TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective January 1, 2012
RC-315 Revised May 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* ***November 2015.***

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.

26 gauge PBU Metal Roofing Panels Over Steel Purlins, manufactured by

Schulte Building Systems, Inc.
17600 Badtke Road
Hockley, TX 77447
Telephone: (281) 304-6111

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

This evaluation report is for PBU metal roofing panels installed over steel purlins. The PBU panel is minimum 26 gauge galvalume steel with an optional paint finish. The 26 gauge metal roof panels have an actual coverage of 36". Each metal roof panel has ribs that are $\frac{3}{4}$" deep. The metal roofing panels conform to ASTM A792, with a minimum 80,000 psi yield point.

LIMITATIONS

Roof Framing: The metal roofing panels shall be installed over open steel purlins.

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 $\frac{1}{2}$: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 3:12.

Installation Over an Existing Roof Covering: Not permitted.

Table 1

Attachment of minimum 26 gauge PBU metal roofing panels to steel purlins

Design Wind Pressure (psf)	Purlins	Attachment of Panel to Steel Purlins
-140.3	Minimum 16 gauge; 2'-0" on center	Fasteners @ 12"-12"-12"; 2'-0" on center
-125.2	Minimum 16 gauge; 2'-6" on center	Fasteners @ 12"-12"-12"; 2'-6" on center
-110.0	Minimum 16 gauge; 3'-0" on center	Fasteners @ 12"-12"-12"; 3'-0" on center
-94.9	Minimum 16 gauge; 3'-6" on center	Fasteners @ 12"-12"-12"; 3'-6" on center
-79.7	Minimum 16 gauge; 4'-0" on center	Fasteners @ 12"-12"-12"; 4'-0" on center
-64.6	Minimum 16 gauge; 4'-6" on center	Fasteners @ 12"-12"-12"; 4'-6" on center
-49.4	Minimum 16 gauge; 5'-0" on center	Fasteners @ 12"-12"-12"; 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.

Attachment of Metal Roof Panels to the Steel Purlins: The metal roofing panels shall be secured to the steel purlins with No. 12-14 x 1 ¼" long HWH self-driller screws integral washer. A line of fasteners shall be located along each steel purlin. The fastener pattern and the spacing of the fasteners shall be as specified in Table 1. The fasteners shall be long enough to ensure a minimum penetration of 3 pitches of thread below the steel purlin.

Panel Side Laps: The panels shall overlap one corrugation. The panels are stitched together with a minimum ¼"-14 x ⅞" lap Tek screw with a sealing washer. The lap screws shall be spaced 20 inches on center along the length of the side lap.

Panel Ends and End Laps to the Steel Purlins: Minimum No. 12-14 x 1 ¼" long HWH self-driller screws with integral washer. A line of fasteners in a 6"-6"-6"-6"-6" pattern shall be located along the steel purlin. The fasteners shall be long enough to ensure a minimum of penetration of 3 pitches of thread below the steel deck. Refer to Figure 1 for an illustration of the fastner pattern.

Panel Edges to Steel Purlins: Minimum No. 12-14 x 1 ¼" long HWH self-driller screws with integral washer. A line of fasteners in a 6"-6"-6"-6"-6" pattern shall be located along the steel purlin. The fasteners shall be long enough to ensure a minimum of penetration of 3 pitches of thread below the steel deck. Refer to Figure 1 for an illustration of the fastner pattern.

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.

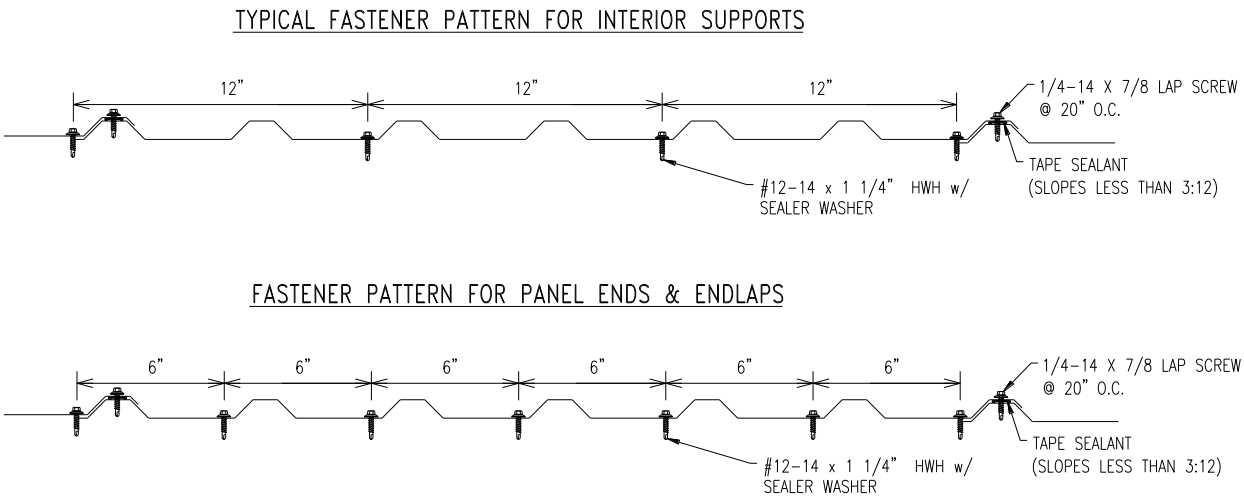

Figure 1: Minimum 26 Gauge PBU Panel Fastener Patterns