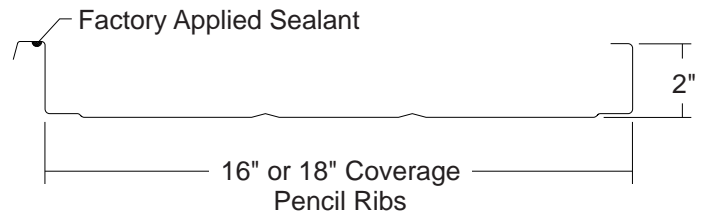
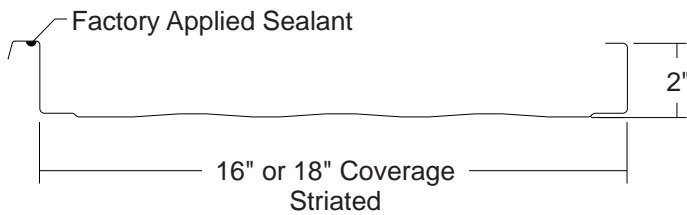
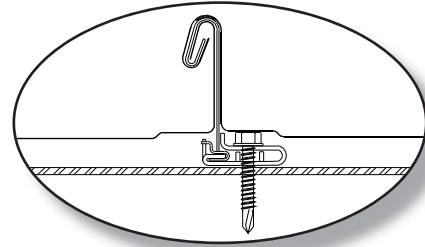
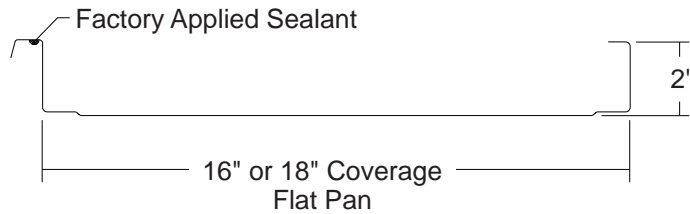


MAGNA-LOC 180



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENERS

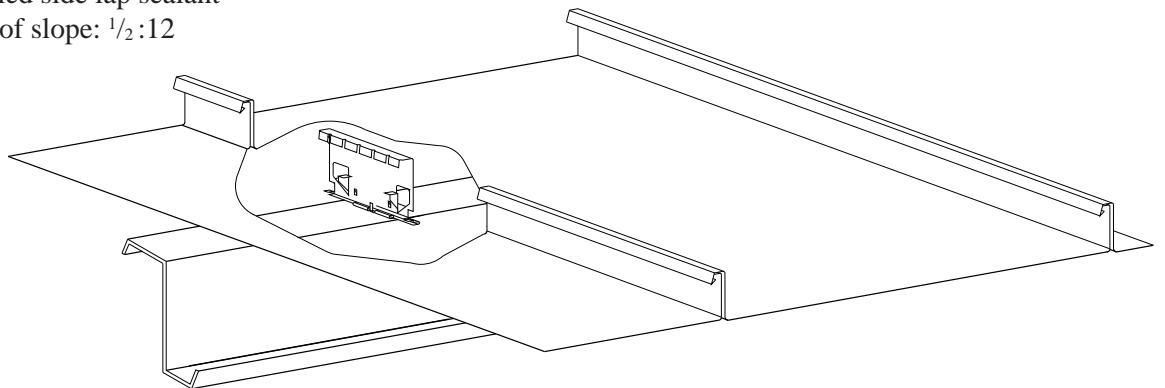
16" OR 18"
COVERAGE

MINIMUM
1/2:12 SLOPE

OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: Kynar 500 (PVDF) and Acrylic Coated Galvalume®
- ▶ Gauge: 24ga standard
- ▶ 16" or 18" panel coverage, 2" rib height
- ▶ Panels can be factory notched and punched
- ▶ Architectural/structural flat pan standing seam panel
- ▶ Applies over open framing or solid substrate
- ▶ Concealed clip designed to accommodate thermal movement
- ▶ Integral mechanically seamed side lap
- ▶ Accommodates 1/2" to 6" blanket insulation
- ▶ Factory applied side lap sealant
- ▶ Minimum roof slope: 1/2:12



