



# Product Evaluation

RC592 | 0918

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-592

**Effective Date:** September 1, 2018

**Re-evaluation Date:** September 2022

**Product Name:** Weather Lok 16" 24-Gauge Standing Seam Steel Roof Panels Installed over a Steel Deck

**Manufacturer:** Whirlwind Steel Buildings  
8234 Hansen Road  
Houston, Texas 77075  
(877) 787- 2350

## **Product Description:**

The Weather Lok Standing Seam Metal roofing panels have 16" of coverage. The metal roof panels have 2" rib height and mechanically seamed side lap. The metal panels are manufactured from 24-gauge Galvalume coated steel that conforms to ASTM A792, Grade 50, with a minimum yield strength of 50,000 psi. Optional paint finish.

## **Limitations:**

**General:** The roof framing must meet or exceed the uplift requirements of the IRC or the IBC and must be installed as required for resistance to wind loads.

**Roof Deck:** The metal roofing panels must be installed over a 22-gauge steel deck secured to steel framing.

**Insulation Board:** Rigid insulation with a minimum compressive strength of 20 psi.

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

**Roof Slope:** The metal roofing panels may be installed on roofs with a minimum roof slope of 1/2:12.

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

**Table 1**

Attachment of minimum 24-gauge Weather Lok metal panels to minimum 22-gauge steel deck

Design Wind Pressure (psf)	Steel Deck	Panel Clip Spacing
-63.5	22-gauge	48" on center
-96.0	22-gauge	36" on center
-128.5	22-gauge	24" on center
-161.0	22-gauge	12" on center

**Installation Instructions:**

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

**Insulation:** Rigid insulation with a minimum compressive strength of 20 psi. The rigid insulation board must be secured to the steel deck with five (5) No. 14-13 DP1 W/3" steel disks per board.

**Structural Steel Deck:** Steel "B"deck. The steel deck must be minimum 22-gauge, Grade 80. The steel deck is secured to minimum 12-gauge steel purlins spaced a maximum of 5'-0" on center. The steel deck must meet or exceed the uplift requirements of the IRC or IBC and must be installed as required for resistance to wind loads.

**Attachment of Metal Panels to Steel Deck:** The metal roofing panels must be secured to the steel deck with two (2) No. 14-13 DP1 screws with MC 1203 Siding clips by Logan Stamping, Inc./BPD and a 4" x 5", 16-gauge bearing plate. The fasteners must be long enough to ensure a minimum penetration of 3 pitches of thread below the steel deck.

**Panel Seam:** The panel ribs must be seamed with mechanical seamer forming a triple Lock.

**Trims, Closures, and Accessories:** Components and trim must be installed 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, the IBC, and the Texas Revisions.