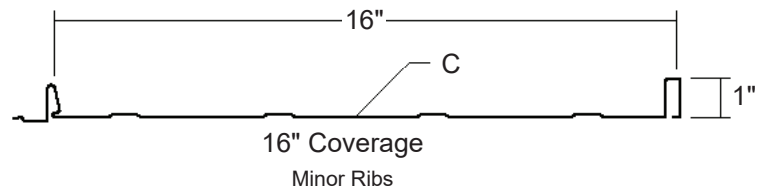
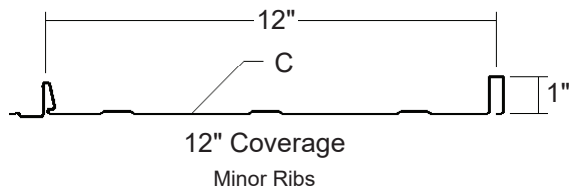
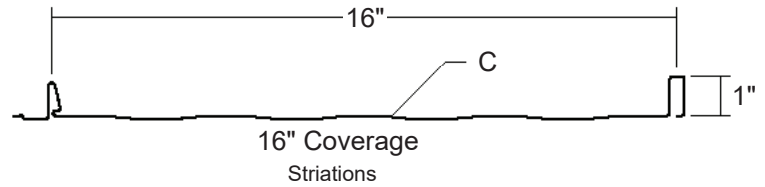
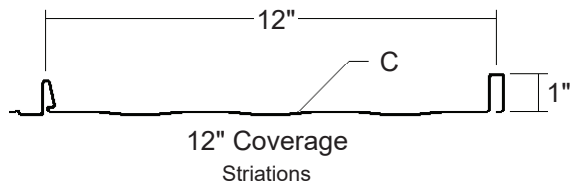


ALUMINUM IMAGE II

Condensed
Technical
Reference



ARCHITECTURAL
RESIDENTIAL
PANEL

CONCEALED
FASTENERS

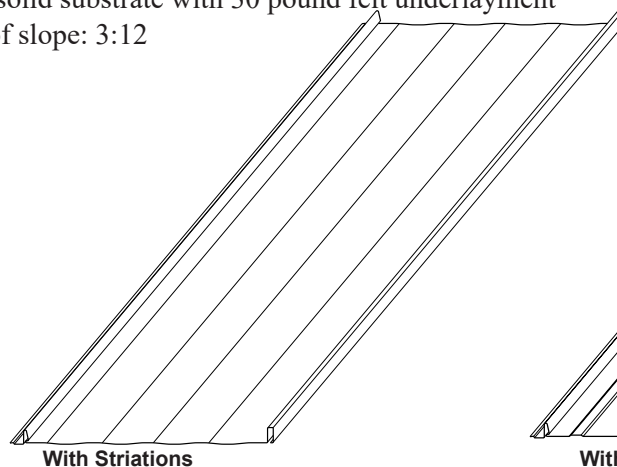
12" OR 16"
COVERAGE

MINIMUM
SLOPE
3:12

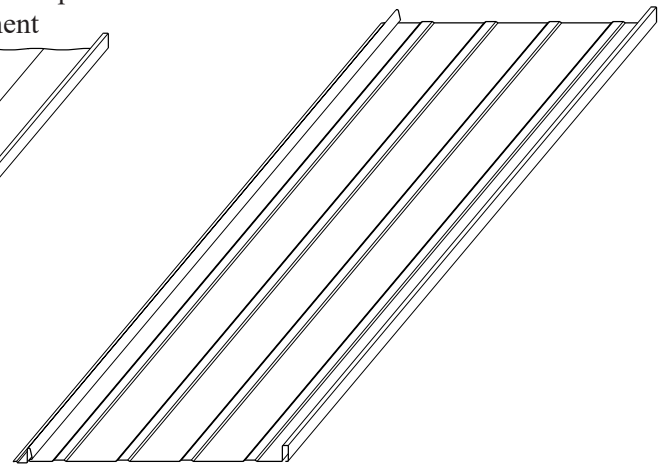
SOLID WOOD
SUBSTRATE

PANEL OVERVIEW

- ▶ Finishes: PVDF and Mill Finish
- ▶ Material: 3105-H24 Aluminum per ASTM B 209
- ▶ Thickness: 0.032"
- ▶ 12" or 16" panel coverage, 1" rib height
- ▶ Architectural concealed direct fasten integral standing rib roof panel
- ▶ Applies over solid substrate with 30 pound felt underlayment
- ▶ Minimum roof slope: 3:12



