TDI Texas Department of Insurance

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Product Evaluation

RC139 | 0322

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-139

Effective Date:March 1, 2022Re-evaluation Date:March 2026

Product Name: 26-Gauge Steel Standing Seam Roofing Panels Installed Over a Plywood Deck

Manufacturer: T. H. Sellers Metal Roofing, Inc. 1720 Wegner Road New Braunfels, TX 78132 (830) 609-0965

General Description:

The standing seam steel roof panels are manufactured from 26-gauge coated steel conforming to ASTM A653, Grade 50, with a minimum yield strength of 50 ksi. The roofing panels are 18" wide with 1" tall ribs. The panel clips have a 3" long base with 1/2" wide folded tabs, both parts constructed of 0.015" thick stainless steel.

Limitations:

Roof Deck: The roofing 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 steel roofing panels must not be installed on roofs with a roof slope less than 2:12.

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

Design Pressure	Fasteners per Panel Clip into Roof Deck	Panel Clip Spacing
-84.25 psf	Two (2) No. 10-12 x 1" Pancake Type A screws	12"

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 thickness of the plywood deck must comply with the requirements of this evaluation report. 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: The steel roofing panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

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

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 felt must be installed with 6" side laps and 3" end laps. The underlayment must be applied with corrosion resistant fasteners in accordance with manufacturer's installation instructions and the IRC and the IBC. Note: An optional radiant barrier may be installed beneath the panels in conjunction with the underlayment.

Attachment of Steel Roofing Panels to the Roof Deck: The panels must be fastened to the plywood deck using panel clips with minimum No. 10-12 x 1" Pancake Type A screws, manufactured by SFS Intec in accordance with Table 1. If the panels are laid directly over an existing roof covering, then No. 10-12 x 2" screws, manufactured by SFS Intec, are required. The fasteners must be long enough to penetrate completely through the wood structural panels with a minimum exposure of 1/4" below the underside of the plywood deck.

Panel Clips: The panel clips are 3" in length, with 1-1/2" wide folded tabs. The clips are 0.15" in thickness. The clips are manufactured of stainless steel.

Ridge Trim: The ridge trim must be attached to the panels with (1/4") No. 14 x 7/8" Longlife self-tapping screws at 12" on center.

Hip Trim: The hip trim must be attached to the panels with 1/8" x 3/16" pop rivets at 6" on center.

Eave Trim and Rake Trim: The eave trim and the rake trim must be anchored to the substrate with the panels using No. 9-15 x 1" Longlife self-tapping screws with a sealing washer at 16" on center.

Valley Trim: The closed hem of the valley trim must slide into the open hem of the panels.

Alternative Fasteners: Alternative fasteners of equal or greater strength may be substituted.

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.