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## **Product Evaluation**

RC703 | 1022

**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-703 **Effective Date:** October 1, 2022

**Re-evaluation Date:** October 2026

Product Name: Brava Roof Tile Cedar Shake Roof Tiles Installed Over a Plywood or Solid Board

Roof Deck

Manufacturer: Brava Roof Tile

915 E Tyler St.

Washington, IA 52353

(417) 214-4426

## **General Description:**

The Brava Roof Tile Cedar Shake roof tiles are compression molded from polymer-based materials. The roof tiles are available in nominal widths of 5", 7", and 12". The roof tiles are nominally 24" in length. The roof tiles are installed with a 10" exposure.

This evaluation report is for Cedar Shake roof tiles that are secured directly to either a minimum 15/32" plywood deck or a nominal 1" thick solid board deck. A thicker plywood or solid board deck may be used; however, the design pressure rating for the roof tiles will be as specified in this evaluation report.

## **Limitations:**

**Design Wind Pressures:** The design wind pressure uplift resistance is -93.5 psf.

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

**Installation Over an Existing Roof Covering:** Not permitted.

**Roof Slope:** The Cedar Shake roof tiles may be installed on roofs with a roof slope as low as 4:12 and as high as 20:12.

## Installation:

**Roof Deck:** Minimum 15/32" plywood deck or nominal 1" thick Douglas Fir-Larch tongue and groove wood boards.

**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 underlayment 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 the manufacturer's installation instructions and either the IRC or the IBC.

**Attachment of Cedar Shakes to Roof Deck:** Follow the manufacturer's installation instructions for the installation of the roof tiles. Attach each Cedar Shake roof tile to the wood roof deck with two (2) No. 10 x 2" FH screws per roof tile located approximately 1-1/2" from each end at the designated fastener locations on the roof tile. The fasteners must be long enough to penetrate a minimum of 1/4" below the roof deck sheathing or minimum 3/4" into the solid board deck.

**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.