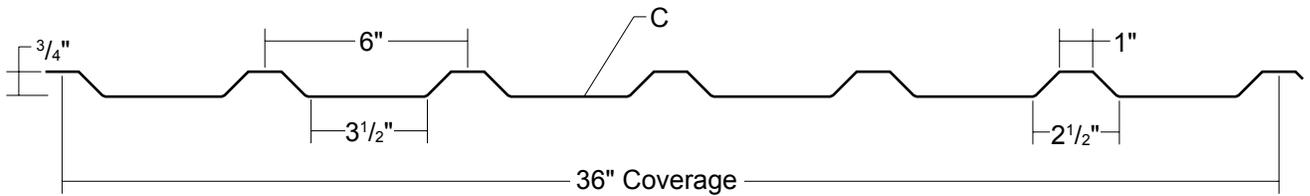


U-PANEL

Condensed
Technical
Reference



COMMERCIAL
INDUSTRIAL
PANEL

EXPOSED
FASTENED

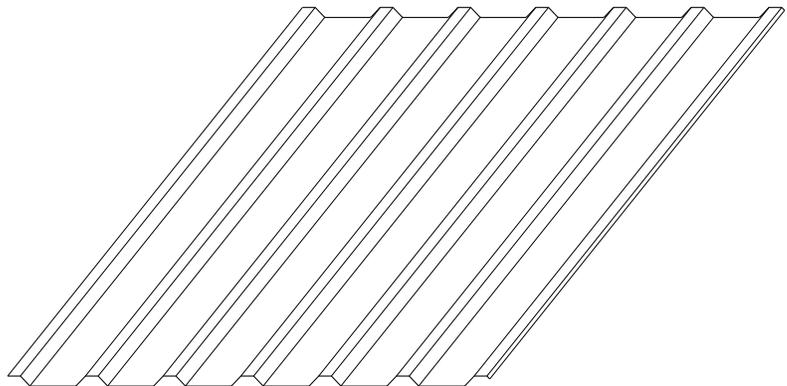
36"
COVERAGE

WALL
PANEL

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: PVDF, MS Colorfast45[®] 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
- ▶ 36" panel coverage, $\frac{3}{4}$ " rib height
- ▶ Panel Length: Minimum: 5'; Maximum: 45' recommended
- ▶ Exposed fastened metal building roof and wall system
- ▶ Trapezoidal rib on 6" centers
- ▶ Wall Panel



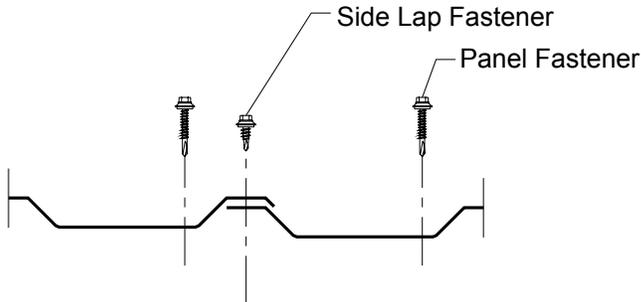
TESTING AND APPROVALS

- ▶ 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 Construction: #39
- ▶ Texas Windstorm - Evaluation RC-196
- ▶ ICC Evaluation Report - ESR-2385

ms metal sales[™]
manufacturing corporation

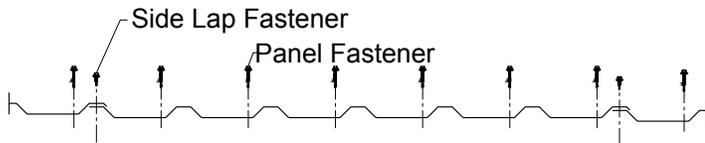
U-PANEL

ATTACHMENT DETAIL



FASTENING PATTERN

Ends and 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 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:

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

Trim Fastener:

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

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 _{xx} in ⁴ /ft	S _{xx} in ³ /ft	I _{xx} in ⁴ /ft	S _{xx} in ³ /ft	2'	3'	4'	5'	6'	7'	2'	3'	4'	5'	6'	7'	
26	36	80	0.81	0.0187	0.0349	0.0127	0.0369	245	112	58	30	17	11	234	106	58	30	17	11	
24	36	50	1.05	0.0270	0.0517	0.0183	0.0461	259	118	67	40	23	15	288	131	75	40	23	15	
22	36	50	1.38	0.0380	0.0736	0.0270	0.0673	375	171	97	54	31	20	406	186	105	54	31	20	

- Theoretical section properties have been calculated per AISI 2012 '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 2012 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.
- The allowable diaphragm strength for a 26 ga panel attached to 16 ga supports with the above fastener and fastener pattern has been calculated at 342 plf with supports at 2' oc and 211 plf with supports 5' oc using the "Diaphragm Design Manual", 3rd Edition, Steel Deck Institute.