

Issue Date: 01-06-2017
Revision Date: 01-28-2019
Renewal Date: 01-06-2020

DIVISION: 04 00 00 MASONRY
Section: 04 73 00 Manufactured Stone Masonry

REPORT HOLDER:
CERTAINTEED CORPORATION
20 Moores Road
Malvern, PA 19355
www.certainteed.com

REPORT SUBJECT:
STONEfacade™

1.0 SCOPE OF EVALUATION

1.1 This Research Report addresses compliance with the following Codes:

- 2018, 2015 *International Building Code*® (IBC)
- 2018, 2015 *International Residential Code*® (IRC)
- 2017 *Florida Building Code* (FBC) excluding HVHZ (See Section 9)

NOTE: This report references 2018 IBC sections with 2015 IBC and 2017 FBC sections shown in brackets where they differ.

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

- Strength
- Durability
 - Combustibility
 - 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 1402 [1403], 1403 [1404] 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/ft³ 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 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. For interior use, STONEfacade™ panels have a Class A finish rating in accordance with ASTM E84 and IBC Section 803.1.1.

4.7 Weather Protection: Panels were evaluated for water penetration resistance in conformance with ASTM E331 and IBC Section 1402.2 [1403.2]. See installation requirements, Section 5.0 of this report.

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 [1403.2]. 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 2303.1.5 and IRC R604

5.2 Application:

Flashing shall be installed in accordance with IBC 1404.4 [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 inch long and fully penetrate thread through backside of sheathing. 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) 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 accordance with the manufacturer's approved quality control system with inspections by Intertek Testing Services NA, Inc.





8.0 IDENTIFICATION

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



9.0 FLORIDA BUILDING CODE

9.1 Scope of Evaluation

The STONEfacade™ panels were evaluated for compliance with the 2017 *Florida Building Code*.

9.2 Conclusion

The STONEfacade™ panels described in Sections 2.0 through 7.0 of this Research Report, comply with the 2017

Florida Building Code – Building, and Florida Building Code – Residential subject to the following conditions:

- Use of the STONEfacade™ panels 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 Research 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 Intertek website address: www.whdirectory.intertek.com is recommended to ascertain the current version and status of this report.

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.



