



# Product Evaluation

RC545 | 0817

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-545

**Effective Date:** August 1, 2017

**Re-evaluation Date:** July 2021

**Product Name:** Tectum-G24 Metal Roofing Panel over Plywood Deck

**Manufacturer:** RGV Contractor  
1130 N. Bentsen Road  
McAllen, Texas 78501  
(956) 250-0990

## General Description:

The Tectum-G24 metal roofing panel is a 24-gauge galvalume steel with an optional paint finish. The metal roofing panels have a maximum coverage of 14-3/4". The panel has a 1-1/2" tall snap lock with a flange with 1/2" x 3/16" slots at 3-7/8" O.C. The 24 gauge steel material is ASTM A 792 Grade 50, with a minimum 50 ksi yield point with optional painted finishes. Panel Roliformer Zimmerman Metals, Inc.

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

## Limitations:

**Roof Deck:** The metal 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 the International residential Code (IRC) and must be as required for resistance to wind loads.

**Roof Slope:** The metal roof panels may be installed on roofs with a slope as slow as 3:12

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

**Installation over an Existing Roof Covering:** Installation over an existing roof covering is limited to a maximum of one existing layer of composition 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 of deck must be acceptable to receive the metal roofing panels before roof panel installation can begin.

**Table 1:** Attachment of Tectum-G24 Metal Roof Panels to Minimum 15/32" Plywood Decking.

Design Wind Pressure (psf)	Panel Fastener Spacing
-56.0	11-5/8" on center
-101.0	3-7/8" on center

**Installation:**

**General:** The metal panels must be installed in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**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, 4869, or ASTM D 1970. The underlayment must be installed with 6-inch side laps and 3-inch end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36 inches on center.

**Attachment of Metal Panels to the Steel Purlins:** The metal roof panels must be secured to the roof deck using minimum one No. 10-12 x 1" long pancake Type 17 (or approved equal). The spacing of the fasteners must be as specified in Table 1. The fasteners must be long enough to insure a minimum penetration of 1/4" below the wood deck.

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

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

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

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