

Product Evaluation

RC444 | 1122

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-444

Effective Date: November 1, 2022

Re-evaluation Date: November 2026

Product Name: Central Snap Steel Standing Seam Roof Panels Installed Over a Plywood Deck

Manufacturer: Central States Manufacturing, Inc.
302 Jane Place
Lowell, AR 72745
(800) 356-2733

General Description:

The Central Snap is a steel standing seam roofing panel. The steel roofing panel is minimum 24-gauge steel panel with a 50 ksi yield point. The height of the female rib is 1-3/4". The panel has a maximum width of 18". The panel can be formed in continuous lengths and interlocks to adjoining panels by snapping male and female legs together and fastening the panel to the deck using a concealed fastener system (clips with screws).

This evaluation report is for residential steel roofing panels that are secured to nominal 15/32" plywood roof decks. Thicker plywood may be used; however, the design pressure rating for the metal panels must be as specified in this evaluation report.

Limitations:

Roof Deck: The steel roofing panels must be installed over a minimum 15/32" plywood deck. Roof framing must not exceed 24" on center.

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

Roof Slope: The roofing panels may be installed on roofs with a roof slope as low as 1:12.

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

Table 1: Attachment of Minimum 24-Gauge Steel Central Snap Standing Seam Roofing Panels to Minimum 15/32" Plywood Roof Deck

Design Wind Pressure (psf)	Panel Clip Spacing
-45.0	36" on center
-67.5	24" on center

Installation Over an Existing Roof Covering: Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing, or roll roofing. The existing roof deck must be minimum 15/32" plywood. Note: Inspection of the existing roof deck must be made before installing the roofing panels. The condition of the existing roof deck must be acceptable to receive the roofing panels before the roofing panel installation can proceed.

Installation:

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

Underlayment: Use a minimum of one layer of No. 30 (Type II) asphalt felt or an equivalent underlayment. Use an underlayment that complies with one or more of the following: ASTM D226, ASTM D4869, or ASTM D1970. Install the underlayment with 6" side laps and 3" end laps. The underlayment must be applied with corrosion resistant fasteners in accordance with the manufacturer's installation instructions, the IRC, and the IBC.

Attachment of Steel Roofing Panels to the Roof Deck: Secure the roofing panels to the wood roof deck with clips. The clips are secured to the roof deck with two (2) minimum No. 10 x 1-1/2" long pancake head wood screws per clip. The fasteners must long enough to penetrate a minimum of 1/4" below the roof deck. Note: If installing the roofing panels over an existing roof covering, then increase the fastener length so that they penetrate a minimum of 1/4" below the roof deck. Table 1 specifies the spacing of the clips.

Panel Clip: SNLCP UL90, 18-gauge, galvanized steel fixed clips. 3.50" wide by 1.827" high.

Panel Seam: The panels interlock to adjoining panels by snapping male and female legs together

Panel Ends and Edges: As required by the manufacturer.

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.