

Product Evaluation

RC663 | 0621

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-663

Effective Date: June 1, 2021

Re-evaluation Date: June 2025

Product Name: RM 200 ML Steel Standing Seam Roof Panels Installed Over Steel Purlins

Manufacturer: Rigo's Roofing Installers, Inc.
4990 Crockett Martin Rd.
Conroe, TX 77306
(936) 520-3787

General Description:

The RM 200 ML standing seam roof panels have a maximum 18.5" of coverage. The 24-gauge steel panels are a maximum of 18.5" wide. The 22-gauge steel panels are a maximum of 18" wide. The Galvalume coated steel conforms to ASTM A792, Grade 50, with a minimum yield strength of 50,000 psi. The steel panels have a 2" rib height and a mechanical seamed side lap. An optional paint finish is available. The panel rollformer is manufactured by New Tech Machinery Corp.

Limitations:

Roof Framing: Install the roof panels over open 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 must be installed as required for resistance to wind loads.

Design Wind Pressures: The design pressure uplift resistance must be as specified in Tables 1, 2 and 3.

Table 1: Attachment of 24-gauge, 16" Wide RM 200 ML Panels to Minimum 16-gauge Steel Purlins

Purlins	Panel Clip Spacing	Design Pressure (psf)
Minimum 16-gauge; 5'-0" on center	5'-0" on center	-49.5
Minimum 16-gauge; 4'-6" on center	4'-6" on center	-61.6
Minimum 16-gauge; 4'-0" on center	4'-0" on center	-73.8
Minimum 16-gauge; 3'-6" on center	3'-6" on center	-85.9
Minimum 16-gauge; 3'-0" on center	3'-0" on center	-98.1
Minimum 16-gauge; 2'-6" on center	2'-6" on center	-110.2
Minimum 16-gauge; 2'-0" on center	2'-0" on center	-122.4
Minimum 16-gauge; 1'-6" on center	1'-6" on center	-134.5
Minimum 16-gauge; 1'-0" on center	1'-0" on center	-146.7

Table 2: Attachment of 24-gauge, 18.5" Wide RM 200 ML Panels to Minimum 16-gauge Steel Purlins

Purlins	Panel Clip Spacing	Design Pressure (psf)
Minimum 16-gauge; 5'-0" on center	5'-0" on center	-32.5
Minimum 16-gauge; 4'-6" on center	4'-6" on center	-43.8
Minimum 16-gauge; 4'-0" on center	4'-0" on center	-55.0
Minimum 16-gauge; 3'-6" on center	3'-6" on center	-66.3
Minimum 16-gauge; 3'-0" on center	3'-0" on center	-77.5
Minimum 16-gauge; 2'-6" on center	2'-6" on center	-88.8
Minimum 16-gauge; 2'-0" on center	2'-0" on center	-100.0
Minimum 16-gauge; 1'-6" on center	1'-6" on center	-111.3
Minimum 16-gauge; 1'-0" on center	1'-0" on center	-122.5

Table 3: Attachment of 22-gauge, 18" Wide RM 200 ML Panels to Minimum 16-gauge Steel Purlins

Purlins	Panel Clip Spacing	Design Pressure (psf)
Minimum 16-gauge; 5'-0" on center	5'-0" on center	-51.5
Minimum 16-gauge; 4'-6" on center	4'-6" on center	-63.9
Minimum 16-gauge; 4'-0" on center	4'-0" on center	-76.3
Minimum 16-gauge; 3'-6" on center	3'-6" on center	-88.7
Minimum 16-gauge; 3'-0" on center	3'-0" on center	-101.1
Minimum 16-gauge; 2'-6" on center	2'-6" on center	-113.5
Minimum 16-gauge; 2'-0" on center	2'-0" on center	-125.9
Minimum 16-gauge; 1'-6" on center	1'-6" on center	-138.3
Minimum 16-gauge; 1'-0" on center	1'-0" on center	-150.8

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

Installation over Existing Roof Covering: Not permitted

Installation:

General: Install the steel roofing panels in accordance with the manufacturer's installation instructions and this production evaluation.

Roof Framing: The minimum thickness of the steel purlins must be as specified in Tables 1, 2, and 3.

Underlayment: N/A

Attachment of Panels to the Steel Purlins: The roof panels must be secured to the steel purlins with either NC-33001-3 sliding clips (2-1/2" tall; 22-gauge top; 16-gauge base; 50 ksi steel, G90 galvanized steel) or NC-33002-3 sliding clips (3" tall; 22-gauge top; 16-gauge base; 50 ksi steel, G90 galvanized steel) by Logan Stamping, Inc./BPD using 1/4-14 x 1-1/2" HWH SD3 screws. Two (2) screws per clip are required. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin.

Panel Seam: The panel is seamed to a 180-degree seam (double lock) with a mechanical seamer.

Panel Ends and Edges: As required by the manufacturer.

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.

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.