

## Product Evaluation

RC571 | 0522

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-571

**Effective Date:** May 1, 2022

**Re-evaluation Date:** May 2026

**Product Name:** AG Steel Roofing Panels Installed over Wood Purlins

**Manufacturer:** Steel Building Supply, Inc.  
1154 State Hwy 7 East  
Center, TX 75935  
(936) 598-6373

### General Description:

The AG metal roofing panel is a minimum 29-gauge steel panel that has a coverage width of 36". The metal roofing panels have a 3/4" rib height. The metal roofing panel has a yield strength of 80,000 psi.

### Limitations:

**Wood Purlins:** Install the metal roofing panels over nominal 2x4 Southern Yellow Pine No. 2 lumber purlins as specified in Table 1.

**Roof Framing:** Roof framing must be minimum Southern Yellow Pine. The roof framing must be spaced a maximum of 48" on center and the wood purlins are secured to the roof framing.

**New Roof Framing Attachment:** The roof framing must meet or exceed the uplift requirements of the IRC and IBC. Install the decking in a manner to resist lateral loads.

**Design Wind Pressures:** Table 1 specifies installation to minimum nominal 2x4 Southern Yellow Pine No. 2 lumber wood purlins and design wind pressure limitations.

**Installation Over an Existing Roof Covering:** Not permitted.

**Roof Slope:** The metal roof panels may be installed on roofs with a roof slope as low as 1/2:12 if sealant is used on the panel laps. If sealant is not used on the panel laps, then the minimum roof slope is 3:12. The maximum roof slope is 21:12.

**Table 1**

Attachment of Minimum 29-gauge AG Steel Roofing Panels to Nominal 2x4 Purlins

Design Wind Pressure	Purlins	Wood Purlins to Roof Framing	Panels to Purlins
-52.5 psf	Nominal 2x4 SYP No. 2	Two No. 8 x 3 Bugle Head screws per framing member	1/4-14 x 1-1/2 Type AB, 14 x 1-1/2 Type AB, 14 x 1-1/2 Type A, No. 10 x 1-1/2 Woodgrip, <b>or</b> No. 10-14 x 1-1/2 hex-washer head screw with neoprene washer

**Installation:**

**General:** Install the steel roofing panels in accordance with the manufacturer's recommended installation instructions and this evaluation report.

**Wood Purlins:** Minimum nominal 2x4 SYP No. 2.

**Underlayment:** Not Applicable.

**Anchorage of Metal Panels to the Roof Deck:** Secure the metal roofing panels to the wood purlins in accordance with Table 1. The screws are to be located a maximum of 24" on center along the length of panel. The fastener spacing across the width of the panel must be 9" on center beginning 1-3/4" from the centerline on one side of each major rib.

**Panel Side Laps:** As required by the manufacturer.

**Panel Edges to the Roof Deck:** The screws are to be located a maximum of 24" on center along the length of panel.

**Trims, Closures, and Accessories:** Install components, such as the eave trim, rake trim, ridge trim, hip trim, and valley trim as required by the manufacturer.

**Panel Ends and End Laps:** Panels to overlap 6" at end laps. Fastener spacing at panel ends to be 1-3/4", 5-1/2", 3-3/4", 5-1/2", 3-3/4", 5-1/2", 3-3/4", 5-1/2".

**Note:** Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.