TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective July 1, 2010
RC-249

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 shall be subject to reevaluation in October 2013.

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.

24 Gauge 1 ½ " Tight Lock Standing Seam Metal Roofing Panels, manufactured by

Texas Elite Roofing, Inc.
6223 Pheall Road
Houston, Texas 77066
Telephone: (832) 928-7442

will be accepted for use in areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Tight Lock standing seam metal roofing panels have a maximum width of 15 inches. The metal roof panels have a 1 ½ " tall standing seam snap lock rib. The metal roof panels are manufactured from 24 gauge Galvalume coated steel that conforms to ASTM A792, Grade 50, with a minimum yield strength of 50,000 psi. The metal roofing panels can be painted with Kynar 500 Fluoropolymer finish coating.

LIMITATIONS

Roof Framing: The metal roofing panels shall be installed over one of the following types of roof framing:

- Minimum 15/32 " plywood roof deck

New Roof Framing Attachment: The roof framing shall meet or exceed the uplift requirements of the International Residential Code or International Building Code and shall be installed as required for resistance to wind loads.

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

Roof Slope: The metal roofing panels may be installed on roofs with a roof slope as low as 3:12.

Table 1

Attachment of minimum 24 gauge Tight Lock standing seam metal roofing panels to minimum 15/32" plywood roof deck

Design Wind Pressure	Panel Seam	Panel Clip	Clip Spacing	Clip Fastener
-116.0 psf	Snap Lock	2" Long Fixed Clip	12"	Two (2) No. 8-12 x 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, 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 the 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 the metal roofing panel installation proceeds. NOTE: Underlayment is not required to be installed.

INSTALLATION INSTRUCTIONS

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

Panels: The metal roofing panels shall be secured to the roof framing as specified in Table 1 and in accordance with this section.

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt shall be used. The underlayment used shall comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The underlayment shall be installed with 6 inch side laps and 3 inch end laps. The underlayment shall be applied with corrosion resistant roofing nails in accordance with the manufacturer's installation instructions. Fasteners shall be applied along the overlaps a maximum of 36 inches on center.

Attachment of Metal Roof Panels to the Roof Deck: The metal roofing panels shall be secured to the roof framing in one of the following ways:

Roofing Panels to Plywood Deck: Minimum No. 8-12 x 1" long, Truss Head Type A screws with 0.031" thick galvanized steel clips. The clips are 2" long, 1 1/4" deep and 1 9/16" high. The clips are spaced 12 inches on center as specified in Table 1. Figure 1 illustrates the panel secured to the plywood roof deck. The fasteners shall 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, then the fastener length shall be increased so that the fasteners are long enough to ensure a minimum penetration of 1/4" below the existing plywood roof decking.) The required size and quantity of fasteners as well as the maximum allowable spacing of the clips is specified in Table 1.

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

Note: The manufacturer's installation instructions shall be available on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.

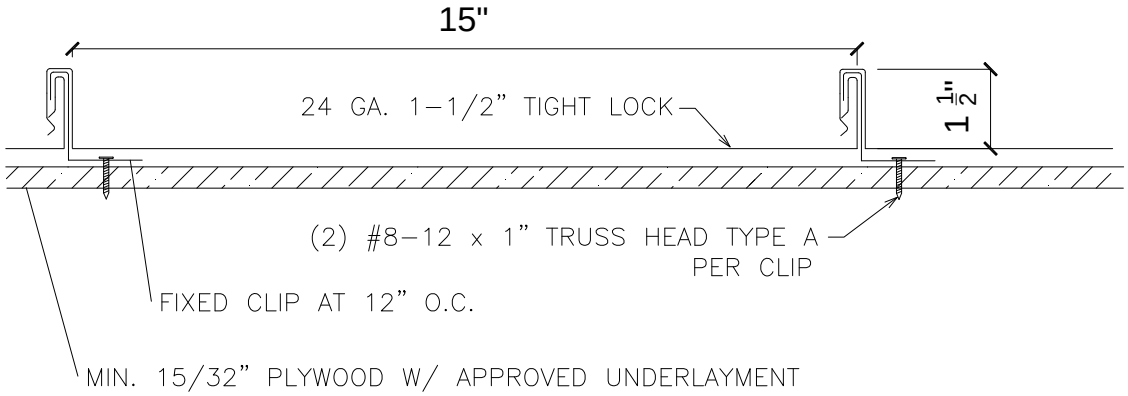

Figure 1. Tight Lock Standing Seam Metal Roofing Panel Secured to a $^{15}/_{32}$" Plywood Deck