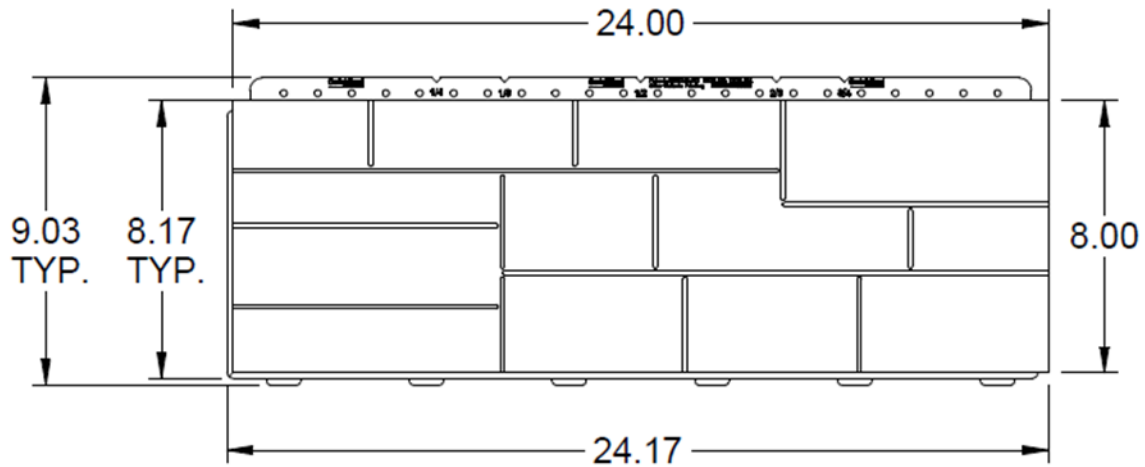


FIGURE 1 – 24" PANEL

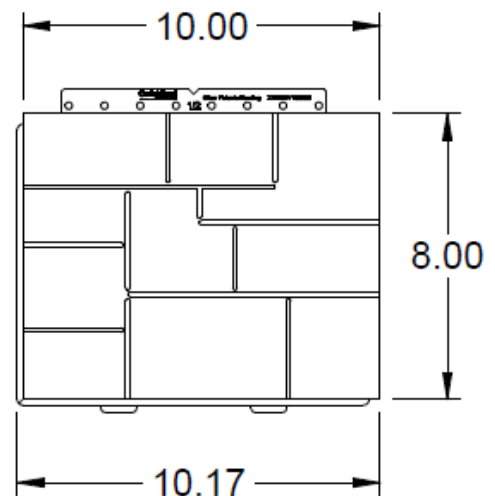
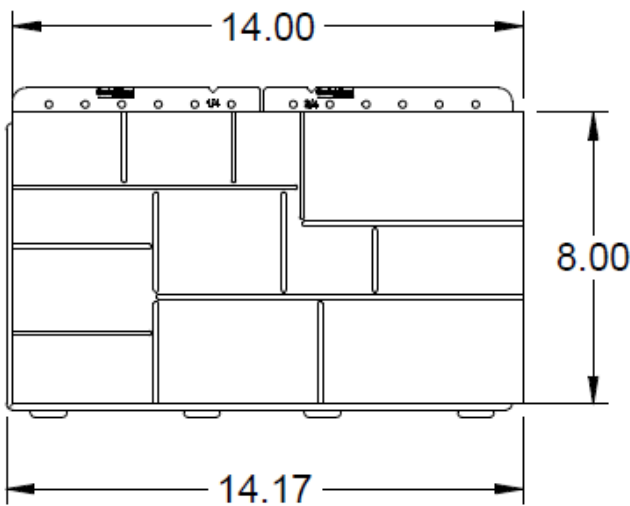


FIGURE 2 – 14" PANEL FIGURE 3 – 10" PANEL

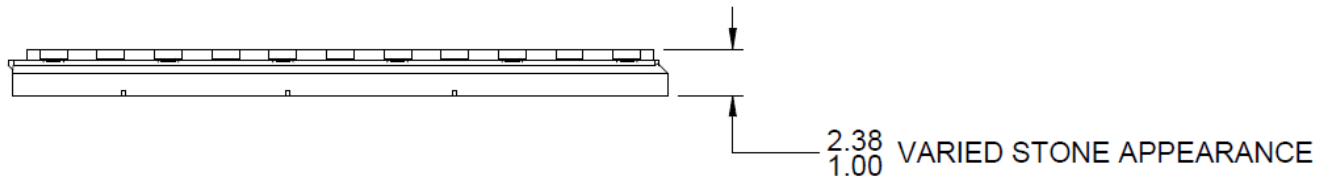


FIGURE 4 – PANEL PROFILE

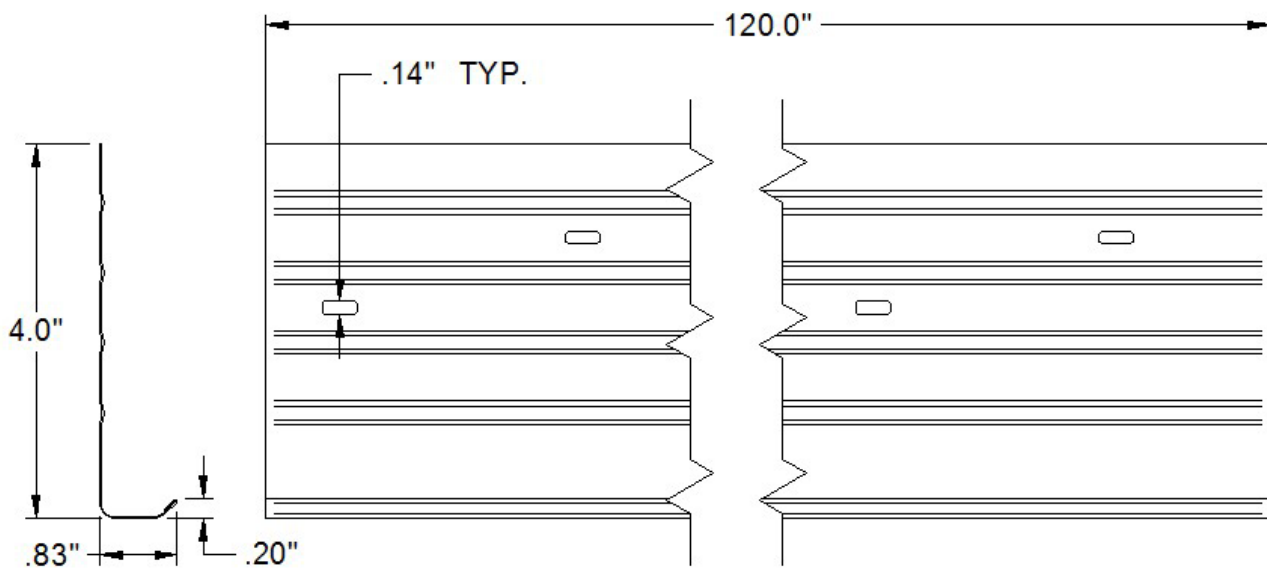


FIGURE 5 – STARTER STRIP