

Code Compliance Research Report CCRR-0217

Issue Date: 01-30-2017 Renewal Date: 01-30-2018 Revision Date: 08-28-2017

DIVISION: 07 Roof Tiles

Section: 07 32 26 Plastic Roof Tiles

Inspire Roofing Products
A Division of Headwaters Roofing
4057 South Oak Street
Metamora, Michigan 48455
(810) 678-2295
www.tapcoint.com

REPORT SUBJECT:

Inspire Classic Roof Slates

1.0 SCOPE OF EVALUATION

1.1. Building Codes:

2015 International Building Code (IBC) 2015 International Residential Code (IRC)

2014 Florida Building Code (FBC) (Excluding HVHZ - High Velocity Hurricane Zones)

1.2. Properties:

Weather Resistance

Wind Resistance

Durability

Fire Classification

2.0 USES

2.1. 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.

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 in conjunction with one layer of MB Eco Chief SOLARHIDE roofing underlayment, as recognized in QAI Listing B1094 or MB Technologies SBS TU35 underlayment as recognized in ICC-ES Evaluation Report ESR-2799. 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 D 226 Type II compliant underlayment. See Section 5.2.1 for underlayment installation.
- 4.2. Wind Resistance *Inspire Classic Roof Slates* are installed in accordance with this report are limited to installation in areas where the maximum basic wind speed is 100 mph on structures with a mean roof height of 40 feet in Exposure B areas.
- 4.3. *Inspire Classic Roof* Slates installed in accordance with this report are classified as Class 90 in accordance with UL 580.

5.0 INSTALLATION

- 5.1. Installation shall be in accordance with the requirements of the applicable code, the manufacturer's installation instructions, and this report. Where differences occur between this report and the manufacturer's installation instructions, this report shall govern.
- 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.







- 5.2.1. 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.
- 5.3. Roof shingles are installed starting with a row of 12-inch wide starter slates. The singles must extend ½-inch over the eaves and rakes. Shingles are secured to the sheathing through premolded 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.
- 5.4. Hips, ridges and valleys must be flashed as specified in the manufacturer's published installation instructions.
- 5.5. Inspire Classic Roof Slates identified as Class A are recognized as a Class A roof covering when installed in conjunction with one layer of *Eco Chief SOLARHIDE* or MB Technologies Layfast SBS TU35 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 ICC-ES ESR-2799.
- 5.6. 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.
- 5.7. 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.
- 5.8. 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 SUPPORTING EVIDENCE

- 6.1. Manufacturer's drawings and installation instructions.
- 6.2. Reports of fire tests of roof coverings demonstrating compliance with ASTM E 108-17 Standard Test Methods for Fire Tests of Roof Coverings.
- 6.3. Documentation of an Intertek approved quality control system for the manufacturing of products recognized in this report.
- 6.4. Reports of testing and engineering analysis demonstrating compliance with ICC-ES AC07, Acceptance Criteria for Special Roofing Systems, approved February 2014.

7.0 CONDITIONS OF USE

- 7.1. *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:
- 7.1.1. Installation of *Eco Chief SOLARHIDE* roof underlayment shall be in accordance with QAI listing B1094. Installation of MB Technologies Layfast SBS TU35 roof underlayment shall be in accordance with ICC-ES ESR-2799. The recognition of *Eco Chief SOLARHIDE* and MB Technologies Layfast SBS TU35 roof underlayment as approved elements of *Inspire Classic Roof Slates* is contingent on the maintenance of a valid QAI Listing B1094 and ICC ESR-2799.
- 7.2. Compatibility of the supporting construction materials with all fasteners are subject to approval by the code official.

Inspire Classic Roof Slates in this report are manufactured in Metamora, Michigan by Inspire Roofing Products under an approved quality control system with inspections by Intertek Testing (IAS AA-676).

8.0 IDENTIFICATION

Each bundle of *Inspire Classic Roof Slates* produced in accordance with this report shall be packaged and labeled with the following information:

- 8.1. Name of the report holder
- 8.2. The statement "Install on solid sheathing, min. slope 3:12"







- 8.3. The referenced standard, ASTM E 108 and the classification (Class A or Class C) in conjunction with the statement "See CCRR-0217 at https://whdirectory.intertek.com"
- 8.4. Each slate is embossed with the Code Compliance Research Report mark and number (CCRR-0217).



9.0 CODE COMPLIANCE RESEARCH REPORT USE

- 9.1. 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.
- 9.2. Code Compliance Research Reports shall not be used in any manner that implies an endorsement of the product by Intertek.
- 9.3. Reference to the Intertek website address at https://whdirectory.intertek.com is recommended to ascertain the current version and status of this report. Where required by the building official, engineering calculations and details shall be provided. The calculations shall verify that the anchorage complies with the building code for the type of framing and condition of the supporting construction.

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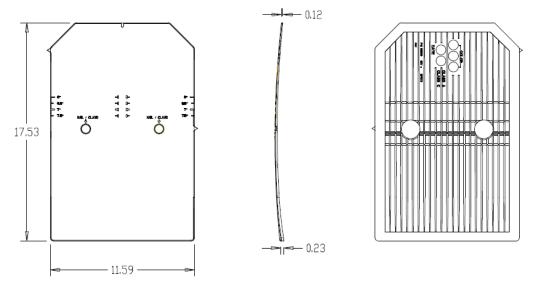


Figure 1 -Inspire Classic Roof Slates Front, Profile, and Back

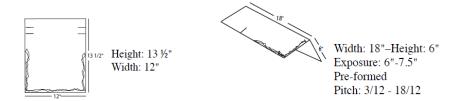


Figure 2: Inspire Classic Roof Slates Starter Piece and Hip and Ridge



