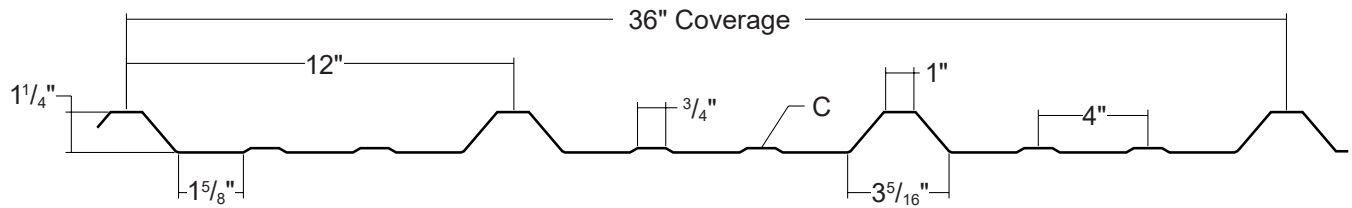


# PBR-PANEL

Condensed  
Technical  
Reference



COMMERCIAL  
INDUSTRIAL  
PANEL

EXPOSED  
FASTENED

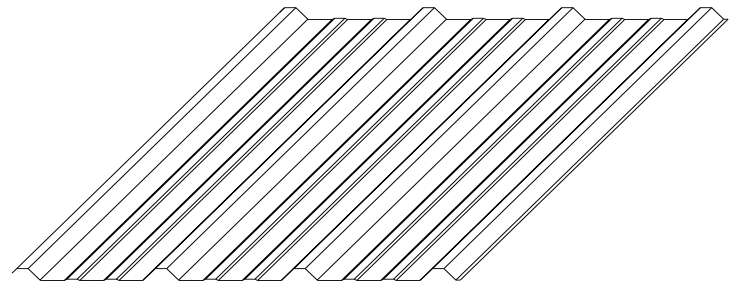
36"  
COVERAGE

MINIMUM  
SLOPE  
1:12

OPEN FRAMING OR  
SOLID SUBSTRATE

## PANEL OVERVIEW

- ▶ Finishes: PVDF, MS Colorfast45<sup>®</sup> and Acrylic-Coated Galvalume<sup>®</sup>
- ▶ Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume<sup>®</sup>  
AZ50 per ASTM A 792 for painted Galvalume<sup>®</sup>  
G90 per ASTM A 653 for Galvanized
- ▶ Gauges: 26 ga and 24 ga standard; 22 ga optional
- ▶ 36" panel coverage, 1 1/4" rib height
- ▶ Panel Length: Minimum: 5'; Maximum: 45' recommended
- ▶ Exposed fastened metal building roof and wall system
- ▶ Trapezoidal rib on 12" centers
- ▶ Minimum roof slope: 1:12
- ▶ Optional material availability: Bonderized



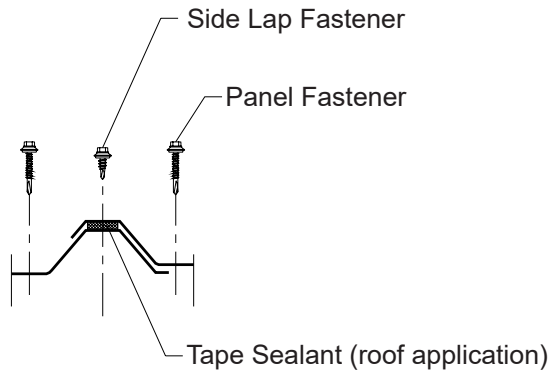
## TESTING AND APPROVALS

- ▶ 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 1592 Structural Performance
- ▶ UL 580 Uplift Resistance - Class 90 Construction: #161
- ▶ Texas Windstorm - Evaluations RC-198, RC-265 and RC-279
- ▶ 2023 FBC Approvals - FL9482.4, FL10999.7 and FL14645.11
- ▶ Miami-Dade County, Florida NOA 20-0331.02 - Wall expires 4/22/2025
- ▶ Miami-Dade County, Florida NOA 20-0331.03 - Roof expires 4/22/2025
- ▶ ICC Evaluation Report - ESR-2385

**MS Metal Sales**<sup>™</sup>

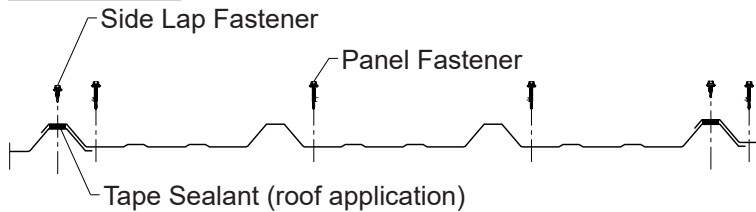
# PBR-PANEL

## ATTACHMENT DETAIL

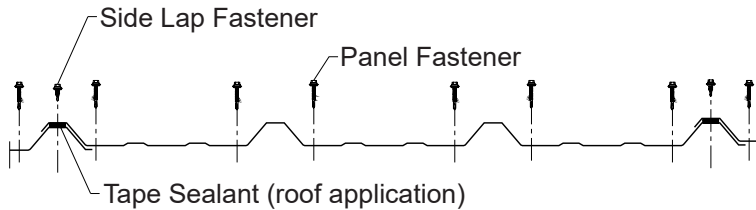


## FASTENING PATTERNS

### Field of Panel



### Ends 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 panels (ex. 18 ga) or supports (ex. 1/2" steel) may require predrilling of holes for screws.

Panel Fastener:

Attaching to Wood:

#10-14 XL Wood Screw

Attaching to Steel:

#12-14 XL Self Drilling Screw

Side Lap Fastener: Spaced 12" on center

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

Trim Fastener:

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

Tape Sealant:

Single Bead: 3/8 x 3/32 x 50' Roll

## SECTION PROPERTIES

## ALLOWABLE UNIFORM LIVE LOADS, psf For various fastener spacings

Ga	Width in	Yield ksi	Weight psf	Top in Compression		Bottom in Compression		Inward Load						Outward Load					
				I <sub>xx</sub> in <sup>4</sup> /ft	S <sub>xx</sub> in <sup>3</sup> /ft	I <sub>xx</sub> in <sup>4</sup> /ft	S <sub>xx</sub> in <sup>3</sup> /ft	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'
26	36	80	0.84	0.0367	0.0367	0.0317	0.0458	261	129	76	49	35	23	223	107	62	40	28	21
24	36	50	1.09	0.0560	0.0579	0.0457	0.0613	330	153	88	57	39	29	314	145	83	53	37	27
22	36	50	1.43	0.0800	0.0860	0.0633	0.0816	453	207	118	76	53	39	474	217	124	80	55	41

- Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. I<sub>xx</sub> and S<sub>xx</sub> 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 & 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.