load does not address web crippling, fasteners, support material or load testing. Allowable load considers the three or more equal spans condition. 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.

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