With Striations



With Minor Ribs

TESTING AND APPROVALS

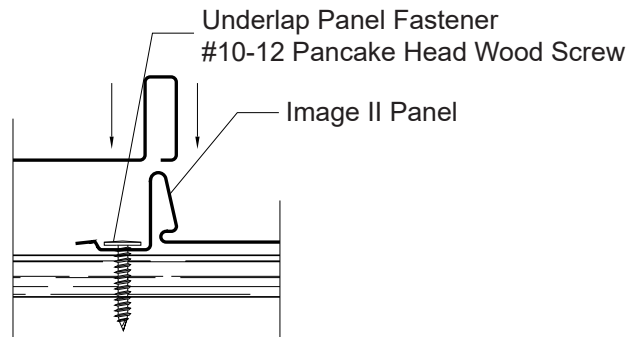
- ▶ UL 2218, Class 4, Impact Resistance
- ▶ UL 790, Class A, Fire Resistance
- ▶ UL 263, Fire Resistance
- ▶ TAS 100, Wind Driven Rain
- ▶ UL 580/1897 Uplift Testing
- ▶ Texas Windstorm - Evaluation RC-398
- ▶ 2017 FBC Approval: FL11560.2 and FL11560.3
- ▶ ICC Evaluation Report - ESR-2385

ms metal sales[™]
manufacturing corporation

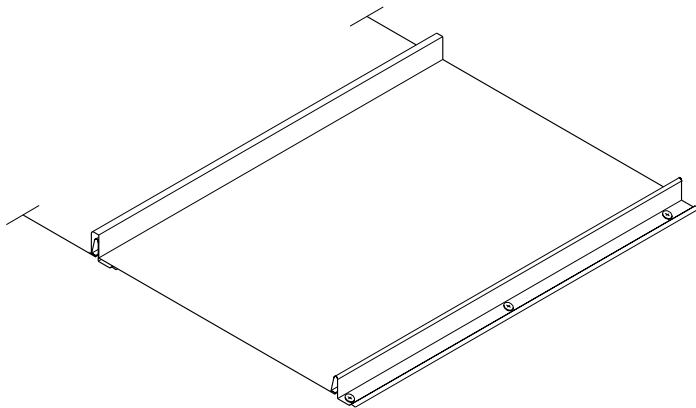
ALUMINUM IMAGE II

Condensed
Technical
Reference

ATTACHMENT DETAIL



FASTENING PATTERN



GENERAL INFORMATION

► Length

Minimum factory cut length is 5'-0".
Maximum recommended panel length is 30'-0".
Please inquire about longer panels.

► Fasteners

Overdriven fasteners will cause panel distortion.

Panel 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.

Underlap Panel Fasteners:

Attaching to Wood:

- #10-12 Pancake Head Wood Screw (Stainless Steel)
- #10-12 Pancake Head Wood Screw (Carbon Steel)

Trim Fasteners:

- 1/8" x 3/16" Pop Rivet (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 ⁴ /ft	S _{Top} in ³ /ft	S _{Bottom} in ³ /ft	Outward Load					
							0.5'	1'	1.25'	1.5'	1.75'	2'
0.032	12	24	0.62	0.0370	0.0411	0.1963	107	79	64	50	36	22
0.032	16	24	0.57	0.0293	0.0314	0.1754	107	79	64	50	36	22

- Theoretical section properties have been calculated per 2010 Aluminum Design Manual. I, S_{Top} and S_{Bottom} 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 uplift load testing per UL 580 over 7/16" OSB. Values at 0.5' and 2' are based on test results. Other values are determined by linear interpolation. Allowable load does not address web crippling or the performance of 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.

ms metal sales[™]
manufacturing corporation

metalsales.us.com

Anchorage, AK 866.640.7663
Bay City, MI 888.777.7640
Deer Lake, PA 800.544.2577
Denver, CO 800.289.7663

Detroit Lakes, MN 888.594.1394
Fontana, CA 800.782.7953
Fort Smith, AR 877.452.3915
Independence, MO 800.747.0012

Jacksonville, FL 800.394.4419
Jefferson, OH 800.321.5833
Mocksville, NC 800.228.6119
Nashville, TN 800.251.8508
Rock Island, IL 800.747.1206
Rogers, MN 800.328.9316

Seattle, WA 800.431.3470
Sellersburg, IN 800.999.7777
Sioux Falls, SD 888.902.8320
Spokane, WA 800.572.6565
Temple, TX 800.543.4415
Woodland, CA 800.759.6019

©MS1280 ALIM/2-2018