

ICC-ES Evaluation Report

ESR-4756

Issued November 2025

This report also contains:

- [City of LA Supplement](#)
- [CA Supplement w/ Exterior Wildlife Exposure](#)
- [FL Supplement](#)

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DIVISION: 07 00 00— THERMAL AND MOISTURE PROTECTION Section: 07 32 26— Plastic Roof Tiles	REPORT HOLDER: WILDHAWK INVESTMENTS LLC DBA BRAVA ROOF TILE 	EVALUATION SUBJECT: BRAVA ONE CEDAR SHAKE ROOFING TILE AND BRAVA ONE SLATE ROOFING TILE	
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1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2021 and 2018 [International Building Code® \(IBC\)](#)
- 2021 and 2018 [International Residential Code® \(IRC\)](#)

Properties evaluated:

- Weather resistance
- Fire classification
- Wind resistance

2.0 USES

The Brava One Cedar Shake Roofing Tile and Brava One Slate Roofing Tile are used as roof covering materials and are classified as a Class A or Class C roof covering when installed in accordance with [Table 1](#) of this report.

3.0 DESCRIPTION

3.1 General:

The Brava One Cedar Shake Roofing Tile and Brava One Slate Roofing Tile are polymer-based roof tiles designed to provide the look of natural shake or slate, respectively. The tiles are manufactured with a proprietary formulation of polymers and other additives.

3.2 Brava One Cedar Shake Roofing Tiles:

Brava One Cedar Shake Roofing Tile are available in various colors in 5, 7, and 12 inch (127, 178, and 305 mm) widths and 22 inches (559 mm) in length with a tolerance of ± 0.375 inches (± 9.5 mm). When installed at the maximum exposure of 10 inches (254 mm), the installed weight is approximately 304 pounds per 100 ft² (1,484 kg/m²). Accessory tiles, used as starter tiles, rake/valley solid tiles and hip/ridge tiles, are made of the same material. See [Figure 1](#).

3.3 Brava One Slate Roofing Tiles:

Brava One Slate Roofing Tile are available in various colors in 6, 9, and 12 inch (152, 229 and 305 mm) widths and 22 inches (559 mm) in length with a tolerance of ± 0.375 inches (± 9.5 mm). When installed at the maximum exposure of 10 inches (254 mm), the installed weight is 310 pounds per 100 ft² (1,513 kg/m²). Accessory tiles, used as starter tiles, rake/valley solid tiles and hip/ridge tiles, are made of the same material. See [Figure 2](#).

3.4 Underlayment:

Underlayment must be a minimum of one layer of ASTM D226 Type II (No. 30) asphalt-saturated organic felt, unless otherwise noted in [Table 1](#) of this report. Where an ice barrier is required, the membrane must be as noted in the second paragraph of Section 4.2 of this report.

3.5 Flashing:

Flashing must be corrosion-resistant metal with a thickness of not less than 0.019 inch (0.483 mm). See Section 4.5 of this report and the manufacturer's published installation instructions for valley flashing installation details.

3.6 Fasteners:

Fasteners used to attach each Brava One Cedar Shake Roofing Tile and Brava One Slate Roofing Tile through the underlayment into the wood sheathing must be two minimum 0.120-inch-diameter (3 mm) by minimum 1 $\frac{3}{4}$ -inch-long (44.5 mm) corrosion-resistant ring shank roofing nails or two No. 8 by 2-inch-long (51 mm) course thread, corrosion-resistant, wood screws, as described in [Table 2](#). The nails and screws must have sufficient length to penetrate the sheathing $\frac{3}{4}$ inch (19 mm) or through the sheathing, whichever is less.

4.0 DESIGN AND INSTALLATION

4.1 General:

The roofing tiles must be installed in accordance with this report, the applicable code and the manufacturer's published installation instructions. The manufacturer's installation instructions must be available at the jobsite at all times during installation.

