

**DIVISION: 07 Thermal and Moisture Protection**  
**Section: 07 31 00 Shingles and Shakes**

**REPORT HOLDER:**  
**Fwave LLC**  
**921 S. Burlison Blvd**  
**Burlison, TX 76028**  
**(817) 754-9021**  
[www.f-wave.com](http://www.f-wave.com)

**REPORT SUBJECT:**  
**REVIA Roofing Shingles**

### 1.0 SCOPE OF EVALUATION

**1.1** This Research Report addresses compliance with the following Codes:

- 2015 *International Building Code*® (IBC)
- 2015 *International Residential Code*® (IRC)
- 2017 *Florida Building Code and Florida Building Code - Residential, Excluding HVHZ – High Velocity Hurricane Zones* (see Section 9)

**1.2** *REVIA Roofing Shingles* have been evaluated for the following properties:

- Fire Classification
- Weather Resistance
- Wind Resistance
- Durability
- Impact Resistance

**1.3** *REVIA Roofing Shingles* have been evaluated for the following uses:

- The *REVIA Roofing Shingles* are an alternative to standard asphalt roofing shingles providing a Class A roof covering when installed according to the manufacturer's instructions and this report.

### 2.0 STATEMENT OF COMPLIANCE

*REVIA Roofing Shingles* comply with the Codes listed in Section 1.1, for the properties stated in Section 1.2 and uses stated in Section 1.3, when installed as described in this report, including the Conditions of Use stated in Section 6.

### 3.0 DESCRIPTION

**3.1** *REVIA Roofing Shingles* are a non-asphaltic, granular-free, single-piece product molded from a proprietary blend of synthetic polymer materials to simulate an architectural asphalt shingle.

**3.2** *REVIA Roofing Shingles* are manufactured as a Class A fire-rated roofing shingle with a nominal length of 39-3/8" inches and nominal width of 14 inches.

**3.3** *REVIA Roofing Shingles* are manufactured in various colors.

### 4.0 PERFORMANCE CHARACTERISTICS

**4.1** Fire Classification – *REVIA Roofing Shingles* are classified as a Class A roof covering for combustibles decks in accordance with IBC Section 1505.1 and IRC R902.1 when used in conjunction with an underlayment that complies with ASTM D226, Type II. See Section 5.2.1 for underlayment installation.

**4.2** Wind Resistance – When installed in accordance with this report, *REVIA Roofing Shingles* are classified as Class H in accordance with ASTM D7158 and Class F in accordance with ASTM D3161 for use with design wind speeds in accordance with IBC 1504.1 (Table 1504.1.1) or R905.2 (Table R905.2.4.1).

**4.2.1** *REVIA Roofing Shingles* meet the requirements of TAS-107 as defined in the 2017 Florida Building Code – Residential R905.2.6.1



#### 4.3 Other Performance Characteristics

**4.3.1** Wind and Wind-Driven Rain – *REVIA Roofing Shingles* meet the requirements of TAS 100 for the HVHZ as defined in the 2017 Florida Building Code.

**4.3.2** Impact Resistance - *REVIA Roofing Shingles* are classified as a Class 4 roof covering in accordance with ANSI / FM 4473 and UL 2218.

### 5.0 INSTALLATION

#### 5.1 General:

*REVIA Roofing Shingles* must be installed in accordance with the manufacturer's published installation instructions, the applicable Code, and this Research Report. A copy of the manufacturer's instructions must be available on the jobsite during installation. In the event of a conflict, this report governs.

**5.2** *REVIA Roofing Shingles* must be installed on solid sheathing and a minimum slope of 3:12. Solid sheathing must be a minimum of 15/32-inch thick exterior grade plywood, 7/16-inch thick Oriented Strand Board (OSB), or nominal 1-inch thick lumber. Sheathing must be adequate and fastened to resist the wind loads as specified by IBC Section 1609 or IRC Section R301.2 for components and cladding.

**5.3** Underlayment must be installed in accordance with applicable code requirements. In areas where the average daily temperature in January is 25 °F or less, or where there is a possibility of ice forming along the eaves and causing a backup of water, an ice barrier is required per IBC 1507.2.8.2 or IRC R905.1.2. Acceptable ice barrier consists of at least two layers of underlayment cemented together, or of a self-adhering polymer-modified bitumen sheet. The ice barrier must extend from the eaves edge to a point 24 inches inside the exterior wall line of the building.

