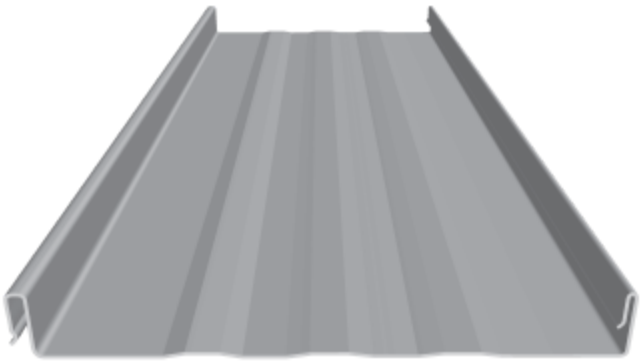
Metal Center
METAL ROOFING SUPPLY

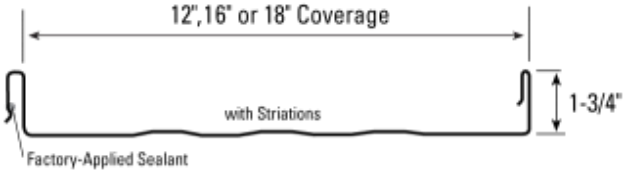
1630 Second Street NW
Albuquerque, NM 87102
(505) 717-2224

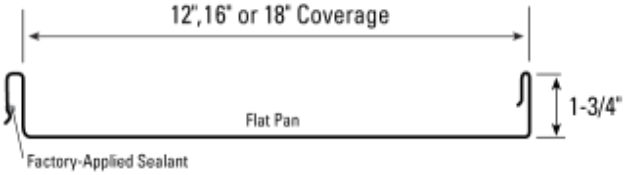
Standing Seam (External Clip)



Product Overview

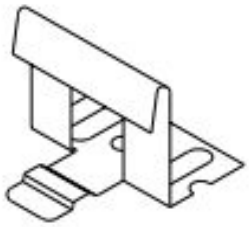
Modern and sophisticated, the elegant lines of these profiles make it a perfect fit for your home or business. The hidden fastener system will transform any roof line into a show piece and is available with an optional “flat pan”.





Testing & Approvals

- UL 2218 Impact Resistance - Class 4
- UL 790 Fire Resistance Rating - Class A, per building code
- UL 263 Fire Resistance Rating - per assembly
- UL 580 Uplift Resistance - Class 90 Construction: #529
- Texas Windstorm - Evaluation RC-162 and RC-399
- 2017 FBC Approvals - FL11560.4, FL11560.5 and FL14645.12 Miami-Dade County, Florida NOA



VERTICAL SEAM CLIP

Required Substrate: Standing Seam is designed to be utilized over open structural framing, but can easily be used with a solid substrate. The recommended substrate is 5/8" plywood with a 30 pound moisture barrier.

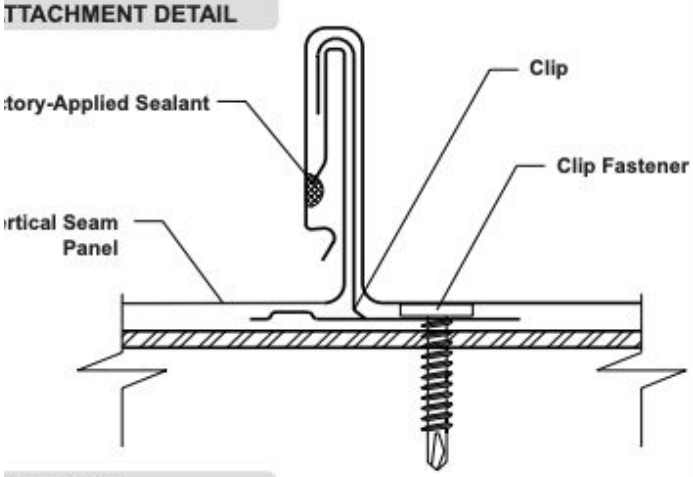
- Minimum Slope:
    - The minimum recommended slope for an external clip Standing Seam system is 3:12.
- Coverage
    - Each panel's effective coverage is either 16" or 12".
- Lengths
    - The minimum length for Standing Seam is 1' 6", with a maximum recommended length of 40'.
- Availability
    - Standing Seam is available in 26 gauge and 24 gauge.
- Application
    - Standing Seam is used largely in commercial, residential, and agricultural settings.
- Fastening System
    - Concealed Fastened with an embedded nail strip.
- Materials
    - Steel Grade 50 per ATSM A-792
- Finish
    - Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
    - Prepainted Galvalume / ASTM A-792 - AZ50
    - Silicone-Modified Polyester (SMP)
    - **Fluorocarbon (PVDF)

* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.

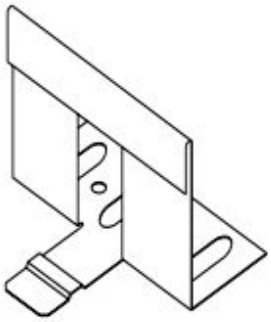
** Meets both Kynar 500 and Hylar 5000 specifications.

Standing Seam Fastening Procedures

TTACHMENT DETAIL



ANEL CLIP



UL90 CLIP
2 Fasteners

FASTENING INFORMATION

▶ Clips

1. Clip spacing is based upon the design loads, the spanning capacity of the panels, the fasteners and the support members.
2. Clips are 0.050" thick. G90 is standard, 304 stainles optional. 2 fastener holes is standard, 3 holes is option
3. Clips can accomodate practically unlimited thermal movement.

▶ Fasteners

1. Overdriven fasteners will cause panel distortions.
2. Fasteners to wood and steel should extend 1/2" or past the inside face of the support material.

Clip Fasteners and Concealed End Fasteners:
- Attaching to Wood:
  - #10-12 Pancake Head Wood Screw
- Attaching to Steel:
  - <18 ga: 1/4"-14 Deck Screw
  - >=18 ga, <=12 ga: #10-16 Pancake Head Drill
- Attaching to Concrete:
  - 3/16" or 1/4" TapCon, Phillips Flat Head

Exposed End Fasteners:
- Attaching to Wood:
  - #10-14 XL Wood Screw
- Attaching to Steel:
  - #12-14 XL Driller

Trim Fasteners:
- 1/4"-14 x 7/8" XL Stitch Screw
- 1/8" x 3/16" Pop Rivet

SECTION PROPERTIES								ALLOWABLE UNIFORM LOADS, psf For various fastener spacings			
Ga	Width in	Yield ksi	Weight psf	Top In Compression		Bottom In Compression		Outward Load			
				Ixx in^4/ft	Sxx in^3/ft	Ixx in^4/ft	Sxx in^3/ft	0.5'	1'	1.5'	2'
26	16	50	0.92	0.0165	0.0174	0.0165	0.0177	103	96	90	84
24	16	50	1.19	0.0210	0.0226	0.0210	0.0226	103	96	90	84

1. Theoretical section properties have been calculated per AISI 2012 'North American Specification for the Design of Cold-Formed Steel Structural Members'. Ixx and Sxx are effective section properties for deflection and bending.
2. Allowable load is calculated in accordance with AISI 2012 specifications considering bending, shear, combined bending and shear, deflection and UL 580 uplift test using #10-12 Pancake Wood Screws into 5/8" plywood. Allowable load considers the 3 or more equal spans condition. Allowable load does not address web crippling, or support material. Panel weight is not considered.
3. Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
4. Allowable loads do not include a 1/3 stress increase for wind.