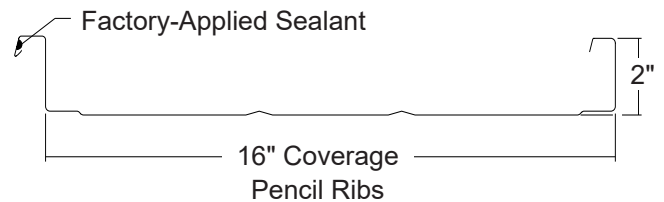
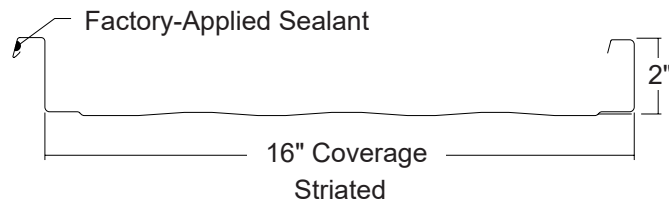
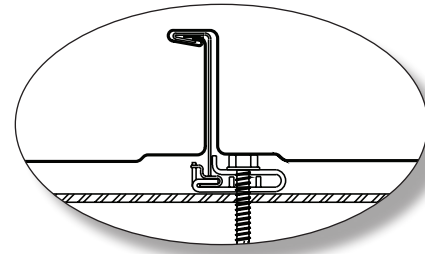
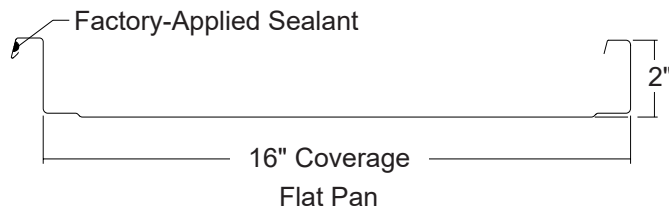


# ALUMINUM MAGNA-LOC

Condensed  
Technical  
Reference



ARCHITECTURAL  
COMMERCIAL  
INDUSTRIAL  
PANEL

CONCEALED  
FASTENERS

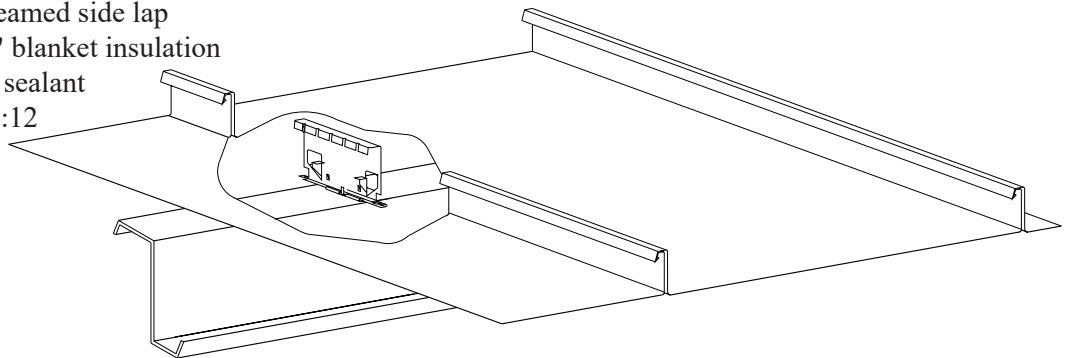
16"  
COVERAGE

MINIMUM  
1/2:12 SLOPE

OPEN FRAMING OR  
SOLID SUBSTRATE

## PANEL OVERVIEW

- ▶ Finish: PVDF and Mill Finish
- ▶ Material: 3003-H14 Aluminum per ASTM B 209
- ▶ Thickness: 0.032"
- ▶ 16" panel coverage, 2" rib height
- ▶ Panels can be factory notched and punched for end laps
- ▶ Architectural/structural flat pan standing seam panel
- ▶ Applies over open framing or solid substrate
- ▶ Concealed clip designed to accommodate thermal movement, 1.5" each way
- ▶ Integral, mechanically seamed side lap
- ▶ Accommodates 1/2" to 6" blanket insulation
- ▶ Factory-applied side lap sealant
- ▶ Minimum roof slope: 1/2:12