Prior to application of the underlayment, the deck surface must be free of frost, dust and dirt, loose fasteners, and other protrusions. Damaged sheathing must be replaced.

The tiles and underlayment must be installed over a roof deck consisting of closely fitting solid sheathing at a minimum slope of 4:12 (33 percent slope). Solid sheathing must be minimum $\frac{15}{32}$ -inch-thick (11.9 mm) exterior-grade plywood, $\frac{7}{16}$ -inch-thick (11.1 mm) oriented strand board (OSB), or nominally 1-inch-thick (25.4 mm) lumber. The sheathing must be structurally adequate and fastened to resist the wind loads as specified by IBC Section 1609, or IRC Section R301.2, for components and cladding.

4.2 Underlayment:

Underlayment as described in Section 3.4 must be installed in accordance with IBC Section 1507.7.3 or IRC Section R905.6.3, as applicable. The underlayment must be installed parallel to the roof eave with 6-inch (152 mm) laps at vertical ends and 6-inch (152.4 mm) laps at horizontal ends. The underlayment is fastened as necessary to hold in place in accordance with the applicable code.

When used, Eco Chief Products Solarhide™-SRW Roofing Underlayment must be installed in accordance with Sections 4.1 and 4.2 of [ESR-4035](#). When used, Environmentally Safe Products, Inc. ESP Low-E Thermo-Sheet 4LMPX must be installed in accordance with Section 4.1 of [ESR-3652](#).

In areas where the average daily temperature in January is 25°F (-4°C) or less, or where there is a possibility of ice forming along the eaves and causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together, or a self-adhering underlayment complying with ASTM D1970 or currently recognized in an ICC-ES evaluation report as complying with the ICC-ES Acceptance Criteria for Self-adhered Underlayments for Use as Ice Barriers (AC48), must extend from the eave's edge to a point 24 inches (610 mm) inside the exterior wall line of the building.

4.3 Roofing Tiles:

4.3.1 Brava One Cedar Shake: The course of Brava One Cedar Shake tiles at the eave are installed on top of starter tiles and must extend approximately ½ inch (12.7 mm) over the eaves and 1 inch (25.4 mm) over the rakes. If used, solid tiles are installed at rakes and valleys. The Brava One Cedar Shake tiles must be fastened to the sheathing using two minimum 0.120-inch-diameter (3 mm) by minimum 1¾-inch-long (44.5 mm) corrosion-resistant ring shank roofing nails or two No. 8 by 2-inch-long (51 mm) course thread, corrosion-resistant, wood screws in accordance with the manufacturer's published installation instructions. The screws must have sufficient length to penetrate the sheathing ¾ inch (19 mm) or through the sheathing, whichever is less. See [Table 2](#) for additional fastening details.

4.3.2 Brava One Slate: The course of Brava One Slate tiles at the eave are installed on top of starter tiles and must extend approximately ½ inch (12.7 mm) over the eaves and 1 inch (25.4 mm) over the rakes. If used, solid tiles are installed at rakes and valleys. The Brava One Slate tiles must be fastened to the sheathing using two minimum 0.120-inch-diameter (3 mm) by minimum 1¾-inch-long (44.5 mm) corrosion-resistant ring shank roofing nails or two No. 8 by 2-inch-long (51 mm) course thread, corrosion-resistant, wood screws in accordance with the manufacturer's published installation instructions. The screws must have sufficient length to penetrate the sheathing ¾ inch (19 mm) or through the sheathing, whichever is less. See [Table 2](#) for additional fastening details.

4.3.3 Hips and Ridges: The hip and ridge areas must be covered with flashing constructed of materials as specified in Section 3.5. Hip tiles and ridge tiles must be attached with two minimum 0.120-inch-diameter (3 mm) by minimum 1¾-inch-long (44.5 mm) corrosion-resistant ring shank roofing nails or two No. 8 by 2-inch-long (51 mm) course thread, corrosion-resistant, wood screws as described in the manufacturer's published installation instructions. The screws must have sufficient length to penetrate the sheathing ¾ inch (19 mm) or through the sheathing, whichever is less.

