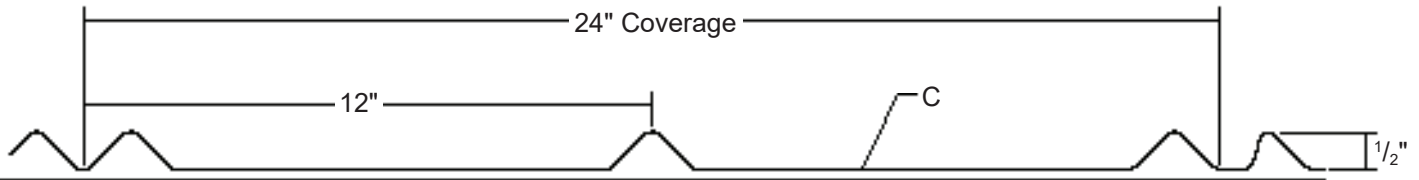


# 5V-CRIMP

Condensed  
Technical  
Reference



ARCHITECTURAL  
RESIDENTIAL  
PANEL

EXPOSED  
FASTENED

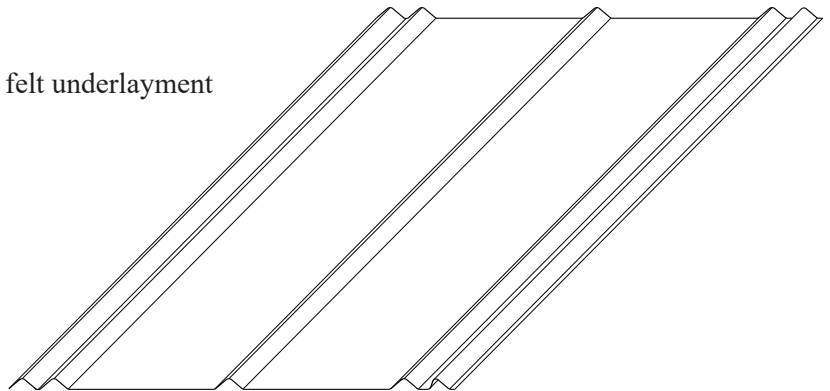
24"  
COVERAGE

MINIMUM  
SLOPE  
3:12

SOLID WOOD  
SUBSTRATE

## PANEL OVERVIEW

- ▶ Finishes: 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 standard; 24 ga optional
- ▶ 24" panel coverage, 1/2" rib height
- ▶ Panel Length: Minimum: 5'; Maximum: 45' recommended
- ▶ Residential, 'V' rib roof system
- ▶ Minimum roof slope: 3:12
- ▶ Applies over plywood with minimum 30# felt underlayment



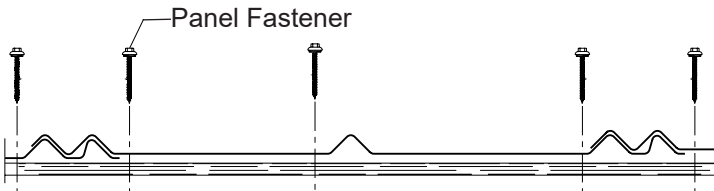
## TESTING AND APPROVALS

- ▶ UL 2218 Impact Resistance - Class 4
- ▶ UL 790 Fire Resistance Rating - Class A, per building code
- ▶ UL 263 Fire Resistance Rating - per assembly
- ▶ UL 580 Uplift Resistance - Class 90 Constructions: #579 and #453
- ▶ Texas Windstorm - Evaluation RC-160
- ▶ 2017 FBC Approvals - FL14645.2, FL14645.3 and FL14645.4
- ▶ Miami-Dade County, Florida NOA 13-0627.02 expires 6/29/2018

**ms metal sales**<sup>™</sup>  
manufacturing corporation

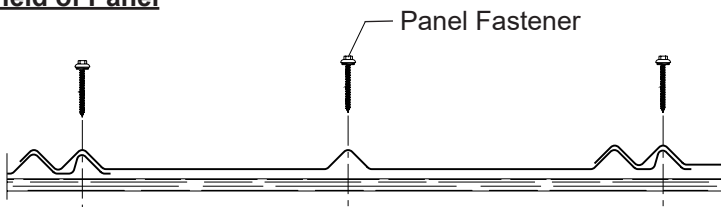
# 5V-CRIMP

## FASTENING PATTERN

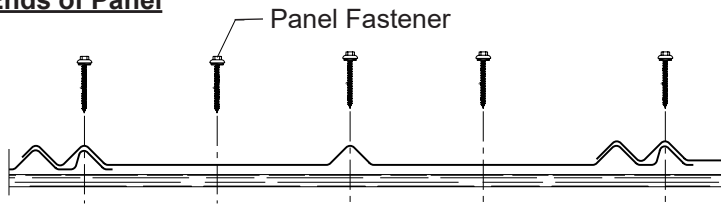


## ALTERNATE FASTENING PATTERN

### 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 Wood Screw

#10-14 XL Wood Screw

Trim Fastener:

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

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

## SECTION PROPERTIES

## ALLOWABLE UNIFORM LOADS, psf For various fastener spacings

| Ga | Width<br>in | Yield<br>ksi | Weight<br>psf | Top In Compression                     |  | Bottom In Compression                  |  | 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 | 0.5'         | 1'  | 1.5' | 2' | 2.5' | 3' |
|    |             |              |               |  |  |  |  |              |     |      |    |      |    |
| 26 | 24          | 50           | 0.78          | 0.0025                                 | 0.0070                                 | 0.0015                                 | 0.0055                                 | 197          | 100 | 71   | 62 | 50   | 42 |
| 24 | 24          | 50           | 1.02          | 0.0030                                 | 0.0089                                 | 0.0020                                 | 0.0073                                 | 197          | 100 | 71   | 62 | 50   | 42 |

- Theoretical section properties have been calculated per AISI 2012 '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 2012 specifications considering bending, shear, combined bending and shear, deflection and UL 580 uplift testing over 5/8" plywood using the Alternate Fastening Pattern above. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, fasteners or support material. 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.