**5.4** *REVIA Roofing Shingles* must be installed starting with a row of *REVIA Starter Shingles*. The starter shingles must extend 3/8-inch over the eaves and rakes and must be installed with six (6) fasteners installed per the manufacturer's instructions.

**5.5** *REVIA Roofing Shingles* are installed using a 6-1/2-inch diagonal offset. Shingles are secured to the sheathing using

a minimum four (4) fasteners per shingle, installed between dashed "Nail Between Lines" marked on each shingle. Fasteners must be sufficient length to allow 3/4 inch penetration of the sheathing.

**5.6** Hips, ridges and valleys must be flashed as specified in the manufacturer's published installation instructions.

**5.7** Flashing and edge materials shall meet the minimum requirements of IBC Section 1503.2 and 1507.2.9 or IRC Section R905.2.8.

**5.8** Reroofing requires that existing roof covering and underlayment must be completely removed and damaged sheathing replaced prior to installing *REVIA Roofing Shingles*.

### 6.0 CONDITIONS OF USE

**6.1** *REVIA Roofing Shingle* applications identified in this report are deemed to comply with the intent of the provisions of the referenced building codes subject to the following conditions:

**6.2** Compatibility of the supporting construction materials with all fasteners are subject to approval by the code official.

**6.3** *REVIA Roofing Shingles* are manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

### 7.0 SUPPORTING EVIDENCE

**7.1** Manufacturer's drawings and installation instructions.

**7.2** Reports of fire tests of roof coverings demonstrating compliance with ASTM E108-17 Standard Test Methods for Fire Tests of Roof Coverings. Also see Intertek Listing Report for "Fwave LLC" at [www.bpdirectory.intertek.com](http://www.bpdirectory.intertek.com) (reference Spec ID 44045).

**7.3** Reports of wind-resistance tests of roof coverings demonstrating compliance with ASTM D3161-13, Standard Test Method for Wind-Resistance of Steep Slope Roofing Products (Fan-Induced Method).





**7.4** Reports of wind-resistance tests of roof coverings demonstrating compliance with ASTM D7158 – 11, Standard Test Method for Wind-Resistance of Sealed Asphalt Shingles (Uplift Force / Uplift Resistance Method).

**7.5** Reports of wind & wind-driven rain resistance tests of roof coverings demonstrating compliance with 2017 Florida Building Code (FBC) Testing Application Standards (TAS) TAS-100, Test Procedure for Wind and Wind-Driven Rain Resistance and/or Increased Windspeed Resistance of Soffit Ventilation Strip and Continuous or Intermittent Ventilation System Installed at the Ridge Area, and TAS-107, Test Procedure for Wind-Resistance Testing of Non-Rigid, Discontinuous Roof system Assemblies.

**7.6** Reports of testing in accordance with ICC-ES AC07 including fire classification, weathering and retention of fire-retardant qualities.

**7.7** Reports of testing in accordance with ICC-ES AC438 including fire classification, tear resistance, pliability, fastener pull-through, wind resistance, temperature cycling and wind-driven rain.

**7.8** Reports of impact resistance tests of roofing materials demonstrating compliance with UL 2218 - 10, UL Standard for Safety for Impact Resistance of Prepared Roof Covering Materials and ANSI / FM 4473-11, Test Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls. Also see Intertek Listing Report for “Fwave LLC” at [www.bpdirectory.intertek.com](http://www.bpdirectory.intertek.com) (reference Spec ID 44045).

**7.9** Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.

## 8.0 IDENTIFICATION

The *REVIA Roofing Shingle* is identified with the:

- Name of the report holder (Fwave LLC), address and telephone number, and the product name (*REVIA*);
- Statement “Install on solid sheathing, min slope 3:12”.
- Reference these standards on the label:
- Fire Classification: ASTM E108 Class A
- Wind Resistance: ASTM D3161, Class F; ASTM D7158, Class H

- Impact Resistance: ANSI/FM4473 Class 4; UL 2218, Class 4
- “See CCRR-0283 at <https://bpdirectory.intertek.com>”;
- Intertek Mark (example shown below), including the Code Compliance Research Report number, CCRR-0283.



## 9.0 FLORIDA BUILDING CODE

### 9.1 Scope of Evaluation:

The *REVIA Roofing Shingle* was evaluated for compliance with the 2017 *Florida Building Code*.

