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# Code Compliance Research Report CCRR-0259

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Renewal Date: 01-06-2018  
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DIVISION: 04 00 00 MASONRY  
Section: 04 73 00 Manufacture Stone Masonry

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## REPORT SUBJECT:

### STONEfacade™

#### 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)

1.2 CertainTeed's STONEfacade™ has been evaluated for the following properties:

- Strength
- Durability
- Noncombustibility
- Surface Burning Characteristics
- Weather Protection
- Wind Resistance

1.3 CertainTeed's STONEfacade™ has been evaluated for the following uses:

- Use as an exterior wall covering in accordance with IBC Section 1403 and IRC Section R703.
- Use on exterior walls of Type V construction.
- Use as an interior wall finishes IBC Section 803 and IRC Section R302.9

#### 2.0 STATEMENT OF COMPLIANCE

CertainTeed's STONEfacade™ complies 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 STONEfacade™ is a pre-cast concrete and stainless steel panel that simulates natural stone. The concrete is cast with an integrated stainless steel (Type 304) rain screen insert creating the exterior facade panels. The façade is produced in three lengths 10", 14" and 24". All panels are 8" in height. The thickness of panels varies based on stone profile from 1 inch to 2.38 inch. See Figure 1, 2, 3 and 4 for details.

3.2 Stainless Steel rain screen inserts have pre-drilled holes on the top flange of each panel spaced at 1" to attach to exterior walls.

3.3 Stainless Steel, type 304, starter strips are used at the first course of installed panels. See Figure 5.

3.3 Corner panels, light boxes, electrical boxes and sills are additional details used to finish the exterior and also simulate natural stone.

#### 4.0 PERFORMANCE CHARACTERISTICS

4.1 **Density:** The average density of the panel concrete is 90 lb/ft<sup>3</sup> determined in accordance with ASTM C567.

4.2 **Durability:** The panels met the conditions of acceptance after 50 cycles of freeze-thaw in accordance with Section 4.2 of AC51.

4.3 **Weight:** The saturated weight of the panels is 12.6 pounds per square foot determined in accordance with Section 4.1 of AC51.

4.4 **Wind Resistance:** The maximum allowable wind pressure for the STONEfacade™ panels is 47 psf when installed in accordance with Section 5 of this report.

Wind Design pressures determined from nominal design wind speeds ( $V_{asd}$ ) in accordance with IBC Chapter 16 and IRC section R301.2.1.1 shall not exceed the allowable wind loads specified in this section.

4.4.1 STONEfacade™ panels must be installed over structural wood sheathing designed to resist positive wind design pressures in accordance with the applicable code.

4.5 **Noncombustibility:** The panels are noncombustible building construction materials complying with IBC Section



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PCA-125

703.5 as determined by testing in accordance with ASTM E136.

**4.6 Surface Burning Characteristics:** The panels are Class A and have a flame spread index of 0 and a smoke-developed index of 0, when tested in accordance with ASTM E84.

**4.7 Weather Protection:** Panels were evaluated for water penetration resistance in conformance with ASTM E331 and IBC Section 1403.2. See installation requirements, Section 5.0 of this report.

**4.8** For interior use, STONEfacade™ panels have a Class A finish rating in accordance with ASTM E84 and IBC Section 803.1.1.

## 5.0 INSTALLATION

### 5.1 General:

STONEfacade™ 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.

Under the IBC, the panels must be installed over a water-resistive barrier complying with Sections 1404.2.. Under the IRC, the panels must be installed over a water-resistive barrier complying with Section R703.2. Panels shall be installed over a code approved structural wood sheathing per IBC 2303.15 and IRC R604.

### 5.2 Application:

Flashing shall be installed in accordance with IBC 1405.4 and IRC R703.4.

Fasteners shall be stainless steel wood screws fully threaded type 305 with a minimum head diameter of 0.287 inch and a minimum shank diameter of 0.162 inch. Length of screws shall be a minimum of 1 -1/2 inches long. A minimum of 3 fasteners shall be used for 24 inch long panels and a minimum of 2 fasteners shall be used for 14

and 10 inch panels. Fasteners shall be equally spaced throughout the panel length.

