



Product Evaluation

RC209 | 1117

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-209

Effective Date: November 1, 2017

Re-evaluation Date: November 2021

Product Name: Cee-Lock Lock Standing Seam Steel Roofing Panels Installed Over a Plywood Deck

Manufacturer: Berridge Manufacturing Company
6515 Fratt Road
San Antonio, TX 78218
(210) 650-3050

General Description:

The Cee-Lock metal roof panels are snap seam standing seam metal roof panels. The metal roofing panels have 16-1/2" of coverage. The panels have a 1-1/2" seam height. The metal roofing panels are manufactured from 24-gauge coated steel that conforms to ASTM A653 Grade 40, with a minimum yield strength of 40,000 psi.

Limitations:

Roof Decking: The Cee-Lock roof panels must be installed over a minimum 15/32" plywood roof deck. A thicker roof deck may be used; however, the design pressure rating for the roofing panels will be as specified in this evaluation report.

New Roof Deck Attachment: The roof deck must meet or exceed the uplift requirements of the IRC or the IBC and must be installed as required for resistance to wind loads.

Roof Slope: The metal roofing panels must not be installed on roofs with a roof slope less than 1:12.

Design Wind Pressures: The design pressure uplift load resistance must be as specified in Table 1.

Table 1:

Attachment of Cee-Lock minimum 24-gauge steel roofing panels to minimum 15/32" plywood deck

Design Pressure	Attachment to 15/32" Plywood
-78.5 psf	Fasteners @ 20" on center
-108.5 psf	Fasteners @ 10" on center

Installation over an Existing Roof Covering: Installation over an existing roof covering is not permitted.

Installation Instructions:

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

Panels: The metal roofing panels must be secured to the roof covering as specified in Table 1 and in accordance with this section.

Underlayment: Minimum 30 pound resin-bound chopped-glass-fiber substrate (Elk Versashield™) by Elk Corporation, with 2" side laps and 4" end laps, fastened to the roof deck with galvanized roofing nails and tin caps. The Elk Versashield™ underlayment must be fastened to the roof deck with fasteners spaced 12" on center in the field (one row) and 6" on center at the side laps.

Alternative Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt or equivalent 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 installed with minimum 2" side laps and 4" end laps. The underlayment must be applied with corrosion-resistant fasteners with tin caps 12" on center in the field (one row) and 6" on center at the side laps.

Attachment of Metal Roof Panels to the Roof Deck: The metal roofing panels must be secured to the roof deck as follows:

Roofing Panels: The panels are secured to the deck with minimum No. 10-13 x 1" long, GP Type A pancake screws, manufactured by Triangle Fasteners with Cee-Rib clips manufactured by Berridge Manufacturing Company. The Cee-Rib clips are minimum 24-gauge galvanized steel with a yield strength of 40 ksi. The Cee-Rib clips are continuous and extend the length of the metal roofing panels. The Cee-Rib clips are secured to the roof deck with the screws. The fasteners must be long enough to ensure a minimum penetration of 1/4" below the roof deck. The fasteners are spaced as specified in Table 1.

Panel Ends and Edges: As required by the manufacturer.

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.

Note: Keep the manufacturer’s installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.