

Product Evaluation

RC61 | 0422

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-61

Effective Date: April 1, 2022

Re-evaluation Date: April 2026

Product Name: LokSeam Standing Seam Steel Roofing Panels installed over Plywood Decks

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 LokSeam standing seam roofing panels are minimum 24-gauge steel panels. The steel panels have a maximum exposure of 18". The steel wall panels have a 1-3/4" rib height. The steel roofing panels are Galvalume steel with a minimum yield strength of 50,000 psi.

Limitations:

Roof Deck: The roof deck is minimum 5/8" plywood. Solidly sheathed.

Roof Deck Attachment: A new roof deck must meet or exceed the uplift wind pressure requirements of the IRC or IBC and must be installed as required to resist lateral loads.

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

Installation over an Existing Roof Covering: Not permitted.

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

Design Wind Pressure: The design pressure uplift load resistance is specified in Table 1.

Table 1

Attachment of Minimum 24-gauge Steel LokSeam Roofing Panels to Plywood Decks

System	Design Wind Pressure	Panel Exposure	Clips	Clip Fasteners
1	-52.5 psf	18"	LokSeam Clip; 48" on center	No. 10 x 1" screw; Two per clip
2	-101.0 psf	16"	LokSeam Clip; 6" on center	No. 10 x 1" screw; Two per clip

Installation:

General: The metal roof panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

Roof Deck: The roof deck is minimum 5/8" plywood. Solidly sheathed.

Underlayment: A minimum of one layer of Type I 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 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 Roof Panels to the Deck:

System 1: Secure the panels to the decks with 18-gauge galvanized steel LokSeam clips (1-7/8" high x 2" wide x 3-1/2" long). The clips are secured to the male leg of the panels. Adjacent panels are secured together using a snap-lock seam. The clips are spaced a maximum of 6" from each end and a maximum of 48" on center. Each clip is secured to the deck with two No. 10 x 1" long Pancake head screws with a No. 2 Phillips head size. The fasteners must be long enough to completely penetration through the deck.

System 2: Secure the panels to the decks with 18-gauge galvanized steel LokSeam clips (1-7/8" high x 2" wide x 3-1/2" long). The clips are secured to the male leg of the panels. Adjacent panels are secured together using a snap-lock seam. The clips are spaced a maximum of 6" from each end and a maximum of 6" on center. Each clip is secured to the deck with two No. 10 x 1" long Pancake head screws with a No. 2 Phillips head size. The fasteners must be long enough to completely penetration through the deck.

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

Trims, Closures, and Accessories: Components, such as trims, closures, and accessories must be installed 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.