

Product Evaluation

RC23 | 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-23

Effective Date: February 1, 2020

Re-evaluation Date: February 2024

Product name: 5V Crimp 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:

MBCI 5V standing seam roof panels are 26 MSG by 24" wide with 1/2" V crimps. The panel has 5 V crimps, two at each edge and one at the center of the panel. The panel conforms to ASTM A 792 Grade E, 80,000 psi yield point and galvanized.

Limitations:

Design Wind Pressure:

System	Allowable Design Pressure Rating
1	-74.75 psf
2	-146.0 psf

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

Roof Slope: The 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.

Installation:

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

Underlayment: A 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 felt shall 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.

Roof Deck: The panels must be installed on nominal 5/8" exterior grade plywood with a 40/20 span rating.

Fasteners:

System 1: The panels must be attached to the roof deck with #10-15 x 1-1/2" long Woodtite Zac screws with self-sealing washers through the high point of the panel ribs. The fasteners shall be placed a maximum of 24" along the length of the panel.

System 2: The panels must be attached to the roof deck with #10-15 x 1-1/2" long Woodtite Zac screws with self-sealing washers through the high point of the panel ribs. The fasteners must be placed a maximum of 12" along the length of the panel.

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.