TDI | Texas Department of Insurance

PO Box 12030 | Austin, TX 78711 | 800-578-4677 | tdi.texas.gov

Product Evaluation

RC620 | 1222 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-620

Effective Date: December 1, 2022
Re-evaluation Date: December 2026

Product Name: HURRICANE® Metal Shake and HURRICANE® Metal Shake Pro Stone Coated Steel Roofing Installed Over a Plywood Roof Deck

Manufacturer: TEK Industries, LLC
11801 Pierce Street,
Suite 200
Riverside, CA 92505
(877) 729-5229

General Description:
Hurricane Metal Shake is a textured stone coated steel roofing panel system. Each panel is constructed of 28-gauge thick steel coated with resin and a layer of stone granules. The steel panels are 16-1/2" in height and 52-1/2" in width.

Hurricane Metal Shake Pro is a textured stone coated steel roofing panel system. Each panel is constructed of 28-gauge thick steel coated with resin and a layer of stone granules. The steel panels are 14-1/2" in height and 52-1/2" in width.

Limitations:
Design Wind Pressures:
HURRICANE® Metal Shake: -55.0 psf
HURRICANE® Metal Shake Pro: -103.5 psf

Roof Slope: The steel roofing panels may be installed on roofs with a roof slope as low as 3:12.

Installation Over an Existing Roof Covering: Installation over existing roof is limited to a maximum of one existing layer of composition shingles, built-up roofing, or roll roofing applied over an existing, solid minimum 15/32" plywood roof deck. Inspection of existing roof deck must be made prior to the installation of the roofing panels. The condition of the existing roof deck must be acceptable to receive the roofing panels before the roofing panel installation proceeds. A layer of underlayment over the existing roof covering is not required.

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

Roof Framing: The roof framing members (rafters or trusses) must be spaced a maximum of 24" on center.

Roof Deck: The roof deck must be minimum nominal 15/32" plywood wood panels.

Underlayment: Minimum one layer of No. 30 asphalt felt. It must comply with ASTM D 226 Type I or Type II, ASTM D4869, Type I or Type II or ASTM D1970. The felt must be installed with minimum 6" side laps and 3" head laps. The underlayment must be applied with corrosion resistant fasteners in accordance with manufacturer's installation instructions, the IRC, and the IBC.

Attachment of Steel Roofing Panels to Roof Deck:
HURRICANE® Metal Shake:
The panels are secured to the roof deck with minimum No. 10-12 x 2-1/2" hex head screws. Along the back flange, locate the fasteners approximately 2-1/4" from each corner and 16" on center (4 fasteners per panel). Along the front flange, locate the fasteners approximately 2-1/4" from each corner and 16" on center (4 fasteners per panel). Fasteners must be long enough to penetrate complete through the roof deck. Foam insulation should be inserted into the cavity of the panel.

HURRICANE® Metal Shake Pro:
The panels must be fastened to the roof deck with a minimum of six (6) No. 10-12 x 2-1/2" hex head screws across the back flange. The screws are to be placed approximately 6-3/4" on center into the predrilled holes. Fasteners must be long enough to penetrate complete through the roof deck. Foam insulation should be inserted into the cavity of the panel. The roofing panels are to be installed in a vertically interlocking position starting left to right. The installing panel on the right side will overlap the installed panel on left side. The second and the subsequent courses must be installed in a random non repetitive pattern. The nose of the panel in the second and subsequent rows must lock into the back flange of the previous row shown in Figure 1. The side of each panel must overlap by 2-1/2" and the back flange of the two panels must be flush with each other at the notches without a gap.

Trims, Closures, and Accessories: Components, such as the eave trim, rake trim, ridge trim, hip trim, and valley 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 and the IBC.

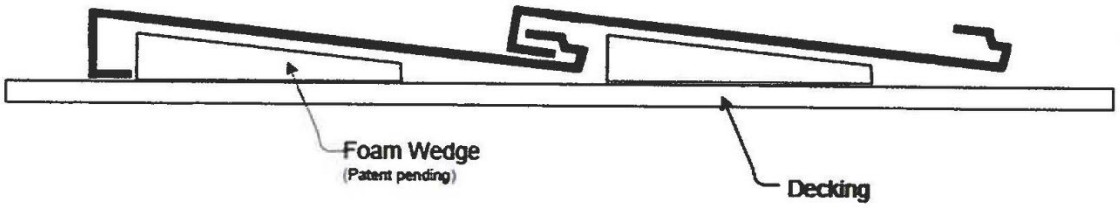

FIG. 1:Panel Overlap