



Product Evaluation

RC225 | 1115

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-225

Effective Date: November 1, 2015

Re-evaluation Date: October 2019

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

Manufacturer: Drexel Metals, Inc.
1234 Gardener Lane
Louisville KY 40213
888-321-9630

General Description:

- 24 gauge minimum DMC 200S pre-formed standing seam metal roof panels, F = min. 50 ksi; 16" installed coverage; 2" mechanically seamed to 180 degrees.

Limitations:

- **Slope:** The metal roofing panels may be installed on roofs with a roof slope as low as 1/4:12. Roofs with slopes less than 2:12 require authorization from Drexel's Technical Department.
- **Installation over an Existing Roof Covering:** Installation over an existing roof covering is not permitted.

Table 1

Attachment of DMC 200S minimum 24 gauge steel standing seam metal roofing panels to composite roof assembly using the DMC 200S Butterfly Clip

Design Pressure (psf)	Clip Spacing (See Clip Fig. 2)	Purlins (12 gauge)	Steel Deck
-41.7	48" o.c.	5'-0" on center	Minimum 22 gauge
-86.0	12" o.c.	5'-0" on center	Minimum 22 gauge

Table 2

Attachment of DMC 200S minimum 24 gauge steel standing seam metal roofing panels to composite roof assembly using the DMC 200S Continuous Butterfly Clip

Design Pressure (psf)	Clip Spacing (Continuous Base See Clip Fig. 3)	Purlin (12 gauge)	Steel Deck
-121.75	12" o.c.	5'-0" on center	Minimum 22 gauge

Installation:

- **General:** The metal roofing panels shall be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.
- **Fastener Clips:** DMC 200S Butterfly Clip; 18 gauge galvanized base with 22 gauge galvanized top.
- **Clip Fastener:** Two #14-13 Deck Driller DP1 by Drexel screws per clip into the steel deck. The screws must penetrate through the deck with a minimum of 3/4" exposed on the underside of the deck.
- **Substrate:** Minimum one layer of 2" 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 Deck Driller DP1 screws by Drexel. The screws shall penetrate through the deck with a minimum of 3/4" exposed on the underside of the deck.
- **Panel Edges:** As required by the manufacturer standard details
- **Trims, Closures, and Accessories:** Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim must be installed as required by the manufacturer standard details.
- **Underlayment:** Minimum of one layer of No. 30 (Type II) asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed with minimum 4" side laps and 6" end laps. The underlayment must be applied with corrosion resistant tin caps and minimum 12 gauge 1" annular ring shank nails. The fasteners must be spaced 6" 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 must 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.

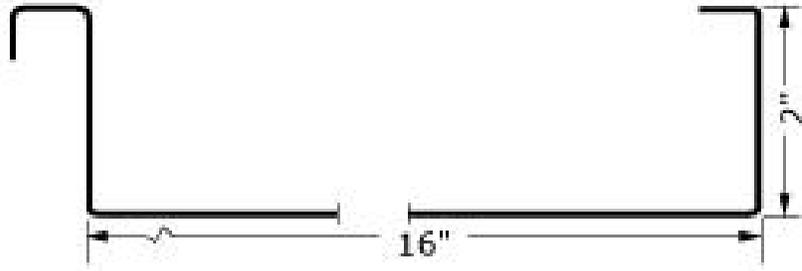


Figure 1. DMC 200S Standing Seam Panel Profile

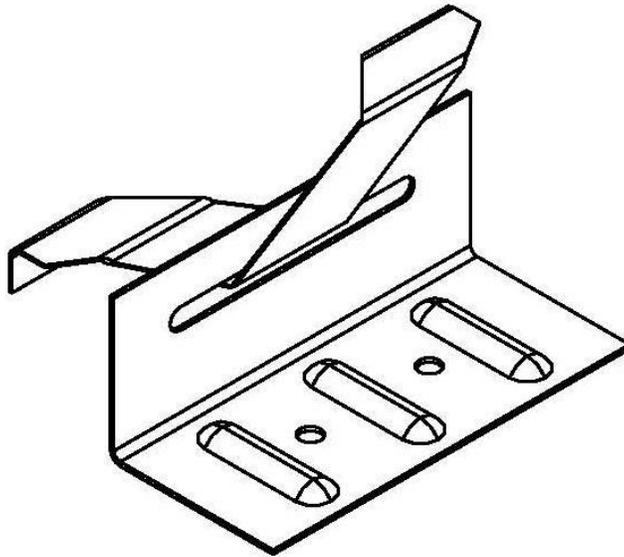


Figure 2. DMC 200S Butterfly Clip

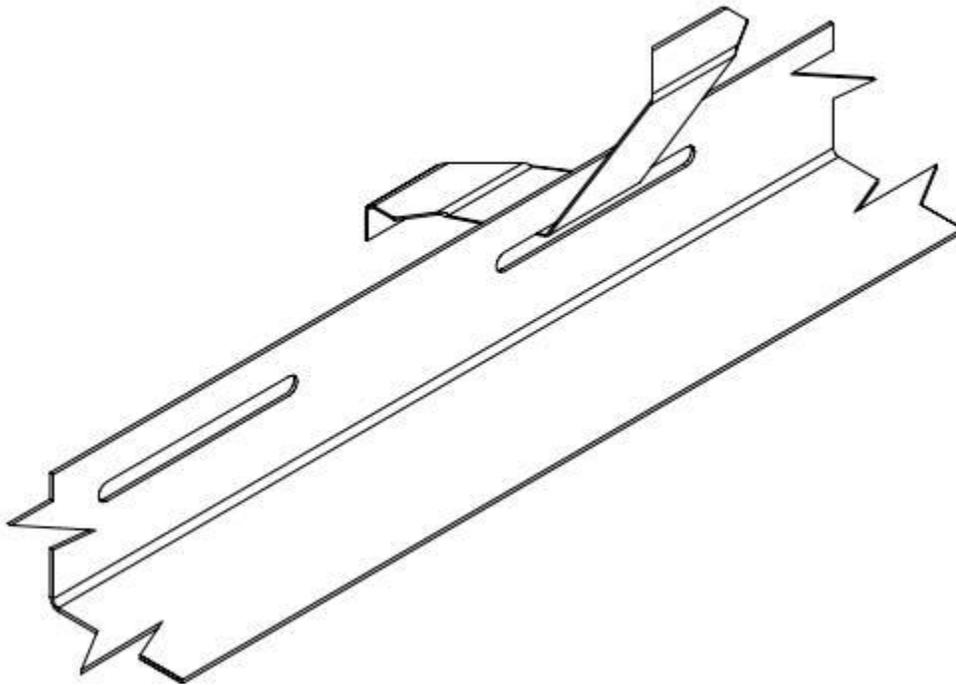


Figure 3. DMC 200S Continuous Butterfly Clip (10' Lengths)