



# Product Evaluation

RC454 | 0815

Engineering Services Program

*The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

*For more information, contact TDI Engineering Services Program at (800) 248-6032.*

**Evaluation ID:** RC-454

**Effective Date:** August 1, 2015

**Re-evaluation Date:** July 2019

**Product Name:** CM 150SS 16" Wide 0.032" Aluminum Standing Seam Roof Panels over a 15/32" Plywood Deck

**Manufacturer:** Carlisle Metal Products  
P.O. Box 7000  
Carlisle, PA 17013  
800-479-6832

## General Description:

- 0.032" Aluminum CM 150SS preformed standing seam metal roof panels F = minimum 16 ksi. 16" installed coverage, 180 degree mechanically seamed lock.

## Limitations:

- **Roof Slope:** Below 2:12 will be subject to Manufacturer's Engineering Review
- **Installation Over an Existing Roof Covering:** Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing applied over an existing, solid roof deck of minimum 15/32" plywood. Note: Inspection of the existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before the metal roofing panel installation proceeds. NOTE: Underlayment is required to be installed.
- **Design Pressure:** Refer to Table 1.

**Table 1**

**Attachment of CM 150SS minimum 0.032" aluminum standing seam metal roofing panels to minimum 15/32" plywood roof deck**

Design Wind Pressure	Fastener Clip	Fastener Clip Spacing	Deck
-90 (field) psf	24-ga. 2" x 1-5/8"	16" o.c.	15/32" Plywood
-180 (perimeter/corner) psf	22-ga. 6-1/4" x 1-5/8"	8" o.c.	15/32" Plywood

**Installation:**

- **General:** Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.
- **Fastener Clips:**
  - **Field Installation:** 24-gauge 2" x 1-5/8" stainless steel CM 150SS fixed clip installed with two # 10-13 x 1" PHW screws at 16" on center along the panel seam. The panels are mechanically locked with a 180 degree hem.
  - **Perimeter/corner Installation:** 22-gauge 6-1/4" x 1-5/8" stainless steel CM 150SS fixed clip installed with two, #10-13 x 1" PHW screws at 8" on center along the panel seam. A 1/4" bead of Bostik 70-50A adhesive was placed at the horizontal leg of seam prior to engaging the panels.
- **Plywood Deck:** 15/32" thick APA span rated plywood installed at 24" over No. 2 lumber supports. Decking attached with 0.113 in. x 2-3/8" ring shank nails spaced 6" on center along the perimeter and intermediate supports.
- **Underlayment:** ASTM D 226 Type II Underlayment installed with minimum 4" side laps and 6" end laps and fastened using 12-gauge 1-1/4" ring shank nails and 32-gauge 1-5/8" tin caps spaced 6" on center in the laps and two staggered rows 12" on center in the field.
- **Panel Ends and End Laps:** As required by the manufacturer
- **Panel Edges:** As required by the manufacturer
- **Trims, Closures, and Accessories Components:** Install components such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

**Note:** Keep the manufacturer's installation instructions at the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.

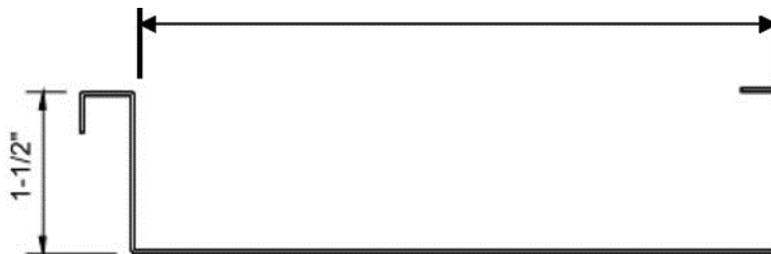


Figure 1. CM 150SS Standing Seam Panel Profile

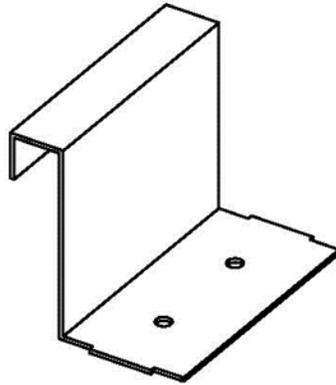


Figure 2. CM 150SS Clip

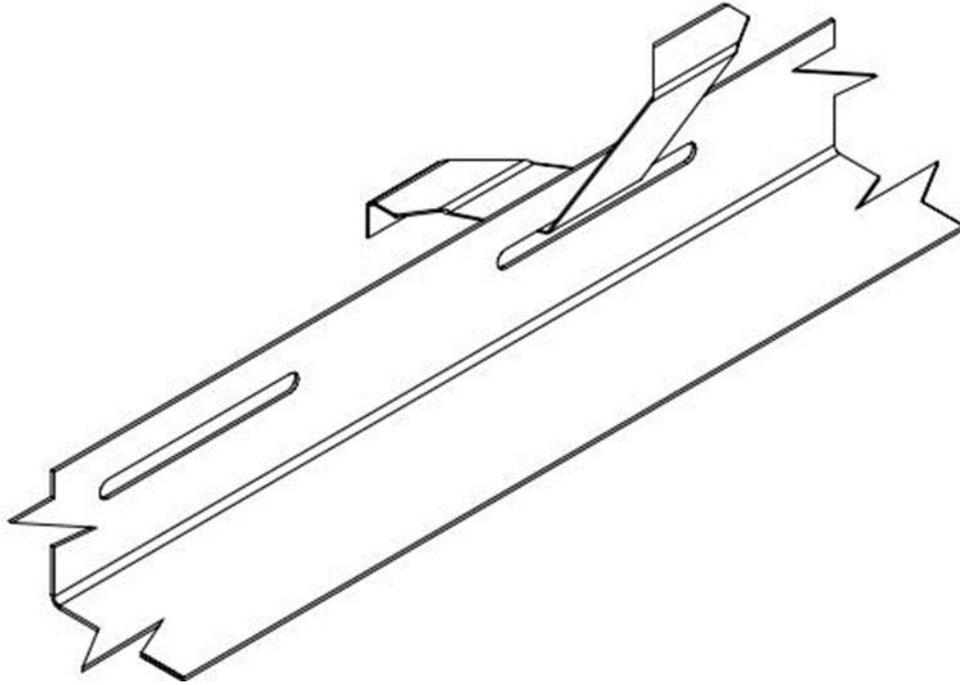


Figure 3. CM 150SS Continuous Butterfly Clip (10 ft. Lengths)