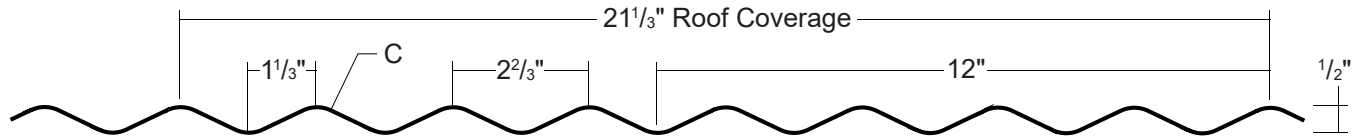


2.5" CORRUGATED

Condensed
Technical
Reference

ROOF PANEL



COMMERCIAL
RESIDENTIAL
PANEL

EXPOSED
FASTENED

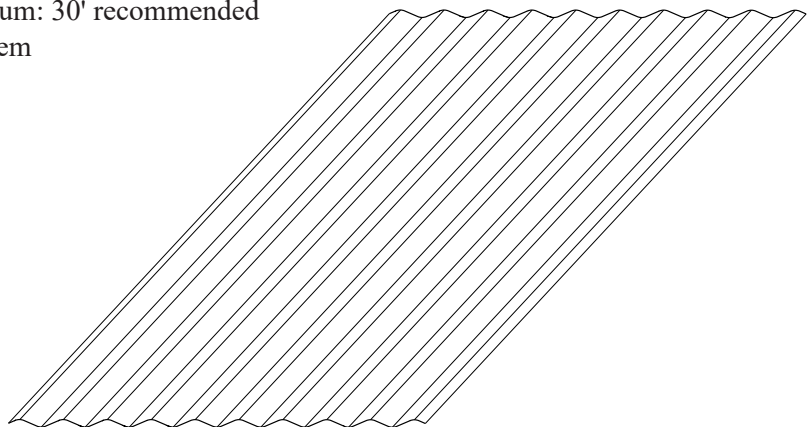
21 1/3"
COVERAGE

MINIMUM
SLOPE
3:12

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: MS Colorfast45®, Acrylic-Coated Galvalume® and Bare Galvanized
- ▶ Corrosion Protection: AZ55 per ASTM A 792 for unpainted Galvalume®
AZ50 per ASTM A 792 for painted Galvalume®
G30, G60, G90 or G100 per ASTM A 653 for Galvanized
- ▶ Gauges: 29 ga and 26 ga standard; 31 ga, 30 ga, 24 ga and 22 ga optional
- ▶ Testing and Approvals do not apply to 30 ga or 31 ga
- ▶ 21 1/3" panel coverage, 1/2" rib height
- ▶ Panel Length: Minimum: 3'-6"; Maximum: 30' recommended
- ▶ Exposed fastened, low profile roof system
- ▶ Corrugated ribs on 2 2/3" centers
- ▶ Minimum roof slope: 3:12



TESTING AND APPROVALS

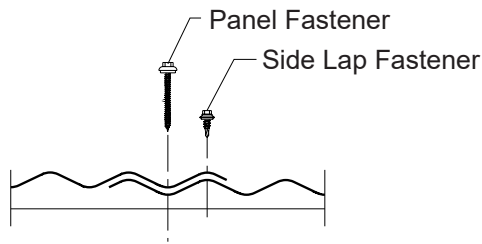
- ▶ UL 2218 Impact Resistance - Class 4
- ▶ UL 790 Fire Resistance Rating - Class A, per building code
- ▶ UL 263 Fire Resistance Rating - per assembly
- ▶ Texas Windstorm - Evaluation RC-159
- ▶ 2023 FBC Approval - FL14645.1
- ▶ ICC Evaluation Report - ESR-2385

MS Metal Sales™

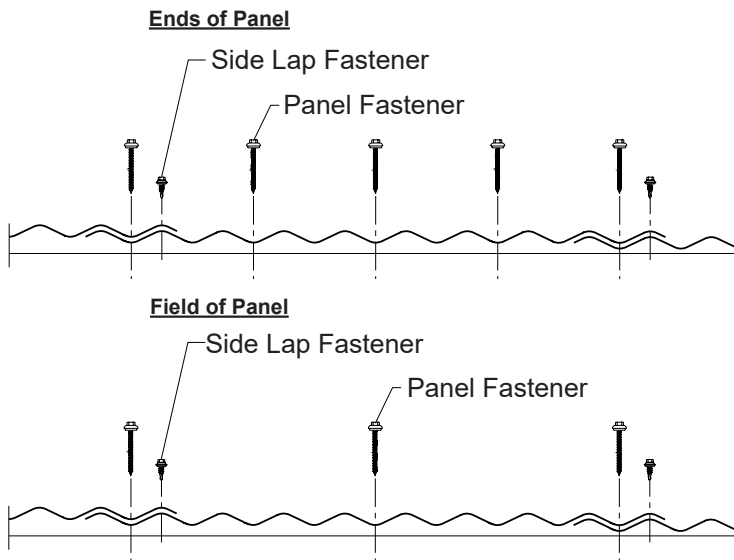
2.5" CORRUGATED

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ATTACHMENT DETAILS



FASTENING PATTERN



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.

Applications with large internal suction pressure, such as partially enclosed structures and those with forced air ventilation, should add sidelap sealant to improve weather resistance.

The minimum roof slope permitted by IBC for metal panels with no sidelap sealant is 3:12. For metal panels with sidelap sealant, IBC permits a minimum slope as low as 1/2:12.

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

Sidelap Fastener, 12" on center:

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

SECTION PROPERTIES

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression	
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ixx in ⁴ /ft	Sxx in ³ /ft
31	21.33	80	0.53	0.0039	0.0147	0.0038	0.0131
30	21.33	80	0.66	0.0051	0.0202	0.0051	0.0185
29	21.33	80	0.70	0.0056	0.0215	0.0055	0.0204
26	21.33	50	0.90	0.0073	0.0275	0.0073	0.0274
24	21.33	50	1.17	0.0096	0.0354	0.0096	0.0354
22	21.33	50	1.53	0.0124	0.0457	0.0124	0.0457

ALLOWABLE UNIFORM LOADS, psf For various fastener spacings

Inward Load						Outward Load					
2'	2.5'	3'	3.5'	4'	4.5'	2'	2.5'	3'	3.5'	4'	4.5'
89	48	28	18	12	-	94	48	28	18	12	-
118	60	35	22	15	10	118	60	35	22	15	10
120	62	36	22	15	11	120	62	36	22	15	11
153	78	45	29	19	13	153	78	45	29	19	13
200	102	59	37	25	18	200	102	59	37	25	18
259	133	77	48	32	23	259	133	77	48	32	23

- Theoretical section properties have been calculated per AISI 2016 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
- Allowable load is calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending & shear and 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.

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Anchorage, AK 866.640.7663
Bay City, MI 888.777.7640
Deer Lake, PA 800.544.2577
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