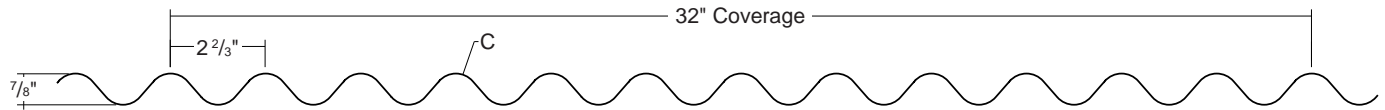


7/8" CORRUGATED

CONDENSED
TECHNICAL
REFERENCE

ROOF PANEL



COMMERCIAL
INDUSTRIAL
PANEL

EXPOSED
FASTENED

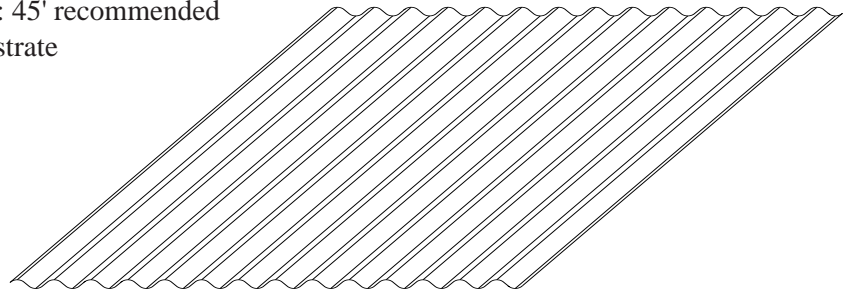
32"
COVERAGE

MINIMUM
SLOPE
1:12

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: Standard: MS Colorfast45[®], PVDF (Kynar 500[®]), Bare Galvanized and Acrylic Coated Galvalume[®]
Optional: Weathering Steel
- ▶ 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 and 20 ga optional
- ▶ 32" panel coverage, alternate coverages are available, 7/8" rib height
- ▶ Panel Length: Minimum: 3'; Maximum: 45' recommended
- ▶ Applies over open framing or solid substrate
- ▶ Minimum roof slope: 1:12



TESTING AND APPROVALS

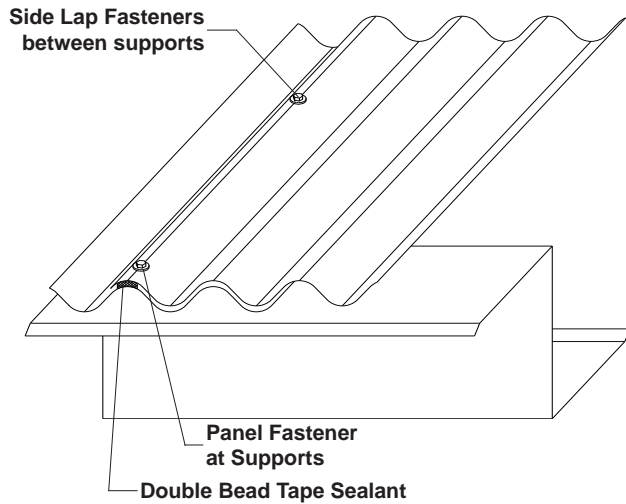
- ▶ UL 2218 Impact Resistance - Class 4
- ▶ UL 790 Fire Resistance Rating - Class A, per building code
- ▶ UL 263 Fire Resistance Rating - per assembly
- ▶ ASTM E 1680 Air Leakage - 0.007 cfm/ft² at 6.24 psf
- ▶ ASTM E 1646 Water Penetration - none at 12 psf
- ▶ ASTM E 283 Air Leakage - 0.004 cfm/ft² at 6.24 psf
- ▶ ASTM E 331 Water Penetration - none at 12 psf
- ▶ ASTM E 1592 Structural Performance
- ▶ UL 580 Uplift Resistance - Class 90 Construction: #649
- ▶ 2010 FBC Approval - FL10999.1

ms metal sales
manufacturing corporation

7/8" CORRUGATED

CONDENSED TECHNICAL REFERENCE

ROOF ATTACHMENT



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 XL Wood Screw

Attaching to Steel:

≤12 ga: #12-14 XL Driller

Side Lap Fastener:

1/4"-14x7/8" XL Stitch Screw, 1' on center

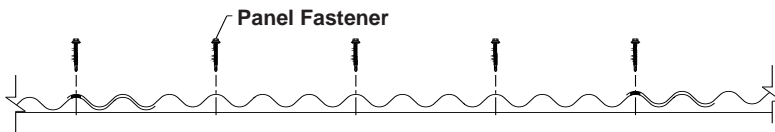
Trim Fasteners:

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

1/8" x 3/16" Pop Rivet

FASTENING PATTERNS

ROOF



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								
				Ixx in ⁴ /ft		Sxx in ³ /ft		Ixx in ⁴ /ft		Sxx in ³ /ft		2.5'		3'			3.5'		4'			4.5'		5'	
26	32	50	1.02	0.0278	0.0624	0.0278	0.0624	227	159	107	72	50	37	227	159	107	72	50	37	227	159	107	72	50	37
24	32	50	1.33	0.0338	0.0801	0.0338	0.0801	291	204	130	87	61	45	291	204	130	87	61	45	291	204	130	87	61	45
22	32	50	1.73	0.0450	0.1029	0.0450	0.1029	373	262	173	116	81	59	373	262	173	116	81	59	373	262	173	116	81	59
20	32	33	2.11	0.0525	0.1234	0.0525	0.1234	295	207	153	117	93	69	295	207	153	117	93	69	295	207	153	117	93	69

- Theoretical section properties have been calculated per AISI 2007 '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 2007 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.

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