

Product Evaluation

RC422 | 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-422

Effective Date: February 1, 2020

Re-evaluation Date: February 2024

Product Name: Minimum 29-Gauge Stormproof Steel Roofing Panels Installed Over 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 Stormproof metal roofing panel is minimum 29-gauge galvalume steel with an optional paint finish. The 29-gauge panel has an actual coverage of 36". The metal roof panels have a 3/4" rib height. The metal roof panels conform to ASTM A792 with minimum yield strength of 80,000 psi.

Limitations:

Roof Framing: Install the metal roofing panels over a minimum 15/32" plywood deck.

New Roof Framing Attachment: The roof framing must meet or exceed the uplift requirements of the IRC or IBC. Install as required for resistance to wind loads.

Design Wind Pressures: Table 1 specifies the design pressure uplift load resistance.

Roof Slope: Do not install the panels on roofs with a roof slope less than 3:12.

Installation Over an Existing Roof Covering: One layer of asphalt composition shingles over one layer of No. 30 felt paper over 15/32" plywood deck.

Table 1. 29-Gauge Stormproof Steel Roofing Panels Installed Over Plywood Deck

Design Wind Pressure	Roof Deck	Fastener Pattern/Spacing
-71.0 psf	Min. 15/32" Plywood	Fasteners at 9"-9"-9"-9"; 2'-0" on center
-153.5 psf	Min. 15/32" Plywood	Fasteners at 6"-3"-6"-3"-6"; 1'-0" on center

Installation Instructions:

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

Roof Deck: Minimum minimal 15/32" plywood.

Underlayment: Install underlayment as required by the IRC and the IBC and the manufacturer.

Attachment of Stormproof Panels to the Plywood Deck: Secure the Stormproof metal roofing panels to the roof deck with No.10-15 x 1-1/2" HiLo Woodgrip w/ ZAC Head. Table 1 specifies the fastener pattern and the spacing of the fasteners.

Panel Side Laps: Stitch the panels together with minimum 1/4"-14 x 7/8" Lap Tek screws with a sealing washer. Space the fasteners 24" on center along the length of the side lap.

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.