

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION

RC-166

Effective 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 **June 2018**.*

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 Slate and **Bellafortè Slate** manufactured by

DaVinci Roofscapes, LLC
13890 W. 101st Street
Lenexa, Kansas 66215
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are acceptable roof shingles 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 Slate

DaVinci Roofscapes' DaVinci Slate roofing shingles are manufactured from polymeric resins and simulate the look of natural slate. DaVinci Slate shingles are 18" long and tapered from $\frac{1}{8}$ " at the tip to $\frac{1}{2}$ " at the exposed bottom of the shingle and are suitable for installation with a maximum exposure of 6, 7 or 7 $\frac{1}{2}$ inches. The available widths are 6, 7, 9, 10 and 12 inches, which may be used together to create the appearance of random sized natural slate. A 4" wide shingle is also available for use on turrets and domes.

Bellafortè Slate

DaVinci Roofscapes' Bellafortè Slate roofing shingles are manufactured from polymeric resins and simulate the look of natural slate. Bellafortè Slate is 15 $\frac{1}{2}$ " long by 12" wide and tapered from $\frac{3}{8}$ " at the tip to $\frac{1}{2}$ " at the exposed bottom.

LIMITATIONS

Design Wind Pressures: Design wind pressure limitations are specified in Table 1.

Table 1

Product	Design Pressure Rating
DaVinci Slate	-118.5 psf
Bellafortè Slate	-121.0 psf

Roof Deck: Minimum nominal $1\frac{5}{32}$ " thick plywood sheathing.

Roof Deck Attachment: The roof deck shall be attached to roof framing to resist the required wind uplift pressures of either the International Residential Code or the International Building Code.

Installation Over an Existing Roof Covering: Installation over an existing roof covering is not permitted. All previous roofing materials shall be removed. The existing roof deck shall be minimum nominal $1\frac{5}{32}$ inch plywood sheathing. Note: Inspection of the existing roof deck shall be made before installing the slate shingles. The condition of the existing roof deck shall be acceptable to receive the slate shingles before the slate shingle installation can proceed.

Roof Slope:

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

Bellafortè Slate: Bellafortè Slate shingles are for application to roof decks with slopes of 4:12 and greater.

INSTALLATION INSTRUCTIONS

Roof Deck: Minimum nominal $1\frac{5}{32}$ " thick plywood sheathing.

Underlayment: A minimum of one layer of No. 30 (Type II) asphalt felt shall be used. The underlayment used shall comply with one or more of the following: ASTM D 226, ASTM D 4869, or ASTM D 1970. The felt shall be installed with 2 inch end laps. The underlayment shall be applied with corrosion-resistant fasteners in accordance with the manufacturer's installation instructions. Fasteners shall be applied along the overlaps not farther apart the 36 inches on center. In all valleys, ice and water shield shall be installed.

Attachment of the Shingles to the Roof Deck:

DaVinci Slate: Attach each shingle to the wood roof deck with minimum 12 gauge ring shank nails with a $\frac{3}{8}$ " flat head and minimum $1\frac{1}{2}$ " length. The fasteners shall be either copper, stainless steel, or hot-dipped galvanized. Two fasteners are required per shingle. The fasteners shall be placed at the locations indicated on the shingles. Ensure that the head of the fastener is flush with the shingle surface to avoid creating craters. At valleys, do not secure shingles within 5 inches of the valley center line.

Bellafortè Slate: Attach each shingle to the wood roof deck with minimum No. 10 x 2" pancake head screws. The fasteners shall be either copper, stainless steel, or hot-dipped galvanized. Three fasteners are required per shingle. The fasteners shall be placed at the two locations indicated on the head of the shingle and one at the side tab of the shingle. Ensure that the head of the fastener is flush with the shingle surface to avoid creating craters.

Exposure:

DaVinci Slate: DaVinci Slate shall have an exposure of between 6" and 7 ½" for straight courses and between 6" and 7" for staggered courses.

Bellafortè Slate: Bellafortè Slate shall have a maximum exposure of 12" with straight courses.

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.