

Product Evaluation

RC226 | 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-226

Effective Date: April 1, 2022

Re-evaluation Date: April 2026

Product Name: Unified Steel Stone Coated Roofing Installed Over a Plywood Deck

Manufacturer: Westlake Royal Roofing LLC
2801 Post Oak
Suite 600
Houston, TX 77056
(800) 669-8453

General Description:

The Unified Steel Stone Coated Roofing are roll-formed from structural-quality 26-gauge sheet metal complying with ASTM 792-93, Grade 33, with an AZ50 aluminum-zinc alloy coating. The metal shingles are coated with a baked-on primer on both sides. On the exposed surface, crushed stone chips are embedded in an acrylic resin adhesive on the product. The stone surface is finished with a clear acrylic over-glaze. The shingles are installed directly to the roof deck. The product dimensions are specified in Table 1.

Table 1. GRANITE-RIDGE Steel Shingles

Profile	Overall Product Length	Install Coverage
GRANITE-RIDGE Shingle	46-1/16" x 15-5/8"	44" x 13-11/16"

Limitations:

Design Wind Pressure: -105 psf

Roof Slope: Do not install the product on roof slopes less 3:12.

Roof Deck: Minimum nominal 15/32" thick plywood sheathing.

Roof Framing: Rafters or trusses must not exceed 24" on center.

Roof Deck Attachment: The roof deck must be secured to the roof framing to resist the required wind uplift design pressures.

Installation over an Existing Roof Covering: Not permitted.

Installation:

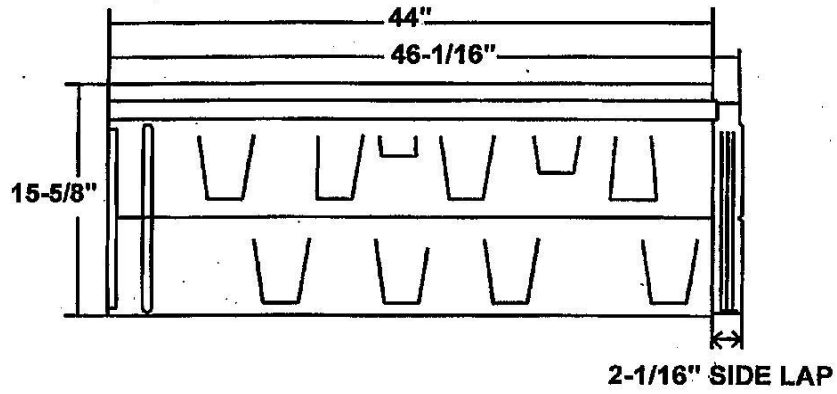
Underlayment: A minimum of one layer of No. 30 (Type II) or two layers of No. 15 (Type I) of asphalt felt must be used. The underlayment used must comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The felt must be installed with minimum 6" side laps and minimum 2" end laps. The underlayment must be applied with corrosion-resistant fasteners in accordance with manufacturer's installation instructions. Fasteners must be applied along the overlaps not farther apart than 36" on center.

Shingles: The steel shingles must be installed starting at the eaves. A starter strip is installed at eaves. Full panel bottom edge is interlocked into the starter strip. The panel's side laps must be overlapped from left to right. Each panel is fastened to the roof deck with a minimum of seven (7) No. 9 x 1-1/2" long corrosion resistant HWH wood screws located 2" from each end and spaced 7" on center between the edge fasteners. The fasteners must be of sufficient length to penetrate into and completely through the roof deck. Refer to Figure 1 for installation details.

All successive courses of panels are attached by interlocking the bottom panel edge to the fold at top edge of preceding panel and fastening through the nailing apron.

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.

DETAIL DRAWING:



FASTENING PATTERN SEVEN SCREWS PER PANEL

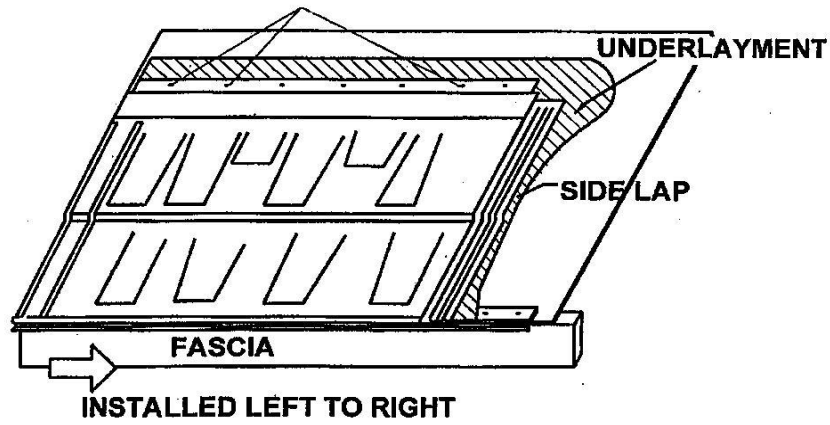


Figure 1. Installation Details