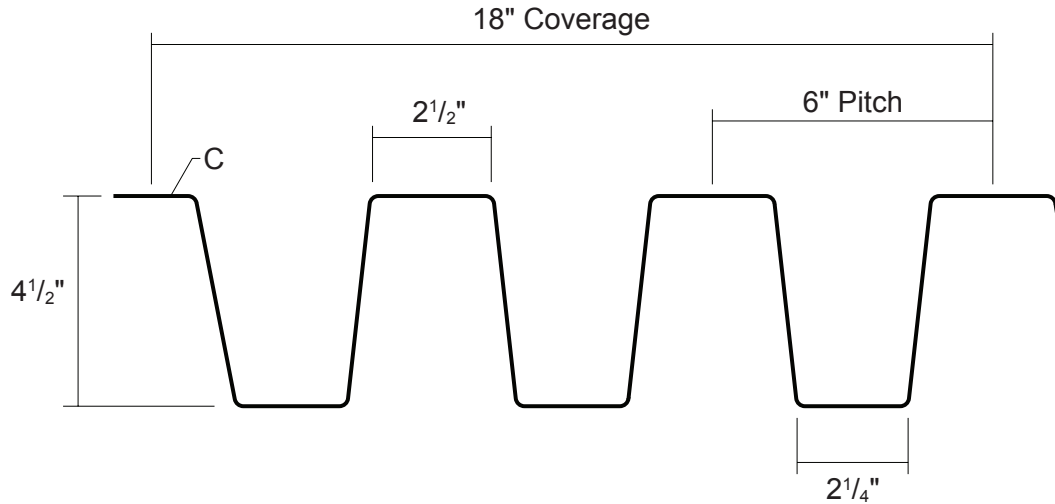


# TDR-6 ROOF PANEL

Condensed  
Technical  
Reference

DEEP RIB SERIES



ARCHITECTURAL  
COMMERCIAL  
INDUSTRIAL  
PANEL

EXPOSED  
FASTENED

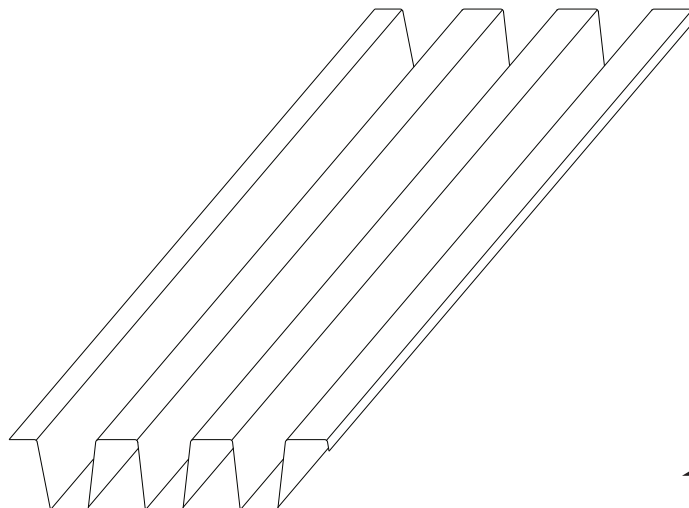
18"  
COVERAGE

MINIMUM  
SLOPE  
1:12

OPEN FRAMING OR  
SOLID SUBSTRATE

## PANEL OVERVIEW

- ▶ Finishes: Standard: PVDF  
Optional: Multi-pass Kynar®, Marblique, Plastisol, Polyester and MS Colorfast45®
- ▶ 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: 24 ga, 22 ga, 20 ga and 18 ga
- ▶ 18" panel coverage, 4 1/2" rib height
- ▶ Trapezoidal ribs on 6" centers
- ▶ Panel Length: 5' minimum, 30' maximum
- ▶ Exposed Fastened Panel
- ▶ Minimum Roof Slope 1:12
- ▶ Optional material availability: Stainless Steel, Copper and Aluminum

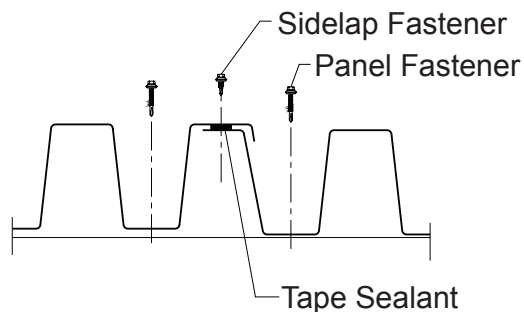


MS Metal Sales™

# TDR-6 ROOF PANEL

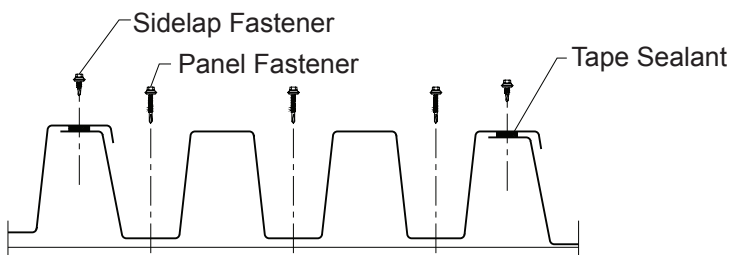
**Condensed  
Technical  
Reference**

## ATTACHMENT DETAIL



## FASTENING PATTERN

### Ends and Field of Panel



## FASTENER INFORMATION

Overdriven fasteners will cause panel distortion.

Panel 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

Sidelap Fastener:

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

Trim Fastener:

1/8" x 3/16" Pop Rivet

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

## 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 <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	18	50	2.20	1.3407	0.5100	1.3140	0.4551	195	155	126	88	64	49	204	164	134	95	70	53
22	18	50	2.89	2.0093	0.8363	1.9713	0.7372	371	288	230	155	111	83	399	313	251	171	123	93
20	18	33	3.53	2.7073	1.1949	2.7907	1.1373	445	334	260	169	119	88	463	349	271	177	125	92
18	18	33	4.65	3.7453	1.6221	3.8467	1.6061	600	487	376	243	170	125	600	491	379	245	171	126

- 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 loads are calculated in accordance with AISI 2016 specifications considering bending, shear, combined bending and shear and deflection. Allowable loads consider the 3 or more equal span condition. Allowable loads do 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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