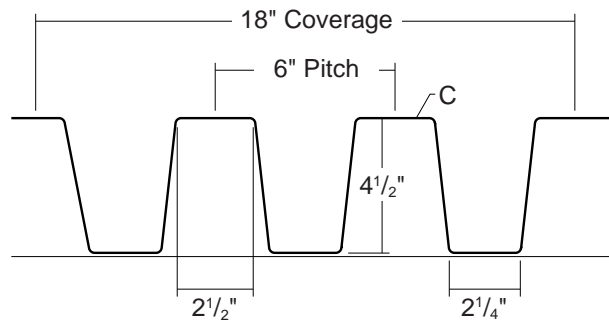


TDR-6 ROOF PANEL

CONDENSED
TECHNICAL
REFERENCE

ROOF PANEL



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

DIRECT
FASTEN

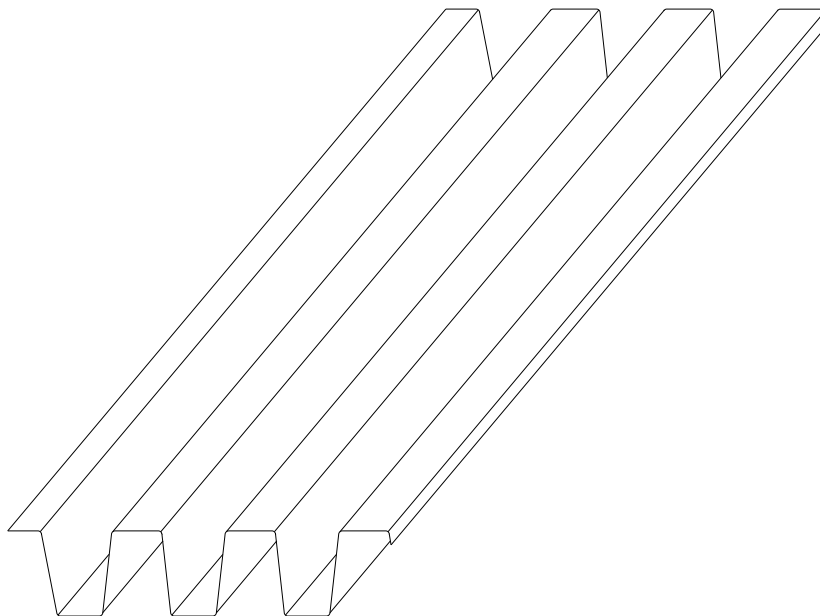
18"
COVERAGE

MINIMUM
SLOPE
1:12

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: Kynar 500 (PVDF) standard, optional; multi-pass Kynar, Marblique, Plastisol, Polyester, and MS Colorfast45[®] (SMP)
- ▶ Gauges: 24ga, 22ga, 20ga, and 18ga
- ▶ 18" panel coverage, 4 1/2" rib height
- ▶ Trapezoidal ribs on 6" centers
- ▶ Optional material availability: Stainless Steel, Copper, and Aluminum
- ▶ Custom capabilities include:
 - Perforated panels for wind screens and liner panels
- ▶ Exposed fastened panel



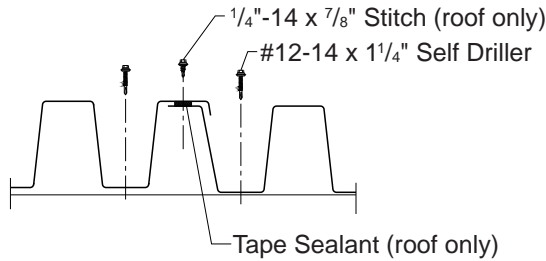
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TDR-6 ROOF PANEL

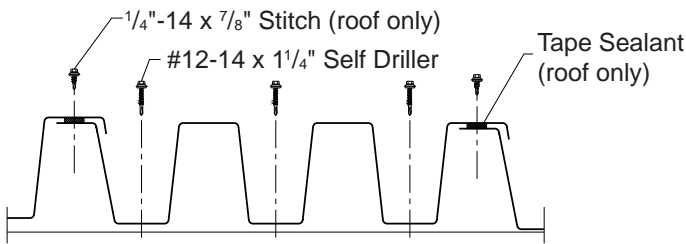
CONDENSED TECHNICAL REFERENCE

ATTACHMENT DETAIL



FASTENING PATTERN

Ends and Field of Panel



GENERAL INFORMATION

► Substructure

TDR-6 panel is designed to be utilized over open structural framing, or a solid substrate.

► Coverage

TDR-6 panels are available in a 4 1/2" depth with a 18" width coverage.

► Length

Minimum factory cut length is 5'-0".
Maximum recommended panel length is 30'-0".

► Fasteners

The fastener selection guide should be consulted for choosing the proper fastener for specific applications. Quantity and type of fastener must meet necessary loading and code requirements.

NOTE: All panels are subject to surface distortion due to improperly applied fasteners. Overdriven fasteners will cause stress and induce oil canning across the face of the panel at or near the point of attachment.

► Availability

Finishes: Kynar 500 (PVDF) standard; optional: multi-pass Kynar, Marblique, Plastisol, Polyester, and MS Colorfast45® (SMP)
Gauges: 24ga, 22ga, 20ga, and 18ga

SECTION PROPERTIES

ALLOWABLE UNIFORM LOADS PSF (3 or More Equal Spans)

Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward Load						Outward/Uplift Load					
				Ixx In ⁴ /ft	Sxx In ³ /ft	Ixx In ⁴ /ft	Sxx In ³ /ft	6'	7'	8'	10'	12'	14'	6'	7'	8'	10'	12'	14'
24	18"	50	2.20	1.3404	0.5100	1.3140	0.4551	195	155	126	88	64	49	204	164	135	95	70	53
22	18"	50	2.92	2.0407	0.8525	2.0020	0.7509	380	295	235	158	113	85	409	321	257	175	126	95
20	18"	33	3.45	2.6373	1.1611	2.7187	1.1059	429	323	252	164	115	85	447	337	263	172	121	89
18	18"	33	4.55	3.6493	1.5833	3.7460	1.5610	634	472	365	236	165	122	643	479	370	239	167	123

- Theoretical section properties have been calculated per AISI 2001 "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 2001 specifications considering bending, shear, combined bending and shear, deflection, and applicable testing when available. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection and 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 in uplift.

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