Code Compliance Research Report
CCRR-0217

Issue Date: 01-30-2015
Revision Date: 02-24-2025
Renewal Date: 02-28-2026

DIVISION: 07 00 00 – THERMAL AND MOISTURE PROTECTION
Section: 07 32 26 – Plastic Roof Tiles

REPORT HOLDER:
Westlake Davinci Roofscapes, LLC
13890 W 101st St
Lenexa, KS 66215
800-328-4624

REPORT SUBJECT:
Inspire Classic Roof Slates

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2024, 2021, and 2018 *International Building Code®* (IBC)
- 2024, 2021, and 2018 *International Residential Code®* (IRC)
- 2023 *Florida Building Code* (FBC) (see Section 9.0) *(Excluding HVHZ – High Velocity Hurricane Zones)*

1.2 *Inspire Classic Roof Slates* have been evaluated for the following properties (see Table 1):

- Weather Resistance
- Wind Resistance
- Durability
- Fire Classification

1.3 *Inspire Classic Roof Slates* have been evaluated for the following uses:

- The *Inspire Classic Roof Slates* are used as a Class A or Class C roof covering when installed according to the manufacturer's instructions and this report.

2.0 STATEMENT OF COMPLIANCE

Inspire Classic Roof Slates 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 6.0.

2.1 2024 IBC and IRC Evaluation Reports: The Intertek CCRR is an *Evaluation Report* for approval of an alternate material, design, or method of construction in accordance with Section 104.2.3.6.1 of the 2024 IBC and Section R104.2.2.6.1 of the 2024 IRC.

3.0 DESCRIPTION

3.1 The *Inspire Classic Roof Slates* are compression molded from polymer-based materials to simulate natural tile roofing.

3.2 The slate tiles are manufactured as a Class A or a Class C roof tile with a nominal length of 17 inches and nominal width of 12 inches.

3.3 *Inspire Classic Roof Slates* are manufactured in standard and premium colors and may be custom ordered in a variety of colors.

4.0 PERFORMANCE CHARACTERISTICS

4.1 Fire Classification: The Class A *Inspire Classic Roof Slates* are classified as a Class A roof covering for combustible decks in accordance with IBC Section 1505.1 and IRC R902.1 when used with a single layer of *Eco Chief SOLARHIDE™* underlayment as recognized in QAI Listing B1094. The Class C *Inspire Classic Roof Slates* are classified as a Class C roof covering for combustible decks in accordance with IBC Section 1505.1 and IRC R902.1 when used in conjunction with one layer of ASTM D226 Type II compliant underlayment. See Section 5.2.1 for underlayment installation.

4.2 Wind Resistance: *Inspire Classic Roof Slates* have a maximum allowable negative design pressure of 90 psf determined in accordance with UL 580 with a 2.0 factor of safety.

5.0 INSTALLATION

5.1 General: *Inspire Classic Roof Slates* 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.

5.2 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 and ice barrier is required. 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 Roof shingles are installed starting with a row of 12 inch-wide starter slates. The singles must extend 1/2 inch over the eaves and rakes. Shingles are secured to the sheathing through pre-molded markers using two stainless steel or copper nails or stainless screws. Fasteners must be sufficient length to allow 3/4-inch penetration of the sheathing. Field shingles are installed flush with starter slate shingles on the outer and lower edges. Spacer tabs are provided to maintain a 1/4-inch gap between shingles.

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

5.6 *Inspire Classic Roof Slates identified as Class A* are recognized as a Class A roof covering when installed with one layer of *Eco Chief SOLARHIDE™* underlayment on a 15/32-inch structural wood panel deck and at a maximum slate exposure of 7.5 inches. Installation of the underlayment shall be in accordance with the requirements of the applicable code and QAI listing B1094.

5.7 *Inspire Classic Roof Slates identified as Class C* are recognized as a Class C roof covering when installed in conjunction with one layer of ASTM D 226 Type II underlayment on a 15/32-inch structural wood panel deck and at a maximum slate exposure of 7.5 inches.

5.8 Flashing and edge materials shall meet the minimum requirements of IBC Section 1503.2 and 1507.7.6 or IRC Section R905.6.6, where applicable.

5.9 Reroofing requires that existing roof covering and underlayment must be completely removed, and damaged sheathing replaced prior to installing *Inspire Classic Roof Slates.*

6.0 CONDITIONS OF USE

6.1 Installation must comply with this Research Report, the manufacturer's published installation instructions, and the applicable Code. In the event of a conflict, this report governs.

6.2 *Inspire Classic Roof Slates* 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:

6.3 Wind design loads determined from nominal wind speeds (V_{asd}) in accordance with Section 1609.3 of the IBC shall not exceed the maximum allowable design pressure specified in Section 4.2.

6.4 Installation of *Eco Chief SOLARHIDE™* roof underlayment shall be in accordance with QAI listing B1094. The recognition of *Eco Chief SOLARHIDE™* roof underlayments as an approved element of the *Inspire Classic Roof Slates* is contingent on the maintenance of a valid QAI Listing B1094.

