

Product Evaluation

RC240 | 0624

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-240

Effective Date: June 1, 2024

Re-evaluation Date: June 2028

Product Name: SLR Steel Standing Seam Steel Roofing Panels Installed Over an Insulated Steel Deck

Manufacturer: Morin-A Kingspan Group Company
685 Middle Street
Bristol, CT 06010
(860) 584-0900

General Description:

This evaluation report is for the SLR steel standing seam metal roofing panels installed over an insulated steel deck. The steel standing seam roofing panels have 16" of coverage. The standing seam metal roof panels have a 2" rib height and a mechanically seamed side lap. The metal roofing panels are manufactured from 24-gauge galvalume steel with a minimum yield strength of 40 ksi.

Limitations:

Roof Framing: Install the metal roofing panels over an insulated steel deck attached to steel purlins or steel bar joists. The roof framing spacing must not exceed 6' on center.

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

Design Wind Pressures: -52.5 psf

Roof Slope: Install the metal roofing panels on roofs with a roof slope as low as 1/2:12.

Installation Over an Existing Roof Covering: Not permitted.

Installation:

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

Roof Framing Members: Use steel supports that are 16-gauge steel with a minimum yield strength of 50 ksi or minimum Type H open web steel joists spaced a maximum of 6'-0" on center.

Steel Decking: Use a minimum steel decking of 22-gauge steel with a minimum yield strength of 50 ksi. The decking has a depth of 1" and a maximum pitch of 6".

Rigid Insulation (Foamed Plastic): The rigid insulation has a minimum thickness of 1" and maximum thickness of 4". The insulation has a minimum density of 1.8 pcf.

Bearing Plate: The bearing plate must be a 6" x 6" flat plate fabricated from 16-gauge coated steel.

Attachment of Metal Roof Panels to the Steel Decking: The panels secure to the steel decking with SLR two-piece panel clips. The base of the clip is 1" long and 1" wide formed to fold over the lower segment of the tabs. The base is fabricated from minimum 16-gauge coated steel. There are two types of upper tabs: Type 330, 4" wide and 2" high formed to engage the lower tab. Type 330B, 4" wide and 2" high formed to engage the lower tab. Use the SLR-330 clip for 45-degree seams and use the SLR-330B clip for 90-degree and 180-degree seams. Space the clips a maximum of 60" on center. Secure each panel clip through the bearing plate and rigid insulation into the steel decking with two (2), No. 12-13, No. 3 Phillips drive, self-drilling, self-tapping, hex head, stainless steel screws. The screw must penetrate the decking a minimum of 1/2".

Panel Ends and End Laps: Secure the panel ends and endlaps to the steel purlins as the manufacturer requires.

Panel Edges: Secure the panel edges to the steel purlins as the manufacturer requires.

Trims, Closures, and Accessories: Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as the manufacturer requires.

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.