



# Product Evaluation

RC460 | 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-460

**Effective Date:** August 1, 2015

**Re-evaluation Date:** August 2019

**Product Name:** CM 200S 24 gauge Steel Standing Seam Metal Roofing Panels Installed over an Insulated Steel Deck

**Manufacturer:** Carlisle Metal Products.

P.O. Box 7000

Carlisle, PA 17013

Tel. (800) 479-6832

## General Description:

- 24 gauge CM 175S pre-formed standing seam metal roof panels, F = min. 50 ksi; 16" installed coverage; 1-3/4 snap lock seam.

## Limitations:

- **Slope** - The metal roofing panels may be installed on roofs with a roof slope as low as 2:12.
- **Installation over an Existing Roof Covering:** Installation over an existing roof covering is not permitted.
- **Design Pressure:** Refer to Tables 1 and 2.

**Table 1****Attachment of CM 200S minimum 24 gauge steel standing seam metal roofing Panels to composite roof assembly using the CM200S butterfly clip**

Design Pressure (psf)	Fastener Clip Spacing	Purlins (12 gauge)	Steel Deck
-86.0	12" o.c	5'-0" on center	Minimum 22 gauge

**Table 2****Attachment of CM 200S minimum 24 gauge steel standing seam metal roofing Panels to composite roof assembly using the CM 200S butterfly clip**

Design Pressure (psf)	Fastener Clip Spacing	Purlin (12 gauge)	Steel Deck
-41.7	48" o.c.	5'-0" on center	Minimum 22 gauge

**Installation Instructions:**

- **General:** The metal roofing panels shall be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.
- **Fastener Clips:** Butterfly 200 Slicer Clip, 18 gauge galvanized base with 22 gauge galvanized top.
- **Clip Fastener:** Two #14-13 x 5 Concealor DPI by TFC per clip into the steel deck.
- **Substrate:** One layer of 2" insulation with polyisocyanurate foam core with fiber reinforced facers laid on top of steel deck. 22 gauge 1-1/2" B-Deck Grade 80 ksi. Attached to framing with 1/4-14 x 1-1/4" WH 36/7 fastener pattern. 12 gauge framing at 5'-0" on center.
- **Panel Ends and End Laps:** Fixed with five #14-13 x 5 Concealor DPI
- **Panel Edges:** As required by the manufacturer
- **Trims, Closures, and Accessories:** Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim shall be installed as required by the manufacturer.
- **Underlayment:** Minimum of one layer of No. 30 (Type II) asphalt felt shall be used. The underlayment used shall comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed with minimum 4" side laps and 6 inch end laps. The underlayment shall be applied with corrosion resistant tin caps and minimum 12 gauge 1" annular ring shank nails. The fasteners shall be spaced 6 inches on center at all end laps and two staggered rows 12" on center in the field.
- **Alternative Underlayment:** Either a synthetic underlayment or a peel and stick ice and water shield that complies with the requirements for underlayment as specified in the IRC and the IBC. The underlayment shall be installed per the manufacturer's installation instructions.

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

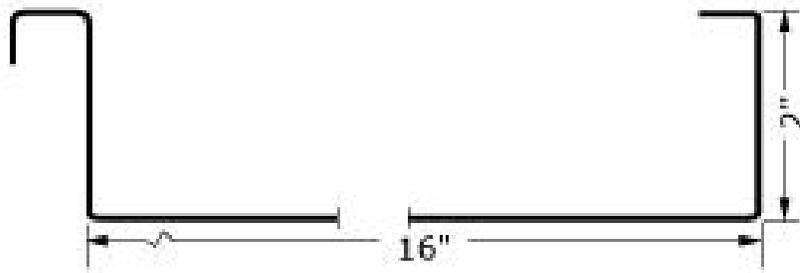


Figure 1. CM 200S Standing Seam Panel Profile

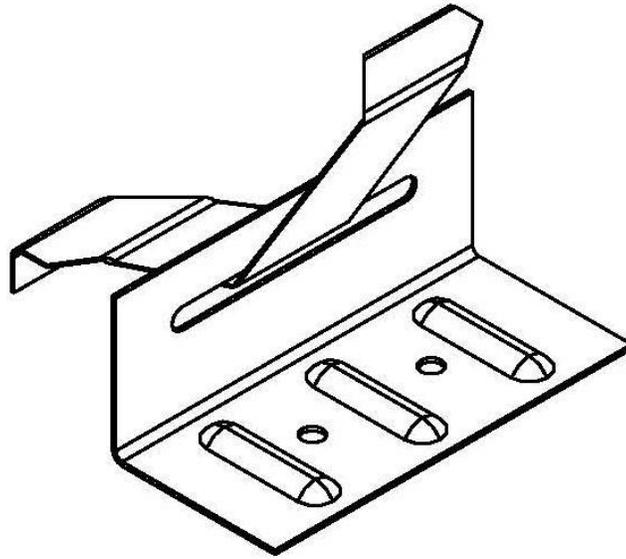


Figure 2. CM 200S Butterfly Clip

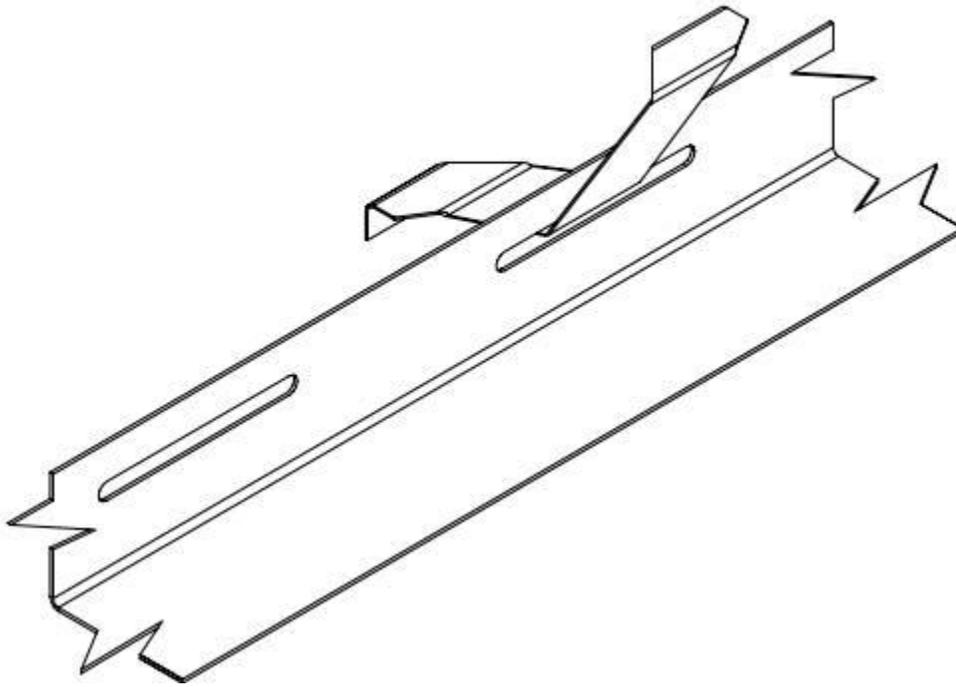


Figure 3. CM 200S Continuous Butterfly Clip (10 ft. Lengths)