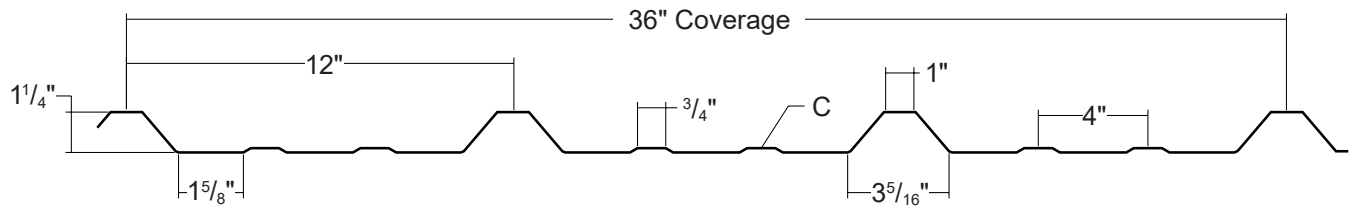


# PBR-PANEL

Condensed  
Technical  
Reference



COMMERCIAL  
INDUSTRIAL  
PANEL

EXPOSED  
FASTENED

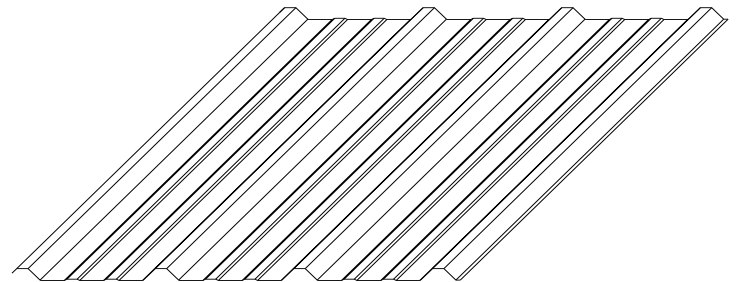
36"  
COVERAGE

MINIMUM  
SLOPE  
1:12

OPEN FRAMING OR  
SOLID SUBSTRATE

## PANEL OVERVIEW

- ▶ Finishes: Sherwin Williams WXL 40 year paint warranty
- ▶ 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
- ▶ 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

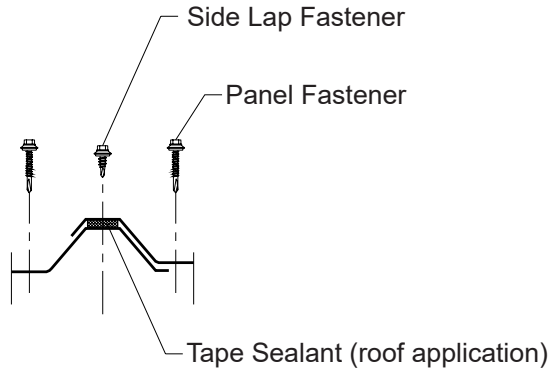


IOWA STEEL *MASTERS*

# PBR-PANEL

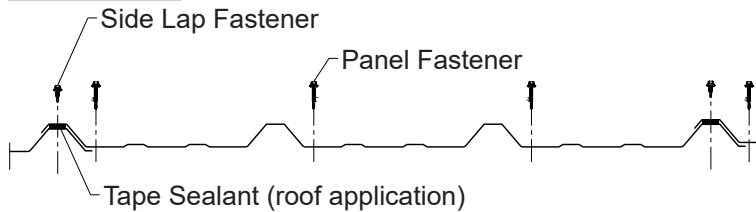
**Condensed  
Technical  
Reference**

## ATTACHMENT DETAIL

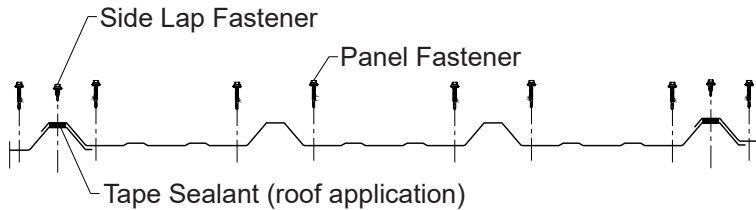


## FASTENING PATTERNS

### 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<br>in | Yield<br>ksi | Weight<br>psf | Top in Compression                     |  | Bottom in Compression                  |  | Inward Load |     |     |    |    |    | Outward Load |     |     |    |    |    |
|----|-------------|--------------|---------------|--|--|--|--|-------------|-----|-----|----|----|----|--------------|-----|-----|----|----|----|
|    |             |              |               | I <sub>xx</sub><br>in <sup>4</sup> /ft | S <sub>xx</sub><br>in <sup>3</sup> /ft | I <sub>xx</sub><br>in <sup>4</sup> /ft | S <sub>xx</sub><br>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.



IOWA STEEL *MASTERS*

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