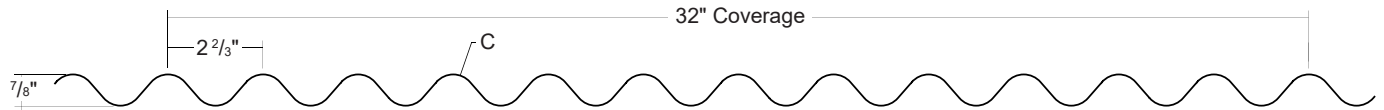


# 7/8" CORRUGATED

Condensed  
Technical  
Reference

## ROOF PANEL



COMMERCIAL  
INDUSTRIAL  
PANEL

EXPOSED  
FASTENED

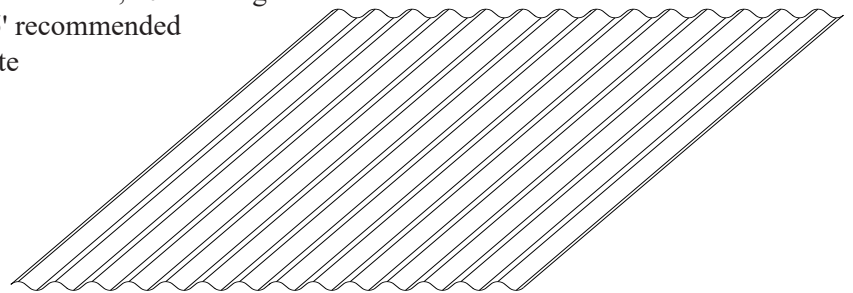
32"  
COVERAGE

MINIMUM  
SLOPE  
1:12

OPEN FRAMING OR  
SOLID SUBSTRATE

## PANEL OVERVIEW

- ▶ Finishes: Standard:MS Colorfast45<sup>®</sup>, PVDF, Bare Galvanized and Acrylic-Coated Galvalume<sup>®</sup>  
Optional: Weathering Steel
- ▶ 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 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

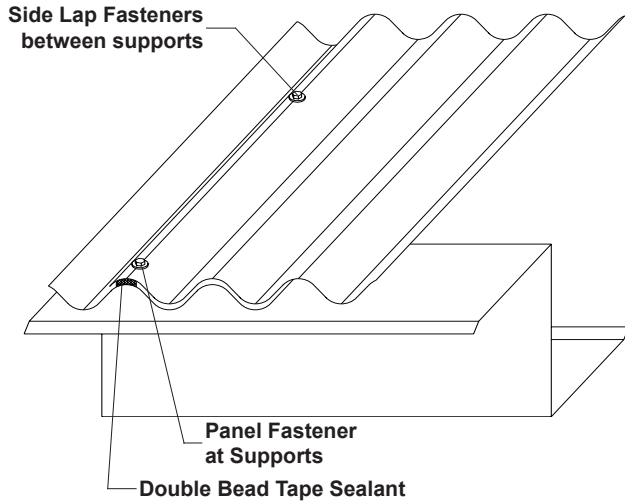
- ▶ UL 2218 Impact Resistance - Class 4
- ▶ UL 790 Fire Resistance Rating - Class A, per building code
- ▶ UL 263 Fire Resistance Rating - per assembly
- ▶ ASTM E 1680 Air Leakage - 0.007 cfm/ft<sup>2</sup> at 6.24 psf
- ▶ ASTM E 1646 Water Penetration - none at 12 psf
- ▶ ASTM E 283 Air Leakage - 0.004 cfm/ft<sup>2</sup> 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
- ▶ Texas Windstorm - Evaluation RC-409
- ▶ 2020 FBC Approval - FL10999.1
- ▶ ICC Evaluation Report - ESR-2385

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## 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:

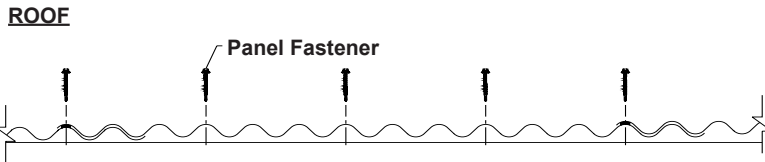
1/4"-14x7/8" XL Stitch Screw, 1' on center

### Trim Fasteners:

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

1/8" x 3/16" Pop Rivet

## FASTENING PATTERNS



## SECTION PROPERTIES

Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression	
				Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft
26	32	50	1.02	0.0278	0.0624	0.0278	0.0624
24	32	50	1.33	0.0338	0.0801	0.0338	0.0801
22	32	50	1.73	0.0450	0.1029	0.0450	0.1029
20	32	33	2.11	0.0525	0.1234	0.0525	0.1234

## ALLOWABLE UNIFORM LOADS, psf For various fastener spacings

								Inward Load					Outward Load						
								2.5'	3'	3.5'	4'	4.5'	5'	2.5'	3'	3.5'	4'	4.5'	5'
26	32	50	1.02	0.0278	0.0624	0.0278	0.0624	272	172	108	73	51	37	272	172	108	73	51	37
24	32	50	1.33	0.0338	0.0801	0.0338	0.0801	291	204	132	88	62	45	291	204	132	88	62	45
22	32	50	1.73	0.0450	0.1029	0.0450	0.1029	373	262	176	118	83	60	373	262	176	118	83	60
20	32	33	2.11	0.0525	0.1234	0.0525	0.1234	295	207	153	117	93	72	295	207	153	117	93	72

- 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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