

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION RC-164

Effective January 1, 2013
Revised June 1, 2014

*The following product has been evaluated to withstand the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **January 2017**.*

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.

DaVinci Shake, Polymer-Composite Synthetic Roofing Shakes, manufactured by

DaVinci Roofscapes, LLC
13890 W. 101st Street
Lenexa, KS 66215
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are acceptable in designated catastrophe zones along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

DaVinci Roofscapes' DaVinci Shake roofing shakes are made from polymeric resins and simulate the look of natural wood shakes. The DaVinci Shake shingles are 22 inches long and tapered from 1/4" at the tip to 5/8" at the exposed bottom of the shingle. The shakes are suitable for installation with an exposure of 9 or 10 inches. The available widths are 4 inches, 6 inches, 7 inches, 8 inches, and 9 inches, which may be used together to create the appearance of a random sized natural shake roof.

LIMITATIONS

Design Pressure: -93.5 psf

Underlayment: Underlayment is required prior to the application of DaVinci Shake shingles. The underlayment shall comply with the underlayment requirements specified in the IRC and the IBC. The DaVinci Shake shall have an exposure of between 9 inches and 10 inches for straight courses and 9 inches for staggered courses.

Roof Slope: DaVinci Shake shingles are for application to roof decks with slopes of 2:12 and greater.

INSTALLATION INSTRUCTIONS

Roof Deck: Minimum 1 $\frac{5}{32}$ " thick plywood, minimum $\frac{7}{16}$ " oriented strand board (OSB), 1" nominal thickness tongue and groove wood planks or 1" nominal thickness wood decking.

Underlayment: A minimum of one layer of ASTM D226 No. 30 un-perforated asphalt saturated felt with ends weather lapped 4 inches minimum is required for roof slopes greater than 4 in 12. For roof slopes between 2 in 12 and 4 in 12, the underlayment shall consist of one of the following systems:

- Two layers of ASTM D226 No. 30 un-perforated asphalt saturated felt or equivalent.
- One layer of ASTM D226 No. 30 un-perforated asphalt saturated felt followed by one layer of an approved ASTM D249 mineral surfaced roll roofing.
- One layer of an ASTM D1970 self-adhering underlayment.

Fasteners: Attach each shake to the wood deck with two nails using a hammer or pneumatic nail gun. The nails shall be placed at the locations indicated on the shingles. Nails shall be minimum 12 gauge ring shank, either copper, stainless steel, or hot-dipped galvanized with a 3/8" flat head and 1-3/4" length. Ensure that the head of the nail is flush with the shake surface to avoid creating craters. At valleys, do not nail shingles within 5 inches of the valley center line.

Note: The manufacturer's installation instructions shall be on the job site during the installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.