4.4 Valleys:

Valleys must be flashed in accordance with 2021 and 2018 IBC Section 1507.7.7 or IRC Section R905.6.6, as applicable, and the manufacturer's published installation instructions, with flashing described in Section 3.5.

4.5 Fire Classification:

Brava One Cedar Shake Roofing Tiles and Brava One Slate Roofing Tiles, when installed as a system as described in [Table 1](#), comply with IBC Section 1505.4 and IRC Section R902.1 as a classified Class A or Class C roof covering.

4.6 Wind Resistance:

4.6.1 Installation with screws: When installed with two No. 8 by 2 inch-long, course thread, corrosion-resistant wood screws per tile, the allowable wind uplift pressures for the roof tiles described in this report are as specified in [Table 2](#). The allowable design wind uplift pressures must be determined in accordance with the requirements of IBC Chapter 16 or IRC Section R301.2.1, as applicable, by a registered design professional and must not exceed the allowable wind uplift pressures specified in [Table 2](#).

4.6.2 Installation with nails under the 2021 and 2018 IBC: When installed in accordance with this report, with two minimum 0.120-inch-diameter by minimum 1¾-inch-long, corrosion-resistant, ring shank roofing nails, the tiles are limited to installation in Exposure B areas where the maximum basic design wind speed is 130 mph (209 km/h) on structures with a maximum roof height of 40 feet (12.2 m) or less.

4.6.3 Installation with nails under the 2021 and 2018 IRC: When installed in accordance with this report, with two minimum 0.120-inch-diameter by minimum 1¾-inch-long, corrosion-resistant, ring shank roofing nails, the tiles are limited to installation in Exposure B areas where the maximum ultimate design wind speed is 130 mph (209 km/h) on structures with a maximum roof height of 40 feet (12.2 m) or less.

4.7 Reroofing:

Prior to application of the tiles, the existing roof covering and underlayment must be completely removed. Any damaged sheathing must be replaced. The installation of the tiles must then proceed as described in Sections 4.1 through 4.4. The roof classification is as noted in Section 4.5 and [Table 1](#).

5.0 CONDITIONS OF USE:

The Brava One Cedar Shake Roofing Tiles and Brava One Slate Roofing Tiles described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with the manufacturer's published installation instructions, this report and the applicable code. In the event of a conflict between this report and the manufacturer's published installation instructions, this report governs.
- 5.2 The roof tiles are manufactured in Washington, Iowa, under a quality-control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Special Roofing Systems \(AC07\)](#), dated February 2014 (editorially revised January 2021).

7.0 IDENTIFICATION

- 7.1 The ICC-ES mark of conformity, electronic labeling, or the evaluation report number (ICC-ES ESR-4756) along with the name, registered trademark, or registered logo of the report holder, and month / year of production, must be included in the product label.
- 7.2 In addition, each pallet of roof tile is labeled with the report holder's company name or Brava logo, city and state of manufacture, product name (Cedar Shake or Slate), and ICC-ES evaluation report number (ICC-ES ESR-4756). Alternatively, each roof tile is embossed with the report holder's Brava logo, city and state of manufacture, product name (Cedar Shake or Slate), month and year of production, and ICC-ES evaluation report number (ICC-ES ESR-4756).
- 7.3 The report holder's contact information is the following:

WILDHAWK INVESTMENTS LLC DBA BRAVA ROOF TILE
915 E. TYLER ST.
WASHINGTON, IOWA 52353
(844) 290-4196
www.bravarooftile.com

