

ARCHITECTURAL
COMMERCIAL
PANEL

EXPOSED
FASTENED

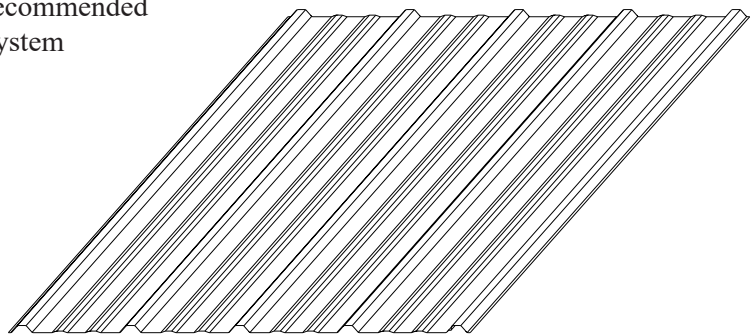
36"
COVERAGE

MINIMUM
SLOPE
3:12

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: MS Colorfast45®, Acrylic-Coated Galvalume® and MS ColorFit40
- ▶ 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

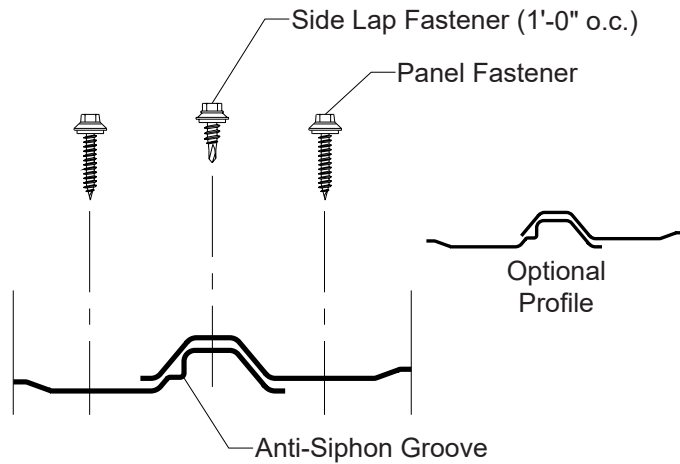


TESTING AND APPROVALS

- ▶ 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
- ▶ 2017 FBC Approvals - FL14645.14

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

ATTACHMENT DETAIL



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 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:

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

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

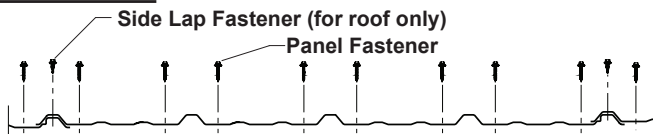
Trim Fastener:

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

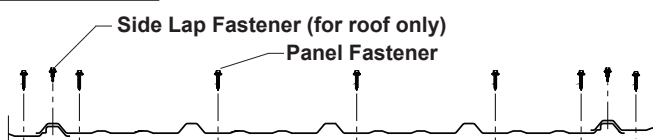
1/4"-14 x 7/8" XL Stitch Screw

FASTENING PATTERN

Field of Panel



Ends of Panel



SECTION PROPERTIES

ALLOWABLE UNIFORM 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	1.5'	2'	2.5'	3'	3.5'	4'	1.5'	2'	2.5'	3'	3.5'	4'
29	36	80	0.63	0.0067	0.0134	0.0047	0.0133	156	90	58	41	27	18	157	90	59	41	27	18
26	36	80	0.80	0.0090	0.0181	0.0063	0.0170	199	115	75	52	35	24	210	122	79	55	35	24

- 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.
- Diaphragm Capacity** - 306 plf average Ultimate Shear Strength using the above fastening pattern on 2x supports located 2' on center, per ASTM E 445.