

# TEXAS DEPARTMENT OF INSURANCE

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**PRODUCT EVALUATION**  
RC-399

Effective February 1, 2014  
Revised March 1, 2014

*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 **January 2018**.*

*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.*

**Image II 26 gauge Steel Roof Panel** manufactured by

**Metal Sales Manufacturing Corporation**  
**3838 North General Bruce Drive**  
**Temple, TX 76501-6505**  
**(254) 791-6650**

is acceptable in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions, the Image II Metal Roof Panel Details and this product evaluation.

## PRODUCT DESCRIPTION

The Image II metal roof panels have 16 inch maximum coverage. The metal roof panels have ribs 1 inch high and located along the sides of the panel width. The steel roof panels are manufactured from minimum 26 gauge (0.0173" thick) steel with minimum yield strength of 50 ksi and a Galvalume or Galvanized coating. The steel roof panels conform to ASTM A 792 or ASTM A 653 and may be prepainted.

## LIMITATIONS

**Roof Framing:** The metal roof panels shall be installed over solidly sheathed minimum  $\frac{7}{16}$ " OSB 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:** Image II Roof Panel shall not be installed on roofs with a roof slope less than 3:12, unless sealant is applied at the panel sidelaps in accordance with the Image II Metal Roof Panel Details and the IRC, Section R905.10.2, or the IBC, Section 1507.4.2.

## INSTALLATION INSTRUCTIONS

**General Installation Requirements:** The panel shall be installed square (flush) with the eave and rake. The panels shall not extend beyond the plane of the fascia board. All IRC and IBC requirements must be satisfied and the manufacturer's Image II Metal Roof Panel Details followed, unless otherwise specified by this product evaluation.

### PANEL INSTALLATION REQUIREMENTS

**Panels:** Panels shall be secured to the roof deck in accordance with Table 1. Refer to the Image II Metal Roof Panel Details for illustrations of the screw locations.

**TABLE 1**

Attachment of minimum Image II 26 gauge Steel Roof Panels  
to minimum  $\frac{7}{16}$ " OSB Wood Sheathing:

Design Wind Pressure (psf)	Attachment of Roof Panel to Wood Sheathing
-20.8	#10-12 screw @ 24 inches on center
-30.1	#10-12 screw @ 18 inches on center
-49.3	#10-12 screw @ 12 inches on center
-63.5	#10-12 screw @ 6 inches on center
-86.6	#10-12 screw @ 6 inches on center and SM7108 adhesive in the ribs

**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  $\frac{7}{16}$ " OSB. 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 required to be installed.

**Underlayment:** For installations over a solid deck, use a minimum of one layer of Type II 30# asphalt felt. The underlayment 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 nails spaced a maximum of 36 inches on center along the side laps.

**Anchorage: (Exposed Fastened End)** The panels shall be fastened in the center of the fastening groove located along the male leg of the panel in accordance with Table 1 with #10-12 x 2 inch Pancake Head Woodscrews to minimum  $\frac{7}{16}$  inch OSB roof sheathing. The panel shall be fastened along the rake at 6 inches on center with #10-14 x  $1\frac{1}{2}$  inch woodscrews. The panel shall be fastened along the high end of the panels at 4 inches on center with #10-14 x  $1\frac{1}{2}$  inch woodscrews. The fasteners shall be corrosion resistant, with a painted or plated finish and shall be properly driven, with #10-12 Pancake Head Woodscrews driven flush with the panel surface and #10-14 Woodscrews driven so that the sealing material is slightly visible at the edge of the washer.

**Ridge Cap and Rake Trim:** The ridge cap and the rake trim shall be attached to the panels with  $\frac{1}{8}$ " x  $\frac{3}{16}$ " Weather Gard pop rivets as indicated in the Image II Metal Roof Panel Details. Double bead tape sealant and urethane tube sealant are required at the trim.

**Trims, Closures and Accessories:** Components, such as eave trim, rake trim, ridge trim, hip trim and valley trim, shall be installed as required by the manufacturer and the Image II Metal Roof Panel Details.

**Note:** The Image II Metal Roof Panel Details published in the TDI Product Evaluation Index 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.