TABLE 1—FIRE CLASSIFICATION

SYSTEM NO.	ROOF CLASS	ROOF DECK	MIN. SLOPE	UNDERLAYMENT ^{1, 2, 3}	BRAVA ONE	
					Roof Tile	Maximum Exposure (in.)
1	A	Min. $15/32$ -inch-thick plywood	4:12	One layer of Eco Chief Products Solarhide™-SRW Roofing Underlayment (ESR-4035)	Cedar Shake	10
2	A	Min. $15/32$ -inch-thick plywood	4:12	One layer of Eco Chief Products Solarhide™-SRW Roofing Underlayment (ESR-4035)	Slate	10
3	A	Min. $15/32$ -inch-thick plywood	4:12	One layer of Environmentally Safe Products, Inc. ESP Low-E Therma-Sheet 4LMPX (ESR-3652)	Cedar Shake	10
4	A	Min. $15/32$ -inch-thick plywood	4:12	One layer of Environmentally Safe Products, Inc. ESP Low-E Therma-Sheet 4LMPX (ESR-3652)	Slate	10
5	C	Min. $15/32$ -inch-thick plywood	4:12	One layer ASTM D226 Type II (No. 30) asphalt-saturated organic felt	Cedar Shake	10
6	C	Min. $15/32$ -inch-thick plywood	4:12	One layer ASTM D226 Type II (No. 30) asphalt-saturated organic felt	Slate	10

For SI: 1-inch = 25.4 mm; 1ft = 305 mm

¹When used, Eco Chief Products Solarhide™-SRW Roofing Underlayment must be installed in accordance with Sections 4.1 and 4.2 of [ESR-4035](#).

²When used, Environmentally Safe Products, Inc. ESP Low-E Therma-Sheet 4LMPX must be installed in accordance with Section 4.1 of [ESR-3652](#).

³When used, ASTM D226 Type II (No. 30) underlayment must be installed in accordance with Section 4.2 of this report.

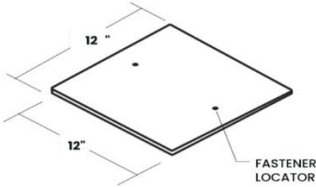
TABLE 2—ALLOWABLE WIND UPLIFT PRESSURE VALUES

SYSTEM NO.	ROOF DECK ³	BRAVA ROOF TILE			ALLOWABLE UPLIFT PRESSURE ¹ (psf)
		Roof Tile	Maximum Exposure (in.)	Tile Fastening	
1	Min. $15/32$ -inch-thick plywood	Cedar Shake	10	Two per tile, No. 8 by 2 inch-long, course thread, corrosion-resistant wood screws	196
2	Min. $15/32$ -inch-thick plywood	Slate	10	Two per tile, No. 8 by 2 inch-long, course thread, corrosion-resistant wood screws	196

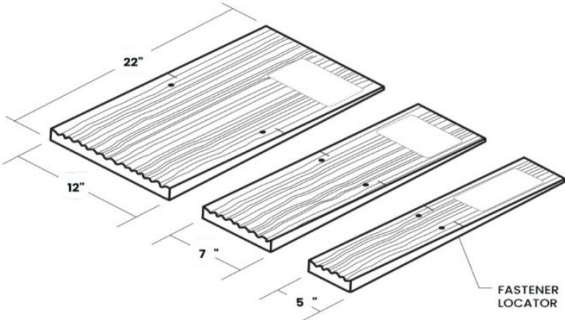
For SI: 1-inch = 25.4 mm; 1 ft = 305 mm; 1 psf = 47.88 Pa

¹Allowable pressure (psf) represents tested assembly ultimate uplift pressure divided by safety factor of 2.

