

## Product Evaluation

RC629 | 1020

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-629

**Effective Date:** October 1, 2020

**Re-evaluation Date:** October 2024

**Product Name:** 24-gauge Standing Seam Snap Lock Steel Roofing Panels Installed over a Plywood Deck

**Manufacturer:** Roofing Steel Construction, LLC.

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### General Description:

The Standing Seam Snap Lock metal roofing panel is a 24-gauge galvalume steel with an optional paint finish. The standing seam snap lock metal roofing panels have a maximum coverage of 14-3/4". The panel has a 1-1/2" tall snap lock rib with a fastener flange with 3/16" x 1/2" slots at 3-15/16" on center. The 24-gauge steel material is ASTM A792, Grade 50, with a minimum 50 ksi yield point with optional painted finishes. Panel Rollformer is made by Zimmerman Metals, Inc.

This product evaluation report is for residential metal roofing panels that are secured to a nominal 15/32" thick plywood deck. A thicker plywood deck may be used, however, the design pressure rating for the metal panels must be as specified in this evaluation report.

**Limitations:**

**Roof Deck:** The metal roofing panels must be installed over a minimum of 15/32" thick plywood deck.

**New Roof Deck Attachment:** The roof framing must meet or exceed the uplift requirements of the IRC or IBC and must be installed in a manner to resist wind loads as required.

**Roof Slope:** The metal roof panels may be installed on roofs with a roof slope as low as 3:12. Contact the panel manufacturer for roof slopes less than 3:12.

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

**Table 1** Attachment of 24-gauge Standing Seam Snap Lock Steel; Roofing Panels to Minimum 15/32" Plywood Deck

Design Wind Pressure (psf)	Attachment of Panel to Plywood Decking
-86.0	Minimum No. 10-9 x 1-1/8" long Ultra low-profile head fasteners @ 3-15/16" on center
-63.5	Minimum No. 10-9 x 1-1/8" long Ultra low-profile head fasteners @ 15-3/4" 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 applied over an existing solid roof deck of minimum 15/32" thick plywood. Note: Inspection of existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before roof panel installation can begin.

**Installation:****General Installation Requirements:**

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

**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 6" side laps and 3" end laps. The underlayment must be applied 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 Metal Roof Panels to Plywood Deck:** The metal roofing panels must be secured to the roof deck using minimum No. 10-9 x 1-1/8" long Ultra low-profile head fasteners or approved equal. The spacing of the fasteners must be as specified in Table 1. The fasteners must be long enough to insure a minimum penetration of 1/4" below the wood deck.

**Panel Ends:** As required by the manufacturer.

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**Trims, Closures and Accessories:** Components such as eave, rake rim, rake trim, hip trim, and valley trim must be as required by the manufacturer.

**Panel Profile:** The panel must be roll-formed to the dimensions noted in the test report. Failure to do so will disqualify the panel meeting the design pressures listed in this report.

**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.