TDI | Texas Department of Insurance

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Product Evaluation

RC327 | 0221 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-327

Effective Date: February 1, 2021
Re-evaluation Date: February 2025

Product name: SS 150 Steel Standing Seam Roof Panels installed over a Plywood Roof Deck

Manufacturer: Midwest Metal Roofing Systems
115 Cole Street
Nevada, TX 75173
(972) 578-1599

General description:
The SS 150 roof panel is a 24-gauge (0.0255") steel panel that has a mechanically seamed double-lock side joint. The panel has an effective width of 17". The panel has a minimum yield strength of 50,000 psi.

Limitations:
Roof Deck: The steel roof panels must be installed over a minimum of 19/32" thick plywood decking.

New Roof Deck Attachment: The roof deck must meet or exceed the uplift requirements of the IRC and the IBC, and the deck must be installed in a manner to resist lateral loads.

Design Wind Pressures: Design wind pressures limitations are specified in Table 1.

Roof Slope: The panels must not be installed on roofs with a roof slope less than 2:12 or on roof slopes greater than 8:12.

Installation Over an Existing Roof Covering: Not permitted.

Table 1. Attachment of SS 150 Steel Standing Seam Roof Panels to a Plywood Roof Deck

System	Design Wind Pressure	Panel Clip	Clip Spacing	Clip Fasteners
1	-108.5 psf	24-gauge, 5" wide Architectural Metal Specialties, Inc., 2-piece hook-style galvanized steel clip	12"	Two (2) No. 8-14 x 1" GP wood screws with Phillips #2 drive slot
2	-86.0 psf	24-gauge, 5" wide Architectural Metal Specialties, Inc., 2-piece hook-style galvanized steel clip	24"	Two (2) No. 8-14 x 1" GP wood screws with Phillips #2 drive slot

Installation:

General: The steel roof panels must be installed in accordance with the manufacturers recommended installation instructions and this evaluation report.

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

Underlayment: A minimum of one layer of 40 mil W.R. Grace Ice and Water Shield self-adhered underlayment or other equivalent self-adhering underlayment complying with ASTM D 1970 applied over the plywood deck.

Anchorage of Panel to Roof Deck: The roof panels must be fastened in accordance with Table 1. The roof panels must be secured to the roof deck with 24-gauge, two-piece hook-style, galvanized steel clips manufactured by Architectural Metal Specialties, Inc., measuring 5" wide x 2.625" high. The clips are located at the panel ends and are spaced either 12" or 24" on center in accordance with Table 1. The clips are secured with two (2) No. 8-14 x 1" GP wood screws with Phillips #2 drive slot. The fasteners must be long enough to ensure a minimum penetration of 1/4" below the roof deck. The female rib is engaged over the male rib and field seamed.

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

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

Panel Edges: 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.