

## Product Evaluation

RC214 | 0919

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-214

**Effective Date:** September 1, 2019

**Re-evaluation Date:** September 2023

**Product Name:** MorZip® Steel Standing Seam Steel Roofing Panels Installed Over Steel Purlins

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

### General Description:

This evaluation report is for the MorZip® steel standing seam metal roofing panels installed over steel purlins. The steel standing seam roofing panels have either 12" or 16" of coverage. The standing seam metal roof panels have a 2-1/2" rib height and a mechanically seamed side lap. The metal roofing panels are manufactured from either 22-gauge or 24-gauge galvalume steel with a minimum yield strength of 40 ksi.

### Limitations:

**Roof Framing:** Install the metal roofing panels over minimum 16-gauge steel purlins.

**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:** The design pressure uplift load resistance must be as specified in Table 1 or Table 2.

**Roof Slope:** Install the metal roofing panels on roofs with a roof slope as low as 1/4:12.

**Installation Over an Existing Roof Covering:** Not permitted.

**Table 1:** Attachment of MorZip® minimum 22-gauge steel standing seam metal roofing panels to minimum 16-gauge steel purlins using a panel clip

Design Wind Pressure	Net Panel Coverage	Steel Purlin Spacing
-47.8 psf	12" wide	60" on center
-80.6 psf	12" wide	24" on center
-41.5 psf	16" wide	60" on center
-71.4 psf	16" wide	24" on center

**Table 2:** Attachment of SRR minimum 24-gauge steel standing seam metal roofing panels to minimum 16-gauge steel purlins using a panel clip

Design Wind Pressure	Net Panel Coverage	Steel Purlin Spacing
-38.2 psf	12" wide	60" on center
-60.6 psf	12" wide	24" on center
-28.3 psf	16" wide	60" on center
-42.8 psf	16" wide	24" on center

**Installation:**

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

**Steel Purlins:** The steel purlins must be minimum 16-gauge steel.

**Structural Steel Deck:** N/A

**Underlayment:** N/A

**Attachment of Metal Roof Panels to the Steel Purlins:** Secure the panels to the steel purlins with MorZip® 2-piece panel clips. The base of the clip is fabricated from 0.047" thick galvanized steel. The hook of the clip is fabricated from 0.040" thick stainless steel. The two-piece clip is 4.5" long, 2.83" wide, and 2.0625" high. Secure each panel clip to the steel purlins with two minimum No. 12-14 x 1" long Hex head, stainless steel self-drilling screws. Use fasteners long enough to ensure a minimum penetration of three pitches of thread below the steel. The panels with the clips are seamed together with a mechanical seamer.

**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.