

Product Evaluation

RC223 | 0220

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-223

Effective Date: February 1, 2020

Re-evaluation Date: February 2024

Product Name: DMC 200S 16" Wide 0.040" Aluminum Standing Seam Roof Panels Installed over a 19/32" Plywood Deck

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

General Description:

0.040" Aluminum DMC 200S preformed standing seam metal roof panels; F = minimum 20 ksi.; 16" installed coverage; 180-degree lock.

Limitations:

Roof Slope: The metal roofing panels may be installed on roofs with a roof slope as low as 1/4:12.

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 19/32" 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.

Table 1. Attachment of DMC 200S Aluminum Roof Panels Installed over a Plywood Deck

Design Wind Pressure	Fastener Clips	Fastener Clip Spacing	Deck
-90 Field psf	DMC 22 ga. 3" x 2-1/8" S.S.	16" o.c.	19/32" Plywood
-180 perimeter/corner psf	DMC 22 ga. 3" x 2-1/8" S.S.	8" o.c.	19/32" Plywood

Installation:

General: Install the metal roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Roof Deck: Minimum 19/32" thick plywood.

Roof Framing: Maximum spacing of 24" on center.

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.

Fastener Clips:

Field Installation: Install 22-gauge 3 x 2-1/8" stainless steel DMC 200S fixed clip with two (2), # 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 3" x 2-1/8" stainless steel DMC 200S fixed clip installed with (2) #10-13 x 1 in. PHW screws at 8 in. 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.

Panel Ends and End Laps: As required by the manufacturer

Panel Edges: As required by the manufacturer

Trims, Closures, and Accessories: 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 available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.