6.5 Compatibility of the supporting construction materials with all fasteners are subject to approval by the Code official.

6.6 *Inspire Classic Roof Slates* 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, Standard Test Methods for Fire Tests of Roof Coverings.

7.3 Reports of testing and engineering analysis demonstrating compliance with ICC-ES AC07, Acceptance Criteria for Special Roofing Systems, approved February 2014, editorially revised May 2016.

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

8.0 IDENTIFICATION

The *Inspire Classic Roof Slates* are identified with the:

- Name of the report holder (Westlake Davinci Roofscapes, LLC), address and telephone number, and the product name (*Inspire Classic Roof Slates*)
- Statement "Install on solid sheathing, min slope 3:12"
- Referenced standard, ASTM E108 and the classification (Class A or Class C) in conjunction with the statement "See CCRR-0217 at https://bpdirectory.intertek.com"
- Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0217)

Intertek
C# 5006879

9.0 FLORIDA BUILDING CODE

The *Inspire Classic Roof Slates* described in Sections 2.0 through 7.0 of this Research Report, comply with the 2023 *Florida Building Code*, subject to the following condition:

- Use of the *Inspire Classic Roof Slates* for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code h*as not been evaluated and is outside the scope of this Research Report.

Intertek is an approved *evaluation entity* and *quality assurance entity* pursuant to Florida Statute 553.842 – *Product Evaluation and Approval*.

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 – PROPERTIES EVALUATED

PROPERTY	2024 IBC SECTION	2024 IRC SECTION	2023 FBC - BUILDING	2023 FBC – RESIDENTIAL
Physical Properties, Wind Resistance	104.2.3	104.2.2	104.11	104.11
Roof Classification	1505	R902	1505	R902

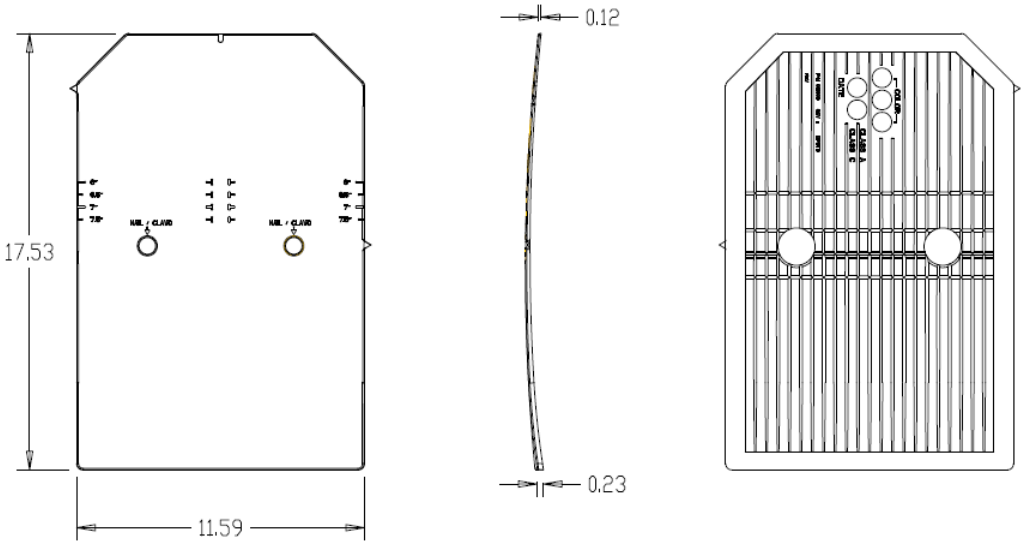

FIGURE 1 – INSPIRE CLASSIC ROOF SLATES FRONT, PROFILE, AND BACK

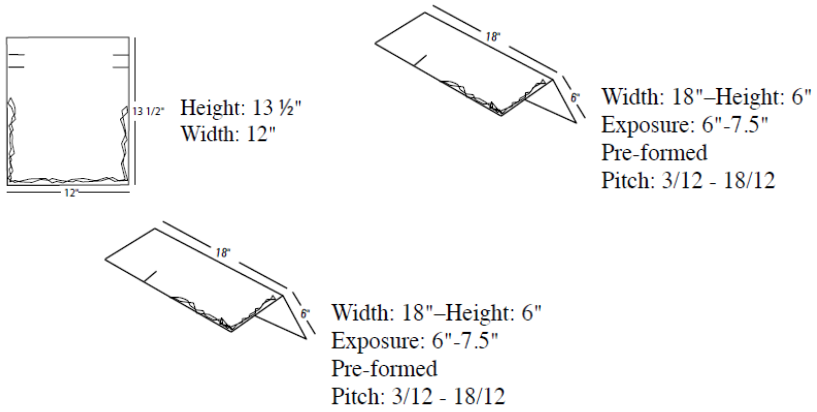

FIGURE 2 – INSPIRE CLASSIC ROOF SLATES STARTER PIECE AND HIP AND RIDGE