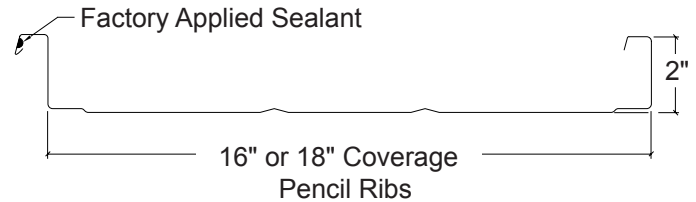
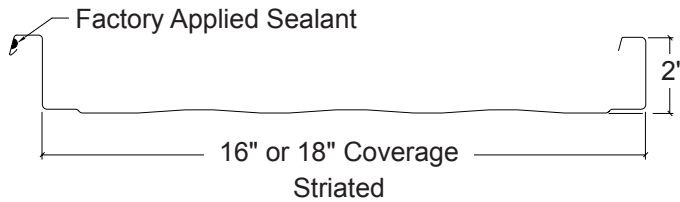
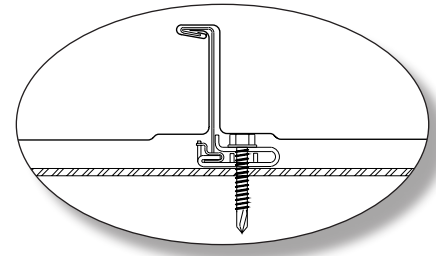
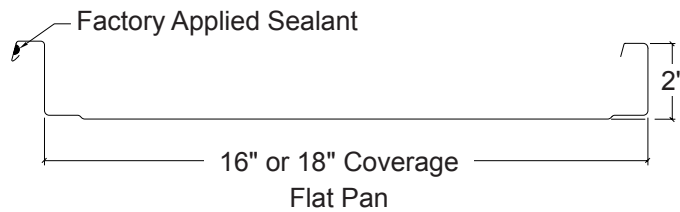


MAGNA-LOC

CONDENSED TECHNICAL REFERENCE



ARCHITECTURAL
COMMERCIAL
INDUSTRIAL
PANEL

CONCEALED
FASTENERS

16" OR 18"
COVERAGE

MINIMUM
1/2:12 SLOPE

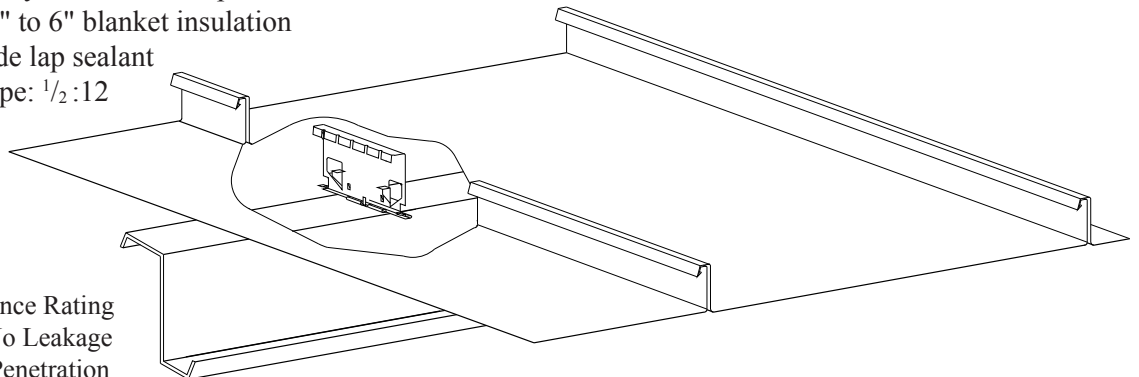
OPEN FRAMING OR
SOLID SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: PVDF (Kynar 500), Acrylic Coated Galvalume®
- ▶ Gauges: 24 ga standard, 22 ga and 20 ga optional
- ▶ 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 seam
- ▶ Accommodates 1/2" to 6" blanket insulation
- ▶ Factory applied side lap sealant
- ▶ Minimum roof slope: 1/2:12