TESTING

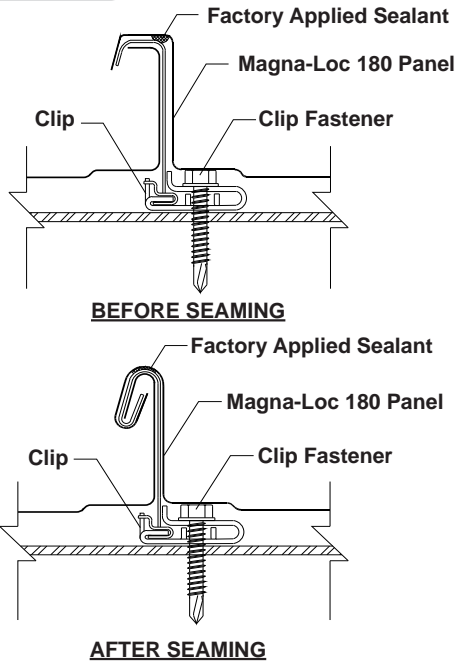
- ▶ ASTM E-1680 Air Penetration
- ▶ ASTM E-1646 Water Infiltration
- ▶ ASTM E-1592 Structural Performance
- ▶ UL 580 Class 90 Wind Uplift, Construction Number 506, 506A, 506B
- ▶ Florida Building Code Approved 5810.2

metal sales
manufacturing corporation

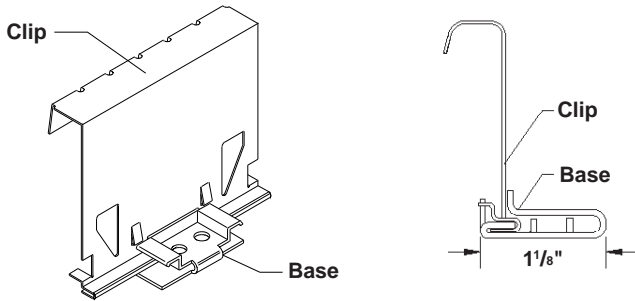


MAGNA-LOC 180

ATTACHMENT DETAILS



PANEL CLIP



GENERAL INFORMATION

- ▶ **Slope**
The minimum recommended slope for the Magna-Loc 180 roof panel is 1/2:12.
- ▶ **Substructure**
Magna-Loc 180 is designed to be utilized over open structural framing or a solid substrate.
- ▶ **Clips**
Clip spacing is based upon the spacing of structural framing members and loading requirements.
- ▶ **Coverage**
Magna-Loc 180 panels are available in a 2" seam height with a 16" or 18" width coverage.
- ▶ **Length**
Minimum factory cut length is 5'-0" (with striations), 7'-0" (without striations). Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult Metal Sales for recommendations.
- ▶ **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: Acrylic Coated Galvalume® or various Kynar 500 (PVDF) colors.
Gauge: 24ga

SECTION PROPERTIES

ALLOWABLE UNIFORM LIVE LOADS PSF (3 or More Equal Spans)

Ga.	Width (in.)	Yield KSI	Weight PSF	Top in Compression		Bottom in Compression		Inward (Gravity / Deflection) Load						Outward Uplift (Stress) Load					
				Ixx In ⁴ /ft	Sxx In ³ /ft	Ixx In ⁴ /ft	Sxx In ³ /ft	1'	2'	2.5'	3'	4'	5'	1'	2'	2.5'	3'	4'	5'
24	16"	50	1.24	0.1403	0.0772	0.0720	0.0656	1166	352	232	164	94	60	146	119	105	92	64	37
24	18"	50	1.21	0.0691	0.0320	0.0640	0.0583	1000	250	160	111	63	40	115	95	85	75	46	30

- 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 ASTM 1592 testing. 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.



Kent, WA (800) 431-3470
 Temple, TX (800) 543-4415
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