

Product Evaluation

RC166 | 0622

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-166

Effective Date: June 1, 2022

Re-evaluation Date: June 2026

Product Name: DaVinci Slate and Bellafortè Slate Installed Over a Plywood Roof Deck

Manufacturer: Westlake DaVinci Roofscapes, LLC
13890 W. 101st St.
Lenexa, KS 66215
(800) 328-4624

General Description:

DaVinci Slate

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

Bellafortè Slate

Bellafortè Slate roofing slates are manufactured from polymeric resins and simulate the look of natural slate. Bellafortè Slate's are 15-1/2" long by 12" wide and tapered from 3/8" at the tip to 1/2" at the exposed bottom.

This evaluation report is for roofing slates that are secured directly to a minimum 15/32" plywood deck. Thicker plywood may be used; however, the design pressure rating for the roofing slate will be as specified in this evaluation report.

Limitations:

Design Wind Pressures: The design wind pressure uplift resistance is specified in Table 1.

Roof Framing: Roof framing (rafters or trusses) must not exceed 24" on center.

Installation Over an Existing Roof Covering: Not permitted.

Roof Slope:

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

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

Table 1.

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

Installation:

Roof Deck: Minimum 15/32" plywood deck.

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

Underlayment: A minimum of one layer of No. 30 (Type II) 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 2" side laps and minimum 2" end laps. The underlayment must be applied with corrosion resistant fasteners in accordance with manufacturer's installation instructions and the IRC and the IBC.

Attachment of Slate to Roof Deck:

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

Bellafortè Slate: Attach each slate to the wood roof deck with minimum No. 10 x 2" pancake head screws. The fasteners must be either copper, stainless steel, or hot-dipped galvanized. Three

(3) fasteners are required per slate. The fasteners must be placed at the two locations indicated on the head of the slate and one at the side tab of the slate. Ensure that the head of the fastener is flush with the slate surface to avoid creating craters.

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.