### 9.2 Conclusion:

The *REVIA Roofing Shingle* described in Sections 2.0 through 7.0 of this Research Report, comply with the 2017 *Florida Building Code*:

- Use of the *REVIA Roofing Shingle* for compliance with the High-Velocity Hurricane Zone provisions of the 2017 *Florida Building Code* has not been evaluated and is outside the scope of this report.
- Intertek is a quality assurance entity approved by the Florida Building Commission.

## 10.0 CODE COMPLIANCE RESEARCH REPORT USE

**10.1** Approval of building products and/or materials can only be granted by a building official having legal authority in the specific jurisdiction where approval is sought.

**10.2** Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.

**10.3** Reference to the <https://bpdirectory.intertek.com> is recommended to ascertain the current version and status of this report.





Table 1 Code References (Sections)

Property	2015 IBC	2015 IRC	2017 FBC	2017 FBC Residential
Alternative Materials	104.11	R104.11	104.11	R101.2
Fire Classification	1505.1	R902.1	1505.1	R902.1
Wind Resistance	1504.1	R905.2.4.1	1507.2.7.1	R905.2.6.

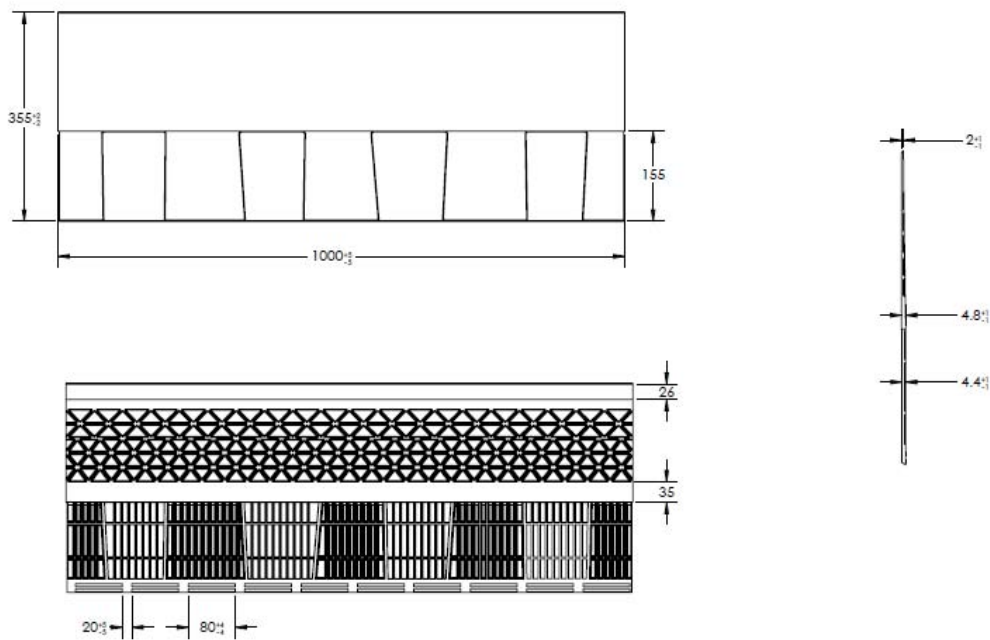
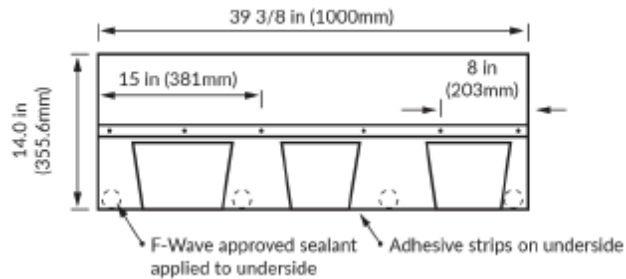


FIGURE 1 – REVIA ROOFING SHINGLE FRONT, PROFILE, BACK, AND DETAILS





**FIGURE 2 - REVIA ROOFING SHINGLE STARTER PIECE**

This Code Compliance Research Report ("Report") is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Report. Only the Client is authorized to permit copying or distribution of this Report and then only in its entirety, and the Client shall not use the Report in a misleading manner. Client further agrees and understands that reliance upon the Report is limited to the representations made therein. The Report is not an endorsement or recommendation for use of the subject and/or product described herein. This Report is not the Intertek Listing Report covering the subject product and utilized for Intertek Certification and this Report does not represent authorization for the use of any Intertek certification marks. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