## 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** The STONEfacade™ is manufactured under a quality control program with inspections by Intertek Testing Services NA, Inc.

## 7.0 SUPPORTING EVIDENCE

**7.1** Reports of tests in accordance with ASTM C567, ASTM C192, ASTM C348, ASTM C190, ASTM C67, ASTM E331, ASTM E330, ASTM E84 and ASTM E136.

**7.2** Data in accordance with the ICC-ES Acceptance Criteria; Fiber Cement Siding Used as Exterior Wall Siding (AC90), dated June 2012 (editorially revised September 2015 and Precast Stone Veneer (AC51) dated January 2016.

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

**7.4** STONEfacade™ panels are manufactured in Leola, PA in accordance with the manufacturer's approved quality control system with inspections by Intertek (IAS AA-676).

## 8.0 IDENTIFICATION

STONEfacade™ panel's packaging is identified with the manufacturer's name (CertainTeed), address and telephone number, the product name (STONEfacade™), the Intertek Mark as shown below, and the Code Compliance Research Report number (CCRR-0259).

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## 9.0 OTHER CODES

This section is not applicable.

## 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 Intertek website address: [www.whdirectory.intertek.com](http://www.whdirectory.intertek.com) is recommended to ascertain the current version and status of this report.

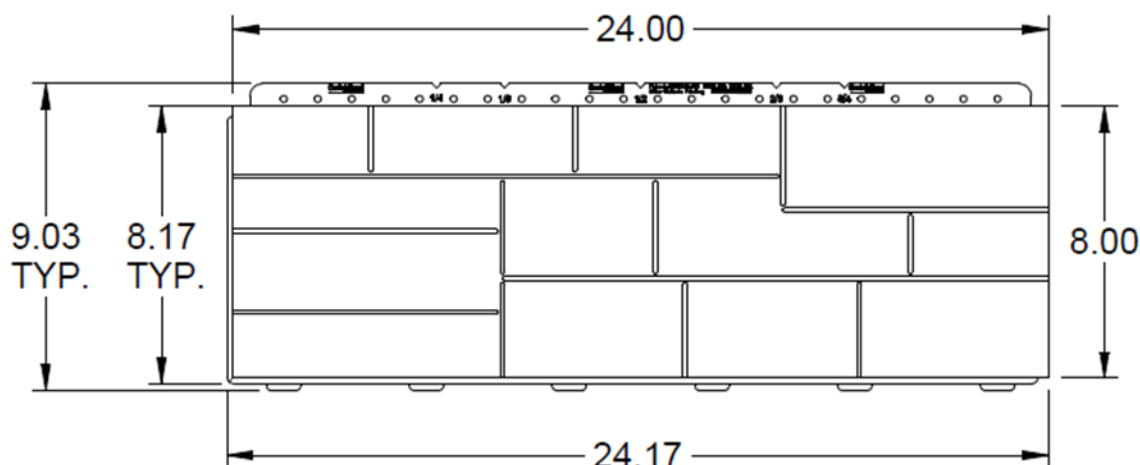


Figure 1 – 24" panel

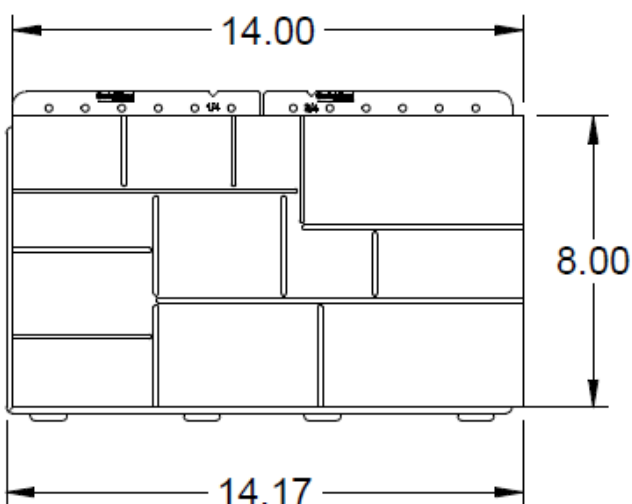


Figure 2 – 14" panel

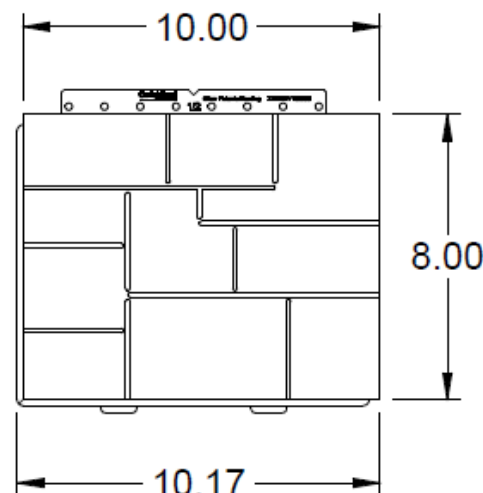
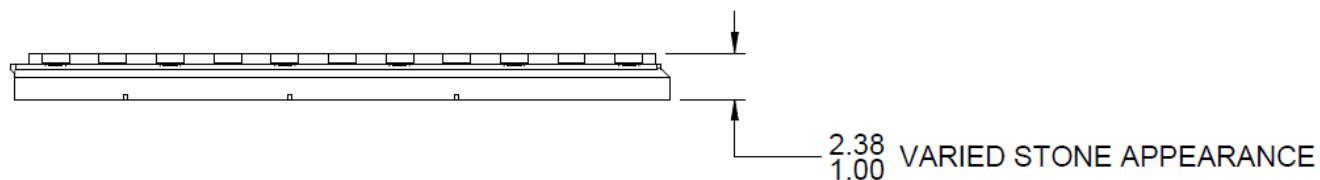
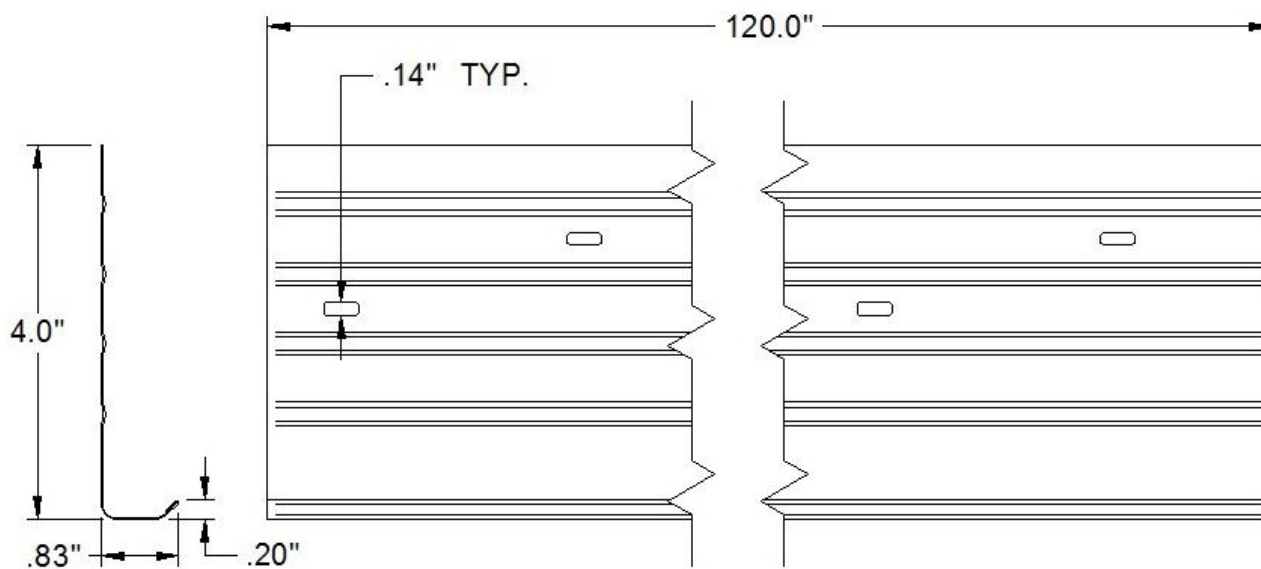


Figure 3 – 10" panel



**Figure 4 – Panel Profile**



**Figure 5 – Starter Strip**