

Product Evaluation

RC357| 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-357

Effective Date: February 1, 2020

Re-evaluation Date: February 2024

Product Name: Slimline Steel Roof Panels Installed over a Plywood Deck

Manufacturer: Metal Building Components, Inc. (MBCI), L.P., a division of NCI, L.P.
14031 West Hardy
Houston, TX 77060
(281) 445-8555

General description:

The Slimline roof panel is an exposed fastened metal roof panel. The metal roof panels are manufactured from No. 29 and 26 MSG minimum coated steel, $F_y = 50$ ksi, and has 12" wide coverage (26 gauge) and 16" wide (29 gauge) with 1" tall ribs.

Limitations:

Design Wind Pressures: For installations to nominal 5/8" plywood roof decks, design wind pressure limitations are specified in Table 1.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not covered in this product evaluation report.

Roof Slope: The Slimline panels must not be installed on roofs with a roof slope less than 3:12.

Roof Framing Members: The roof framing members must be spaced a maximum of 24" on center.

Table 1. Attachment of Slimline Panels to Minimum 5/8" Plywood Deck

System	Min. Panel Gauge	Design Wind Pressure	Attachment to Plywood
1	29	-52.5 psf	Fasteners spaced 12" o.c.
2	26	-56.0 psf	Fasteners spaced 24" o.c.
3	26	-108.5 psf	Fasteners spaced 6" o.c.

Installation:

General: All IRC and the IBC requirements must be satisfied, and manufacturer's installation instructions followed, unless otherwise specified by this product evaluation.

Roof Deck: Minimum nominal 5/8" plywood deck.

Underlayment: A 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 felt must be installed with 6" side laps and 3" end laps. The felt must be fastened to the roof deck with corrosion resistant fasteners in accordance with the manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36" on center.

Attachment of Panels to Wood Deck: Slimline panels are fastened to the roof deck with No. 10-12 x 1" long No. 2 Phillips pancake head Type A screws. The fasteners are installed through the pre-punched slots in the fastener flange of the panel at a spacing specified in Table 1.

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.

Panel Ends and End Laps: As required by the manufacturer.

Panel Edges: 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.