## TESTING AND APPROVALS

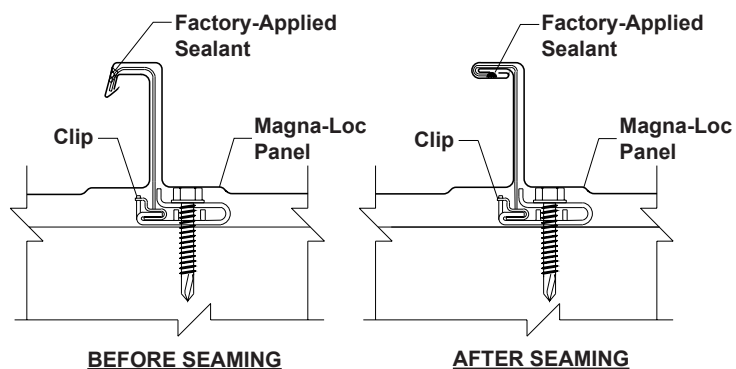
- ▶ UL 2218, Class 4, Impact Resistance
- ▶ UL 790, Class A, Fire Resistance
- ▶ UL 263, Fire Resistance
- ▶ ASTM E 1680 Air Penetration - 0.0016 cfm/ft<sup>2</sup> leakage at 12 psf
- ▶ ASTM E 1646 Water Infiltration - No Leakage at 30 psf
- ▶ ASTM E 2140 Standing Water - No Leakage at 6" of water
- ▶ ASTM E 1592 Wind Uplift
- ▶ 2017 FBC Approval - FL10999.2

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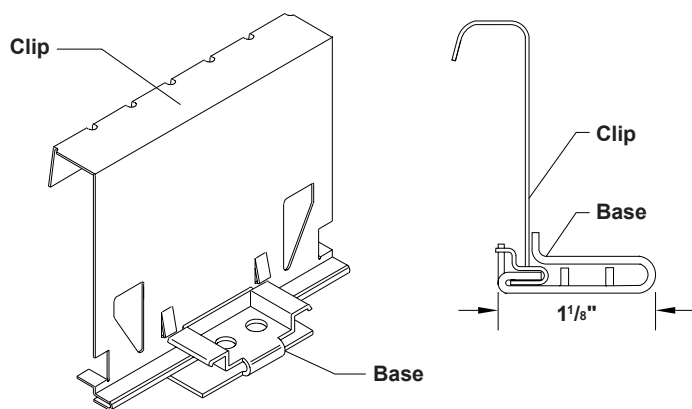
# ALUMINUM MAGNA-LOC

Condensed  
Technical  
Reference

## ATTACHMENT DETAILS



## PANEL CLIP



## GENERAL INFORMATION

- ▶ **Length**  
Minimum factory cut length is 5'-0" with striations and 7'-0" without striations.  
Maximum recommended panel length is 45'-0".  
Please inquire about longer panels.
- ▶ **Clips**  
Clip spacing is based upon the spacing of structural framing members and loading requirements. Clips with Galvanized tabs are standard. Clips with Stainless Steel tabs are also available.
- ▶ **Fasteners**  
Overdriven fasteners will cause panel distortions.

Panel and Clip fasteners should extend 1/2" or more past the inside face of the support material.

Type 304 Stainless Steel fasteners are recommended for any fastener that penetrates Aluminum.

Type of fastener material is shown in parenthesis.

### Clip Fasteners:

#### Attaching to Wood:

#12-11 x 1.5" Wood Screw (Carbon Steel)

#### Attaching to Steel:

<18 ga: 1/4"-13 Deck Screw (Carbon Steel)

>= 18 ga, <= 12 ga: 1/4"-14 Driller (Carbon Steel)

> 12 ga: 1/4"-24 Driller, No Washer (Carbon Steel)

### Exposed End Fasteners (Attaching to Eave Plate):

#12-14 Driller (Stainless Steel)

#12-14 Driller XL (Carbon Steel)

### Concealed End Fasteners (Attaching to Eave Plate):

#12-14 Driller (Stainless Steel)

#12-14 Driller, No Washer (Carbon Steel)

### Trim Fasteners:

1/8" x 3/16" Pop Rivets (Stainless Steel)

#14-11 x 1" Stitch Screw (Stainless Steel)

1/4"-14 x 7/8" Stitch Screw (Carbon Steel)

## SECTION PROPERTIES

## ALLOWABLE UNIFORM LOADS, psf (3 or More Equal Spans)

Thick in	Width in	Yield ksi	Weight psf	I in <sup>4</sup> /ft	S <sub>Top</sub> in <sup>3</sup> /ft	S <sub>Bottom</sub> in <sup>3</sup> /ft	Inward Load						Outward Load					
							1'	2'	2.5'	3'	4'	5'	1'	2'	2.5'	3'	4'	5'
							0.032	16	17	0.60	0.2723	0.1568	0.6351	347	94	61	42	24

- Section properties have been calculated per 2010 Aluminum Design Manual. Ixx and Sxx are section properties for deflection and bending.
- Allowable load is calculated in accordance with 2010 Aluminum Design Manual specifications considering bending, shear, combined bending and shear, deflection, and ASTM 1592 uplift testing. Allowable load does not address web crippling or other fasteners or support materials.
- 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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