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Product Evaluation

RC671 | 0821

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-671

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

Product Name: 1.5" Steel and Aluminum Standing Seam Roofing Panel Installed over an OSB Roof Deck

Manufacturer: Anguiano Roofing, Inc.
dba J.R. & Sons Construction.
1733 Kentucky Derby Drive
Corpus Christi, TX 78417
(361) 851-0138

General Description:

The 1.5" standing seam roof panel is minimum 24-gauge galvalume steel panels or minimum 0.032" aluminum with an optional paint finish. The roofing panels have a maximum coverage of 16". The panel has a 1-1/2" tall mechanical double lock standing seam rib. The 24-gauge steel material is ASTM A 792 Grade 50, with a 50 ksi yield point. The aluminum is 0.032" ASTM B-557 H24-3105. Panels must be formed within the panel rollformer specifications and tolerances. Panel Rollformer: Roll Former Corporation VS-150.

This product evaluation report is for residential roofing panels that are secured to a nominal 19/32" OSB deck. A thicker wood structural panel roof deck may be used; however, the design pressure rating for the panels must be as specified in this evaluation report.

Limitations:
Roof Deck: The roofing panels must be installed over a solid minimum 19/32" OSB deck.

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

Roof Slope: The metal roofing panels may be installed on roofs with a roof slope as low as 1/4:12.

Design Pressure: The design pressure uplift load resistance shall be as specified in Table 1 and Table 2.

Table 1. Attachment of 1.5" Steel Roofing Panels to Minimum 19/32" OSB Roof Deck.

Design Uplift Pressure (psf)	Panel Seam	Panel Clip	Clip Spacing	Clip Fastener
-93.5	Double Lock	Fixed Clip	16" o.c.	Two (2) #10-12
-101.0	Double Lock	Fixed Clip	12" o.c.	Two (2) #10-12

Table 2. Attachment of 1.5" Aluminum Roofing Panels to Minimum 19/32" OSB Roof Deck**.**

Design Uplift Pressure (psf)	Panel Seam	Panel Clip	Clip Spacing	Clip Fastener
-71.0	Double Lock	Fixed Clip	16" o.c.	Two (2) #10-9
-93.5	Double Lock	Fixed Clip	12" o.c.	Two (2) #10-9

Installation over Existing Roof Covering: Installation over an existing roof covering is limited to a maximum of one existing layer of composition shingles, wood shingles or shakes, built-up roofing or roll roofing applied over an existing solid roof deck of minimum 19/32" OSB. Note: Inspection of existing roof deck must be made prior to the installation of the roof panels. The condition of the existing roof deck must be acceptable to receive the metal roofing panels before roof panel installation can begin.

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

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt or equivalent must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment must be installed with 6" side laps and 3" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instruction. Fasteners must be applied along the overlaps not farther apart than 36" on center.
Attachment of Steel Roof Panels to OSB Deck: The 24-gauge steel panels must be installed using a fixed clip (one-piece, 26-gauge galvanized steel, 2" long) with two (2) No. 10-12 x 1" long Pancake Type 17 point fasteners. The fasteners must be long enough to ensure a minimum

penetration of 1/4" below the roof deck. The maximum allowable spacing of the clips is specified in Table 1.

Attachment of Aluminum Roof Panels to OSB Deck: The 0.032" aluminum panels must be installed using a fixed clip (one-piece, 26-gauge 304 stainless steel, 2" long) with two (2) No. 10-9 x 1" long Pancake Stainless Steel Type 17 point fasteners. The fasteners must be long enough to ensure a minimum penetration of 1/4" below the roof deck. The maximum allowable spacing of the clips is specified in Table 2.

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

Panel Ends: As required by the manufacturer.

Panel Edges: As required by the manufacturer.

Trims, Closures and Accessories: Components such as eave, rake rim, rake trim, hip trim, and valley trim shall 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 and the IBC.