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## **Product Evaluation**

RC612 | 0819

**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-612 **Effective Date:** August 1, 2019

**Re-evaluation Date:** August 2023

Product Name: Tridom 1.5" Snaplock Standing Seam Steel Roofing Panel over 15/32" Plywood

Deck

Manufacturer: Tridom Roofing, LLC

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## **General Description:**

The Tridom 1.5" Snaplock Metal Roofing Panel is minimum 24-gauge galvalume steel panels with optional painted finishes. The metal roofing panels have a maximum coverage of 16-5/8". The panel has a 1.5" tall snap lock rib. The 24-gauge steel material is ASTM A 792 Grade 50, with a 50 ksi yield point with optional painted finishes. Panels must be formed with the panel rollformer specifications and tolerances. The panel rollformer is from New Tech Machinery Corp. with an SS450SL panel profile.

This product evaluation report is for residential metal roofing panels that are secured to a nominal 15/32" plywood deck. Thicker plywood deck may be used; however, the design pressure rating for the metal panels must be as specified in this evaluation report.

## **Limitations:**

**Roof Deck:** The metal roofing panels must be installed over minimum 15/32" plywood deck.

**New Roof Deck Attachment:** The roof deck must meet or exceed the uplift requirements of 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 3:12.

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

**Table 1:** Attachment of Tridom 1.5" Snaplock 24-gauge Steel Metal Roofing Panels to Minimum 15/32" Plywood Decking

Design Wind Pressure (psf)	Panel Seam	Panel Clip	Panel Clip Spacing	Panel Clip Fasteners
-52.5	Snap Lock	1.75" Fixed Clip	18" on center	Two (2) No. 10-12 x 1"
-86.0	Snap Lock	1.75" Fixed Clip	6" on center	Two (2) No. 10-12 x 1"

**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 15/32" plywood. 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:** The metal roofing panels must be installed in accordance with the manufacturer's installation instructions and this production 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 Metal Roof Panels to Plywood Deck:** The 24-gauge Tridom 1.5" panels must be installed using a fixed clip with two (2) No.  $10-12 \times 1$ " long Pancake Type A fasteners. The fasteners must be long enough to ensure a minimum penetration of 1/4" below the roof deck. (Note: if the metal roofing panels are installed over an existing roof covering, the fastener length must be increased so that the fasteners are long enough to ensure a minimum penetration of 1/4" below the existing plywood roof decking). The maximum allowable spacing of the clips is specified in Table 1.

**Panel Clip:** 24-gauge (0.026" thick nominal) galvanized steel clip; fixed clip; 1.75" long by Logan Stamping, Inc.

**Panel Seam:** The panel has a snap lock seam.

**Panel Ends:** As required by the manufacturer.

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**Trims, Closures, and Accessories:** Components such as eave, rake rim, rake trim, and valley trim must be as required by the manufacturer.

**Alternative Fasteners:** Alternative fasteners of equal or greater strength may be substituted.

**Note:** The manufacturer's installation instructions must be available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.