

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

RC-385

Effective October 1, 2013

Revised November 1, 2013

*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 **March 2016**.*

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.

SMI 2.0 MS 24 gauge Mechanical Standing Seam Metal Roof Panel Installed Over Steel Purlins,
manufactured by

Sheffield Metals International
5467 Evergreen Parkway
Sheffield Village, OH 44054
(800) 283-5262

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 SMI 2.0 MS is a mechanically seamed standing seam metal roof system. The panel is 24 gauge galvalume. The vertical leg of the panel measures 2 inches in height and has a maximum panel width of 18". The panel can be formed in continuous lengths and interlocks to adjoining panels by field seaming the panels to a 180 degree seam.

LIMITATIONS

Roof Decking: The metal roof panels shall be installed over open steel purlins.

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

Design Wind Pressures: Design wind pressure limitations are specified in Table 1.

Roof Slope: The metal roof panels may be installed on roofs with a roof slope as low as $\frac{1}{2}$:12 if sealant is used on the panel side laps. If sealant is not used on the panel side laps, then the minimum roof slope is 2:12.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not permitted.

Table 1
Attachment of 18" wide minimum 24 gauge
Metal Roof Panels to Steel Purlins

Design Wind Pressure (psf)	Purlins	Attachment of Panel to Steel Purlins
-105	Minimum 16 gauge; 1'-0" on center	Two piece floating clips @ 1'-0" on center
-37.5	Minimum 16 gauge; 5'-0" on center	Two piece floating clips @ 5'-0" on center

INSTALLATION INSTRUCTIONS

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

Steel Purlins: The minimum thickness of steel and the maximum spacing of the purlins shall be as specified in Table 1.

Underlayment: N/A.

Anchorage to Roof Decking: The metal roof panels shall be fastened in accordance with Table 1. The metal roofing panels shall be secured to the roof deck with a two piece floating clip. Each two-piece clip consists of a float clip base (16 gauge, G90 galvanized steel) and a float clip tab (22 gauge, G90 galvanized steel). The clips are secured with two (2) $\frac{1}{4}$ -14 x $1\frac{3}{8}$ " #2 point Weather Gard self-drilling hex head screws. The fasteners shall be long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin. The legs are mechanically seamed 180 degrees after the clips are installed.

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.

Panel Ends and End Laps: As required by the manufacturer.

Panel Edges: 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.