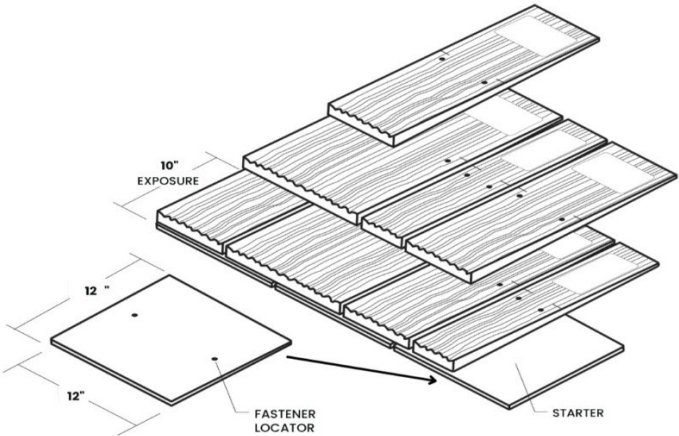
Shake & Slate Starter



Cedar Shake



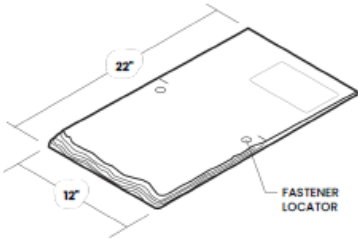
Layout & Exposure



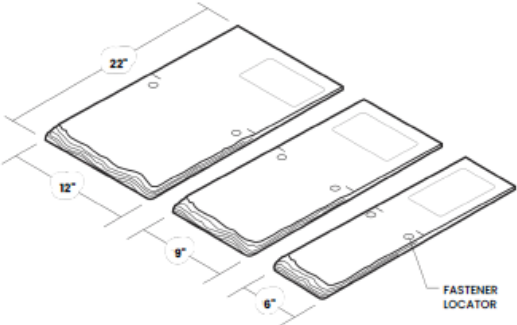
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FIGURE 1—BRAVA ONE CEDAR SHAKE ROOFING TILE

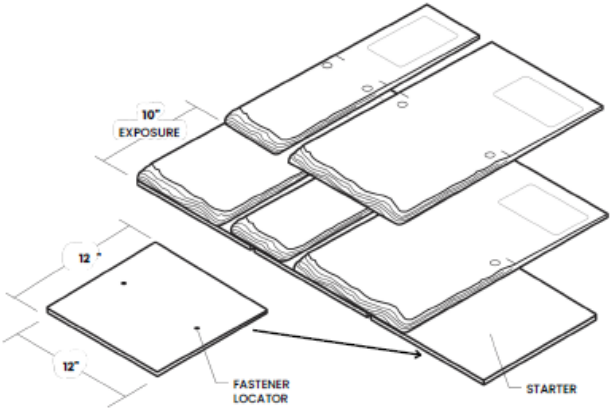
Standard Width Slate



Multi-Width Slate



Layout & Exposure



20250616

FIGURE 2—BRAVA ONE SLATE ROOFING TILE

ICC-ES Evaluation Report

ESR-4756 City of LA Supplement

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 32 26—Plastic Roof Tiles

REPORT HOLDER:

WILDHAWK INVESTMENTS LLC DBA BRAVA ROOF TILE

EVALUATION SUBJECT:

BRAVA ONE CEDAR SHAKE AND BRAVA ONE SLATE ROOFING TILES

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in ICC-ES evaluation report [ESR-4756](#), have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

Applicable code editions:

- 2023 *City of Los Angeles Building Code* ([LABC](#))
- 2023 *City of Los Angeles Residential Code* ([LARC](#))

2.0 CONCLUSIONS

The Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in Sections 2.0 through 7.0 of the evaluation report [ESR-4756](#), comply with the LABC Chapter 15, and the LARC, and are subject to the conditions of use described in this supplement.

3.0 CONDITIONS OF USE

The Brava One Cedar Shake and Brava One Slate Roofing Tiles described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-4756](#).
- The design, installation, conditions of use and identification of the Brava One Cedar Shake and Brava One Slate Roofing Tiles are in accordance with the 2021 *International Building Code*® (IBC) and 2021 *International Residential Code*® (IRC) provisions, as applicable, noted in the evaluation report [ESR-4756](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 16 and 17, as applicable.

This supplement expires concurrently with the evaluation report, issued November 2025.

