

Product Evaluation

RC598 | 1218

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-598

Effective Date: December 1, 2018

Re-evaluation Date: December 2022

Product Name: RidgeLine Insulated Standing Seam Steel Roofing Panels Installed over Steel Purlins

Manufacturer: Green Span Profiles
21200 FM 362
P.O. Box 730
Waller, TX 77484
(844) 807-7400

General Description:

An insulated metal roof panel (IRP) consisting of roll-formed interior and exterior profiles chemically bonded to a continuously, foamed-in-place, 2-1/2" polyisocyanurate, insulating core. The exterior profile is called the facer and is minimum 26-gauge steel, ASTM A 653 GR 50, Fy=60 ksi. The interior profile is called the liner and is minimum 26-gauge steel, ASTM A653, GR 50, Fy=51.7 ksi. The IRP comes in a width of 42" and a thickness of either 2.5", 3", 4", 5", or 6". The rib is 2" tall and T-shaped. The panels are mechanically seamed with a steel clip.

Limitations:

General: The roof framing must meet or exceed the uplift requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

Roof Framing: The metal roofing panels must be installed over minimum 14-gauge steel purlins.

Roof Slope: The metal roof panels may be installed on roofs with a roof slope as low as 1/2:12.

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

Table 1

Attachment of RidgeLine IRP Roofing Panels to Minimum 14-gauge Steel Purlins

Design Wind Pressure	Purlins	Panel Clip Spacing
-49.5 psf	Minimum 14-gauge @ 5'-0" on center	5'-0" o.c.
-78.1 psf	Minimum 14-gauge @ 2'-6" on center	2'-6" o.c.

Installation over Existing Roof Covering: N/A

Installation:

General Installation Requirements: The metal roofing panels must be installed in accordance with the manufacturer's installation instructions and this product evaluation.

Underlayment: N/A

Steel Purlins: Minimum 14-gauge steel. The steel purlins must meet or exceed the uplift requirements of the IRC or the IBC and must be installed as required for resistance to wind loads.

Attachment of IRP Roofing Panels to Steel Framing: The IRP roofing panels must be secured to the steel framing using 16-gauge galvanized steel clips (4" long x 3-3/8" high x 1-1/4" wide); one-piece). Each clip is secured to the purlins with three 1/4-14 x 2-1/4" HWH SD Shoulder screws (no washers) manufactured by Atlas. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the steel framing.

Panel Seam: The panel ribs must be seamed with mechanical seamer.

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.

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.