

ICC-ES Evaluation Report

ESR-3181

Reissued October 2023

This report also contains:


- CBC Supplement

Subject to renewal October 2024

- FBC Supplement

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<p>DIVISION: 04 00 00 — MASONRY</p> <p>Section: 04 43 13.16 — Adhered Stone Masonry Veneer</p> <p>Section: 04 73 00 — Manufactured Stone Masonry</p>	<p>REPORT HOLDER: HORIZON STONE, LLC</p>	<p>EVALUATION SUBJECT: HORIZON STONE MANUFACTURED STONE VENEER</p>	
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1.0 EVALUATION SCOPE

1.1 Compliance with the following codes:

- 2021, 2018, and 2015 [International Building Code® \(IBC\)](#)
- 2021, 2018, and 2015 [International Residential Code® \(IRC\)](#)
- Other Codes (See Section 8.0)

Properties evaluated:

Veneer strength and durability

1.2 Evaluation to the following green code(s) and/or standards:

- 2022 [California Green Building Standards Code \(CALGreen\)](#), Title 24, Part 11
- 2020, 2015, 2012 and 2008 ICC 700 [National Green Building Standard™ \(ICC 700-2020, ICC 700-2015, ICC 700-2012, and ICC 700-2008\)](#)

Attributes verified:

See Section 3.0

2.0 USES

Horizon Stone Manufactured Stone Veneer is used as an adhered, non-load-bearing exterior veneer on wood framed or light-gage steel stud walls, concrete walls, and masonry walls.

3.0 DESCRIPTION

Horizon Stone Manufactured Stone Veneer is a precast concrete product made to resemble natural stone in color and in texture and complies with ASTM C1670 as indicated in 2021 and 2018 IBC Section 2103.1 and 2021 and 2018 IRC Section R606.2.6. The concrete is composed of cement, aggregate, pigments, admixtures and water. The veneer units are molded and cured at the manufacturing plant. The average saturated weight of the installed veneer units does not exceed 15 pounds per square foot (73.2 kg/m²). Recognized styles of veneer are listed in [Table 1](#).

The attributes of the stone veneer have been verified as conforming to the provisions of (i) CALGreen Section A4.405.1.3 for prefinished building materials and Section A5.406.1.2 for reduced maintenance; (ii) ICC 700-2020, ICC 700-2015, ICC 700-2012 Sections 602.1.6 and 11.602.1.6 for termite-resistant materials;

(iii) ICC 700-2020 Sections 6017 and 11.601.6, (vi) and ICC 700-2015 and ICC 700-2012 Sections 601.7, 11.601.7, and 12.1(A).601.7 for site-applied finishing materials; and (v) ICC 700-2008 Section 602.8 for termite-resistant materials and Section 601.7 for site-applied finishing materials. Note that decisions on compliance for those areas rest with the user of this report. The user is advised of the project-specific provisions that may be contingent upon meeting specific conditions, and the verification of those conditions is outside the scope of this report. These codes or standards often provide supplemental information as guidance.

4.0 DESIGN AND INSTALLATION

4.1 General:

Installation of Horizon Stone Manufactured Stone Veneer must comply with this report, the manufacturer's published installation instructions, and the applicable code. The manufacturer's published installation instructions must be available at the jobsite at all times during installation. In accordance with the code, the veneer can be installed over a lath and mortar scratch coat or applied directly to concrete and masonry.

4.2 Installation over a Lath and Mortar Scratch Coat Over Framed Walls:

The scratch coat must be installed over a water-resistive barrier complying with 2021 and 2018 IBC Section 1404.10.1.1 (2015 IBC Section 1405.10.1.1) or IRC Section R703.12.3, as applicable. Also, flashing must be installed as required by 2021 and 2018 IBC Section 1404.10.1.2 (2015 IBC Section 1405.10.1.2) or IRC Sections R703.4 and R703.12.2, as applicable, including a foundation weep screed installed at the bottom of the stone veneer. The foundation weep screed must comply with, and be installed in accordance with, the requirements for flashing at foundation shown in 2021 and 2018 IBC Section 1404.10.1.2.1 (2015 IBC Section 1405.10.1.2.1) or IRC Section R703.12.2, as applicable. The veneer must be installed with the clearances required by 2021 and 2018 IBC Section 1404.10.1.3 (2015 IBC Section 1405.10.1.3) or IRC Section R703.12.1, as applicable.

Lathing must comply with IBC Section 2510 [referenced from 2021 and 2018 IBC Section 1404.10.1.4.1 (2015 IBC Section 1405.10.1.4.1) or IRC Section R703.7.1 (referenced from IRC Section R703.12)]. The scratch coat must be applied in accordance with 2021 and 2018 IBC Section 1404.10.1.4.2 (2015 IBC Section 1405.10.1.4.2) and the veneer units must be adhered to the scratch coat in accordance with 2021 and 2018 IBC Section 1404.10.1.4.3 (2015 IBC Section 1405.10.1.4.3). The mortar used to adhere the veneer units to the scratch coat must comply with IBC Section 2103.2.4.

4.3 Installation over Concrete and Masonry:

Installation over concrete and masonry must comply with 2021 and 2018 IBC Section 1404.10.1.5 (2015 IBC Section 1405.10.1.5). When adhering the veneer units directly to the concrete or masonry, the supporting surfaces must be prepared in accordance with IBC Section 2510.7, and the veneer units must be adhered to the supporting surface as described in Section 4.2. When adhering the veneer units to a lath and mortar scratch coat, the lathing and scratch coat preparation must comply with Section 4.2.

