

WOLTERS ENGINEERING

ENGINEERING, DRAFTING, CONSULTING

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PRODUCT EVALUATION

PRODUCT: BRAVA SHAKE COMPOSITE ROOF SHINGLE
(Over 1/2" CDX Plywood)

MANUFACTURER: BRAVA ROOF TILE
915 E. TYLER STREET
WASHINGTON, IA 52353

To all concerned,

The Brava Shake Composite Roof Shingle, manufactured by Brava Roof Tile, is a non-structural resin-based composite roof shingle, mechanically fastened to a 1/2" CDX plywood deck (min), that meets the requirements of Sections 1507.3 and 1518.8 of the 7th Edition (2020) Florida Building Code. The shingle has been tested per TAS 100, TAS 110, and TAS 125, with results shown in test reports TMIC-005-02-01 and TMIC-006-02-01 by PRI Construction Materials Technologies, ETC-07-718-20130.0 by ETC Laboratories, 01.131537.01.301a by Southwest Research Institute, and L9576.01-450-18 and L9576.05-450-18 by Intertek B&C.

Technical Documentation:

1. Drawing "BSCS-HZ" dated 4/19/21, signed and sealed by Scott Wolters, PE.
2. Test Reports listed above, signed and sealed by Charles Thomas PE or Duc T. Nguyen (PRI), Vinu Abraham PE (ATI), Barry Badders PE (SRI), or Joseph Doldan PE (ETC).
3. Supplemental Calculations to support "BSCS-HZ", signed and sealed by Scott Wolters, PE.

I have reviewed this submittal per the requirements of FAC Product Approval Rule Chapter 61G20-3.005 (4). Based on the limitations listed below and those provided in the documents above, this product meets all the requirements of the 7th Edition (2020) Florida Building Code generally, and chapter 15 specifically, including the HVHZ provisions.

Limitations: This roof shingle is approved for use inside and outside of the HVHZ.

<u>Overall Limitations:</u>	Overall Shingle Dimensions:	22 1/4" (long) x 5", 7", or 12" (wide)
	Overall Shingle Thickness:	5/8" max, tapering to 9/32".
	Exposed Shingle Length:	10"
	Eave Starter Dimensions:	16" (long) x 14" (wide)
	Eave Starter Thickness:	9/16" max, tapering to 1/8"
	Max. Design Pressure:	-126 psf

Shingle Installation: Eave Starter Fasteners: (2) #10 x 2" FH Corrosion
Resistant Self-Drilling Screw
(Eave starter is installed flush with drip edge in bed of urethane sealant)

Shingle Fasteners: (2) #10 x 2" FH Corrosion
Resistant Self-Drilling Screw
(Fasteners Penetrate Tiles thru Reinforced Nail Bosses)

Install eave starter, composite shingles, and accessories in compliance with the installation instructions and details from the manufacturer's current installation manual. Install flashings, penetrations, valleys, and other details per RAS 133 (Valleys must also meet RAS 118).

Fire Barrier: Where required by code, install an approved fire barrier. Refer to a current fire directory listing for fire ratings of this roofing system assembly as well as the location of the fire barrier within the assembly. (See note #2 below)

Underlayment: Minimum ASTM D 226 Type II with 4" overlaps and 6" end-laps, anchored with 12 Ga. x 1 1/4" galvanized roof nails with 32 Ga. Tin caps spaced 6" O.C. in rows at the perimeter, at overlaps, and two intermediate rows staggered and spaced 12" O.C.
(or)
Any underlayment with a valid FLPA or Miami-Dade NOA

Min. Deck Requirements: 1/2" CDX Plywood (15/32" min.) over 2x supports spaced 24" max O.C.

Deck Attachment: #8d x 2" Galvanized. Ring-Shank Roofing Nail.

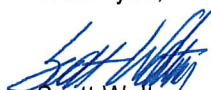
Field Installation: 12" max O.C.
Perimeter Installation: 6" max O.C.

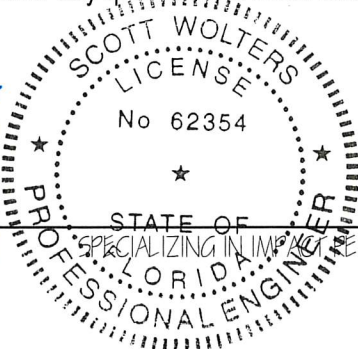
Other Limitations:

1. Roof slope must meet requirements of FBC Section 1507.3.2.
2. Fire classification is not a part of this evaluation. Refer to a current Approved Roofing Materials Directory for fire ratings of this product.
3. Design of substrate is by others and is not a part of this evaluation.
4. Rational analysis or extrapolation of pressures or fastener spacings is not permitted.

If you have any questions or need more information concerning this approval please contact me.

Thank you,


Scott Wolters
FL PE# 62354
APR 19 2021



SPECIALIZING IN IMPACT RESISTANT CURTAIN WALLS, STOREFRONTS, & WINDOWS