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## **Product Evaluation**

RC714 | 0323

**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-714 **Effective Date:** March 1, 2023

**Re-evaluation Date:** March 2027

**Product Name:** 26 Ga. PBR Metal Roofing Panel Installed over Steel Framing

Manufacturer: JAG Metals, LLC

1815 Banks Drive

Weatherford, Texas 76087

(817) 599-5241

## **General Description:**

The 26 Ga. PBR Metal Roofing panel is minimum 26-gauge galvalume steel panels with an optional paint finish. The metal roofing panel is a through fastened panel with a maximum coverage of 36". The panel has 1-1/4" tall major ribs at 12" O.C. The 26 Ga. Steel material is ASTM A 792 Grade 80, with a 80 ksi yield point with optional painted finishes.

## **Limitations:**

**Roof Framing:** The metal roofing panels must be installed over minimum 16 Ga. open steel framing.

**New Roof Framing Attachment:** The roof framing must meet or exceed the uplift requirements of the IRC or IBC and be install as required for resistance to wind loads.

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

**Roof Slope:** The metal roofing panels may be installed on roofs with a roof slope as low as 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.** 26 Ga. PBR Metal Roof Panels Installed over Steel Framing

Design Wind Pressure (psf)	Steel Framing	Attachment of Panel to Steel Framing
+46.9 / -46.9	Minimum 16 Ga. 5'-0" O.C.	Fasteners at 12"-12"-12"
+65.7 / -59.9	Minimum 16 Ga. 4'-6" O.C.	Fasteners at 12"-12"-12"
+84.6 / -72.9	Minimum 16 Ga. 4'-0" O.C.	Fasteners at 12"-12"-12"
+103.4 / -85.9	Minimum 16 Ga. 3'-6" O.C.	Fasteners at 12"-12"-12"
+122.3 / -98.9	Minimum 16 Ga. 3'-0" O.C.	Fasteners at 12"-12"-12"
+141.1 / -111.9	Minimum 16 Ga. 2'-6" O.C.	Fasteners at 12"-12"-12"
+160.0 / -124.9	Minimum 16 Ga. 2'-0" O.C.	Fasteners at 12"-12"-12"

## Installation:

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

**Underlayment:** N/A.

**Steel Framing:** Minimum 16 Ga. Steel framing at spacings listed in Table 1.

**Attachment of Metal Roof Panels to Steel Framing:** The metal roofing panels must be fastened to the steel framing with  $#12-14 \times 1-1/4$ " Cupped HWH SD with EPDM washer or equal. A line of fasteners must be located along each steel frame at spacings listed in table 1. The fasteners must be long enough to ensure a minimum penetration of three pitches below the steel framing.

**Panel Side Laps:** The panel side laps are stitched together with minimum  $1/4-14 \times 7/8$ " Cupped HWH SD1 with EPDM washer or equal at 20" O.C.

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

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**Trims, Closures, and Accessories:** Components such as eave, rake rim, rake trim, hip trim, and valley trim must be 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 installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.