

# TEXAS DEPARTMENT OF INSURANCE

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**PRODUCT EVALUATION**  
RC-370

Effective February 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 **February 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.*

**Bellaforté Shake, Polymer-Composite Synthetic Roofing Shakes**, manufactured by

**DaVinci Roofscapes, LLC**  
**13890 W. 101<sup>st</sup> Street**  
**Lenexa, KS 66215**  
**Telephone: (800) 328-4624**  
**Fax: (913) 599-0065**

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' Bellaforté Shake roofing shakes are made from polymeric resins and simulate the look of natural wood shakes. The Bellaforté Shake shingles are 16.25 inches long and 12.75 inches wide. The shakes are suitable for installation with an exposure of 12 inches. There are eight available shingle designs, which may be used together to create the appearance of a random sized natural shake roof.

## LIMITATIONS

**Underlayment:** Underlayment is required prior to the application of Bellaforté Shake shingles. The underlayment shall comply with the underlayment requirements specified in the IRC and the IBC. The Bellaforté Shake shall have an exposure of 12 inches.

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

## INSTALLATION INSTRUCTIONS

### Assembly No. 1

**Design Pressure:** -80.0 psf

**Roof Deck:** Minimum  $\frac{19}{32}$ " thick plywood, 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 (1) 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 five nails using a hammer or pneumatic nail gun. The nails shall be placed at the locations indicated on the shingles. Nails shall be minimum 11 gauge ring shank, either copper, stainless steel, or hot-dipped galvanized with a minimum 3/8" flat head and minimum 1 3/4" length. Ensure that the head of the nail is flush with the shake surface to avoid creating craters.

## Assembly No. 2

**Design Pressure:** -75.0 psf

**Roof Deck:** Minimum 1 5/32" thick plywood, 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 five nails using a hammer or pneumatic nail gun. The nails shall be placed at the locations indicated on the shingles. Nails shall be minimum 11 gauge ring shank, either copper, stainless steel, or hot-dipped galvanized with a minimum 3/8" flat head and minimum 1 1/2" length. Ensure that the head of the nail is flush with the shake surface to avoid creating craters.

**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.