TESTING

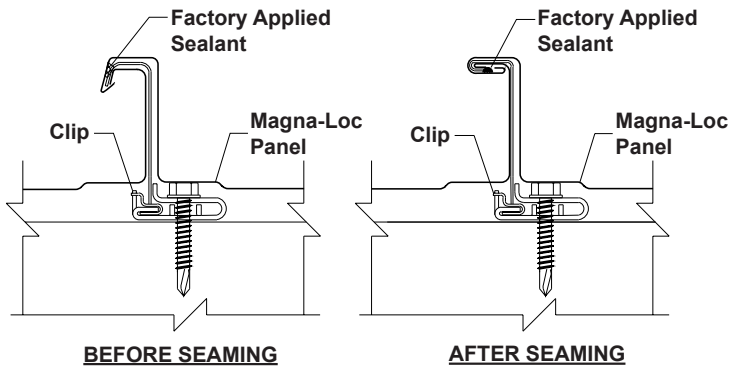
- ▶ UL 263 Fire Resistance Rating
- ▶ ASTM E 2140-01 No Leakage
- ▶ ASTM E 1680 Air Penetration
- ▶ ASTM E 1646 Water Infiltration
- ▶ Factory Mutual Approved Class 1-90, 1-105, 1-165
- ▶ Florida Building Code Approved 10999.1, 11560.2, 11560.3
- ▶ UL 2218 Class 4 Impact Resistance
- ▶ UL 790 Class A Fire Resistance Rating
- ▶ ASTM E 1680 and 1646 Air and Water Infiltration.
- ▶ UL 580 Class 90 Wind Uplift-Construction Numbers: 506, 506A, 506B
- ▶ Miami-Dade County Approved 08-1014.08, 08-1006.04
- ▶ Texas Wind Storm Evaluation RC-197



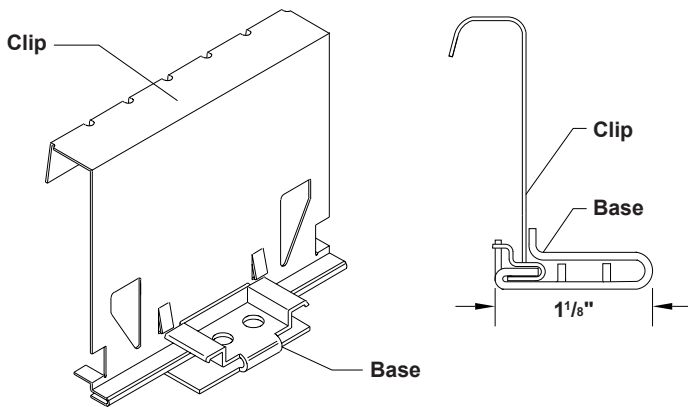
MAGNA-LOC

CONDENSED TECHNICAL REFERENCE

ATTACHMENT DETAILS



PANEL CLIP



GENERAL INFORMATION

► Slope

The minimum recommended slope for the Magna-Loc roof panel is 1/2:12.

► Substructure

Magna-Loc 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 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® and PVDF (Kynar 500).

Gauges: 24 ga standard, 22 ga and 20 ga optional

SECTION PROPERTIES

Ga.	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression	
				Ixx in ⁴ /ft	Sxx in ³ /ft	Ixx in ⁴ /ft	Sxx in ³ /ft
24	16"	50	1.25	0.1785	0.1013	0.0855	0.0754
22	16"	50	1.63	0.2468	0.1419	0.1178	0.1066
20	16"	33	2.02	0.3165	0.1831	0.1643	0.1474
24	18"	50	1.21	0.1620	0.0900	0.0760	0.0669
22	18"	50	1.58	0.2233	0.1255	0.1047	0.0947
20	18"	33	1.96	0.2893	0.1640	0.1460	0.1310

ALLOWABLE UNIFORM LOADS psf (3 or More Equal Spans)

Inward Load						Outward Load					
2.5'	3'	3.5'	4'	4.5'	5'	2.5'	3'	3.5'	4'	4.5'	5'
161	126	101	82	68	57	111	99	87	75	63	51
257	197	155	125	103	86	119	110	101	92	83	74
252	189	147	117	93	76	392	283	213	166	133	109
144	112	89	73	61	51	68	62	56	50	43	37
233	176	138	111	91	74	78	73	68	62	57	52
224	168	131	104	83	67	350	253	191	149	119	97

- 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 for 24 ga and 22 ga. Allowable load considers the worst case of 3 and 4 equal span conditions. Allowable load does not address web crippling or fasteners/support connection or testing for 20 ga 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.

metal sales
manufacturing corporation



Kent, WA 800.431.3470
Temple, TX 800.543.4415
Longmont, CO 800.289.7663
Antioch, TN 800.251.8508
Woodland, CA 800.759.6019
Rogers, MN 800.3289316
Spokane, WA 800.572.6565

Jefferson, OH 800.321.5833
Rock Island, IL 800.747.1206
Sellersburg, IN 800.999.7777
Jacksonville, FL 800.394.4419
Orwigsburg, PA 800.544.2577
Independence, MO 800.747.0012
Fontana, CA 800.782.7953

Anchorage, AK 866.640.7663
Bay City, MI 888.777.7640
Detroit Lakes, MN 888.594.1394
Mocksville, NC 800.228.6119
Fort Smith, AR 877.452.3915

www.metalsales.us.com