

Product Evaluation

RC521 | 0422

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-521

Effective Date: April 1, 2022

Re-evaluation Date: April 2026

Product Name: ClickLock 0.032" Aluminum Standing Seam Roofing Panels Installed over a Plywood Deck

Manufacturer: Isaiah Industries, Inc.
8510 Industry Park Dr.
Piqua, OH 45356
(937) 778-5111

General Description:

The ClickLock standing seam roofing panel is a 0.032" aluminum panel. The panel has a coverage width of 12". The aluminum roofing panels have a 1-1/2" rib height. The aluminum roofing panels are manufactured of 3015-H24 aluminum with a minimum yield strength of 22,000 psi. The panels are coated with a bake-on protective primer and Kynar 500 or Hylar 5000 PVDF resin-based coating.

Limitations:

Roof Framing: Install the aluminum roofing panels over a minimum 15/32" plywood deck as specified in Table 1.

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

Design Wind Pressures: Table 1 specifies installations to minimum 15/32" plywood deck and design wind pressure limitations.

Installation Over an Existing Roof Covering: If installing over an existing roof covering, limit to a maximum of one existing layer of composition shingles applied over an existing, solid roof deck of minimum 15/32" plywood. Note: Inspect the existing roof deck prior to the installation of the roof panels. The existing roof deck's condition must be acceptable to receive the metal roofing panels before installing the metal roofing panel. Installation requires underlayment be installed over the existing roof covering.

Roof Slope: The aluminum roofing panels may be installed on roofs with a roof slope as low as 2:12.

Table 1

Attachment of Aluminum ClickLock Roofing Panels to a Minimum 15/32" Plywood Deck

Design Wind Pressure (psf)	Panel Clip	Panel Clip Fasteners	Panel Clip Spacing
-82.50	175-SLZ-18-G(S)	No. 12 x 1" A-point screws	12" on center

Installation:

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

Roof Deck: Minimum 15/32" plywood deck.

Underlayment: Use a minimum of one layer of No. 30 (Type II) asphalt felt. Use underlayment that complies with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. Install the underlayment with 4" side laps and 6" end laps. Apply the underlayment with corrosion resistant fasteners in accordance with the manufacturer's installation instructions and the IRC or the IBC.

Anchorage of Aluminum Panels to the Roof Deck: Secure the aluminum roofing panels to the plywood deck with either 175-SLZ-18-G-OT 18-gauge G90 galvanized steel or 175-SLZ-18-S-OT 304 stainless steel clips (2.250" long by 1.750" high x 2.07" wide). The clips are secured to the plywood deck with two No. 10-12 x 1" long A-point screws per clip. Use fasteners long enough to ensure a minimum penetration of 1/4" below the roof deck.

Panel Seam: Adjacent panels are seamed together along the side laps by snapping the female lock over the male lock.

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.

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.