ICC-ES Evaluation Report

ESR-4756 CA Supplement w/Exterior Wildlife Exposure

Issued November 2025

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REPORT HOLDER:

WILDHAWK INVESTMENTS LLC DBA BRAVA ROOF TILE

EVALUATION SUBJECT:

BRAVA ONE CEDAR SHAKE AND BRAVA ONE SLATE ROOFING TILES

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in ICC-ES evaluation report [ESR-4756](#), have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2022 California Building Code (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2022 California Residential Code (CRC)

2.0 CONCLUSIONS

2.1 CBC:

The Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in Sections 2.0 through 7.0 of the evaluation report [ESR-4756](#), comply with CBC Chapter 15, provided the design and installation are in accordance with the 2021 *International Building Code*® (IBC) provisions noted in the evaluation and the additional requirements of CBC Section 1505.1.3 for a Class A or Class C roof covering.

When installed as a Class A roof covering in accordance with CBC Section 705A, the products have been evaluated under CBC Chapter 7A and CBC Section 1505.1 for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in Sections 2.0 through 7.0 of the evaluation report [ESR-4756](#), comply with CRC Chapter 9, provided the design and installation are in accordance with the 2021 *International Residential Code*® (IRC) provisions noted in the evaluation report and the additional requirements of CRC Section R902.1 for a Class A or Class C roof covering.

When installed as a Class A roof covering in accordance with CRC Section R337.5, the products have been evaluated under CRC Sections R337.5 and R902.1.3 for use in the exterior design and construction of new buildings located in any Fire Hazard Severity Zone within State Responsibility Areas or any Wildland–Urban Interface Fire Area.

This supplement expires concurrently with the evaluation report, issued November 2025.

ICC-ES Evaluation Report

ESR-4756 FL Supplement

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 32 26—Plastic Roof Tiles

REPORT HOLDER:

WILDHAWK INVESTMENTS LLC DBA BRAVA ROOF TILE

EVALUATION SUBJECT:

BRAVA ONE CEDAR SHAKE AND BRAVA ONE SLATE ROOFING TILES

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in ICC-ES evaluation report [ESR-4756](#), have also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2023 *Florida Building Code—Building*
- 2023 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Brava One Cedar Shake and Brava One Slate Roofing Tiles, described in Sections 2.0 through 7.0 of ICC-ES evaluation report [ESR-4756](#), comply with the *Florida Building Code—Building* and *Florida Building Code—Residential*. The design requirements must be determined in accordance with the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable. The installation requirements noted in ICC-ES evaluation report [ESR-4756](#) for the 2021 *International Building Code*® meet the requirements of the *Florida Building Code—Building* or the *Florida Building Code—Residential*, as applicable, subject to the following conditions:

1. Flashing must be in accordance with Section 1503.2 of the *Florida Building Code—Building* or Sections R903.2 and R905.4.6 of the *Florida Building Code—Residential*, as applicable.
2. Gutters and roof downspouts must be installed in accordance with Section 1503.7 of the *Florida Building Code—Building* or Section R903.4.2 of the *Florida Building Code—Residential*, as applicable.
3. Fasteners must be in accordance with Section 1506.5, 1506.6, or 1506.7, as applicable, of the *Florida Building Code—Building* or Section R904.5 of the *Florida Building Code—Residential*, as applicable.
4. Underlayment and underlayment installation must be in accordance with Section 1507.1.1 of the *Florida Building Code—Building* or Section R905.1.1 of the *Florida Building Code—Residential*, as applicable.

Use of the Brava One Cedar Shake and Brava One Slate Roofing Tiles for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 61G20-3, verification that the report holder's quality assurance program is audited by a quality assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission). Florida Rule 61G20-3 is applicable to products and/or systems which comprise the building envelope and structural frame for compliance with the structural requirements of the Florida Building Code.

This supplement expires concurrently with the evaluation report, issued November 2025.