5.0 CONDITIONS OF USE:

The Horizon Stone Manufactured Stone Veneer described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1 Installation must comply with this report, the manufacturer's published installation instructions, and the applicable code. In the event of a conflict amongst these documents, the most severe requirements govern.
- 5.2 Expansion or control joints, used to limit the effect of differential movement of supports on the veneer system, are to be specified by the architect, designer, or veneer manufacturer, in that order. Consideration must also be given to movement caused by temperature change, shrinkage, creep, and deflection.
- 5.3 In jurisdictions adopting the IBC, the supporting wall must be designed to support the installed weight of the veneer system, including stone veneer, setting bed and scratch coat, as applicable. At wall openings, the supporting members must be designed to limit deflection to $1/600$ of the span of the supporting members.
- 5.4 In jurisdictions adopting the IRC, where the seismic provisions of IRC Section R301.2.2 apply, the average weight of the wall supporting the precast stone veneer, including the weight of the veneer system, must be determined. When this weight exceeds the applicable limits of 2021 and 2018 IRC Section R301.2.2.2 (2015 IRC Section R301.2.2.2.1), an engineered design of the wall construction must be performed in accordance with IRC Section R301.1.3.
- 5.5 Horizon Stone Manufactured Stone Veneer is manufactured under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the [ICC-ES Acceptance Criteria for Precast Stone Veneer \(AC51\)](#), dated June 2018 (Editorially revised January 2021).

7.0 IDENTIFICATION

- 7.1 Packaged precast stone veneer units are identified with the manufacturer’s name (Horizon Stone, LLC), the style name, the manufacturing date and location, and the evaluation report number (ESR-3181).
- 7.2 The report holder’s contact information is the following:

HORIZON STONE, LLC
2515 EAST 43RD STREET, SUITE A
CHATTANOOGA, TENNESSEE 37407
(423) 629-0801
www.horizon-stone.net
blarge@horizon-stone.net

8.0 OTHER CODES

8.1 Evaluation Scope:

In addition to the codes referenced in Section 1.0, the products described in this report were evaluated for compliance with the following codes:

- 2012 and 2009 *International Building Code*® (IBC)
- 2012 and 2009 *International Residential Code*® (IRC)

The Horizon Stone Manufactured Stone Veneer addressed in Sections 2.0 through 7.0 of this report comply with, or are suitable alternatives to what is specified in, the codes listed above, and must be installed in accordance with the 2021, 2018 and 2015 IBC and IRC, as described in Section 4.0.

TABLE 1—RECOGNIZED STYLES

PRODUCT	STYLES
Horizon Stone Manufactured Stone Veneer	19 th Century, Castlestone, Craftsman Cottage Stone, Fieldstone, Handcrafted, Ledgestone, Olde World, Rockface Series

DIVISION: 04 00 00—MASONRY
Section: 04 43 13.16—Adhered Stone Masonry Veneer
Section: 04 73 00—Manufactured Stone Masonry

REPORT HOLDER:

HORIZON STONE, LLC

EVALUATION SUBJECT:

HORIZON STONE MANUFACTURED STONE VENEER

1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that Horizon Stone Manufactured Stone Veneer, described in ICC-ES evaluation report ESR-3181, has also been evaluated for compliance with the code(s) noted below.

Applicable code editions:

- 2016 *California Building Code*® (CBC)

For evaluation of applicable chapters adopted by the California Office of Statewide Health Planning and Development (OSHPD) AKA: California Department of Health Care Access and Information (HCAI) and the Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

- 2016 *California Residential Code*® (CRC)

2.0 CONCLUSIONS**2.1 CBC:**

The Horizon Stone Manufactured Stone Veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3181, complies with CBC Sections 1404.4 and 2101.2.1, provided the design and installation are in accordance with the 2015 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapter 14, as applicable.

2.1.1 OSHPD:

The applicable OSHPD Sections and Chapters of the CBC are beyond the scope of this supplement.

2.1.2 DSA:

The applicable DSA Sections and Chapters of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Horizon Stone Manufactured Stone Veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3181, complies with CRC Section R703, provided the design and installation are in accordance with the 2015 *International Residential Code*® (IRC) provisions noted in the evaluation report.

This supplement expires concurrently with the evaluation report, reissued October 2023.

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1.0 REPORT PURPOSE AND SCOPE**Purpose:**

The purpose of this evaluation report supplement is to indicate that Horizon Stone Manufactured Stone Veneer, described in ICC-ES evaluation report ESR-3181, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2014 *Florida Building Code—Building*
- 2014 *Florida Building Code—Residential*

2.0 CONCLUSIONS

The Horizon Stone Manufactured Stone Veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3181, complies with the *Florida Building Code—Building* and the *Florida Building Code—Residential*, provided the design and installation are in accordance with the 2012 *International Building Code*® provisions noted in the evaluation report, provided that the veneer has a clearance to the final earth grade on the exterior of the building as required by Section 1403.8 of the *Florida Building Code—Building* or Section R318.7 of the *Florida Building Code—Residential*, as applicable.

Use of the Horizon Stone Manufactured Stone Veneer for compliance with the High-Velocity Hurricane Zone provisions of the *Florida Building Code—Building* and the *Florida Building Code—Residential* has not been evaluated, and is outside the scope of this supplemental report.

For products falling under Florida Rule 9N-3, verification that the report holder's quality-assurance program is audited by a quality-assurance entity approved by the Florida Building Commission for the type of inspections being conducted is the responsibility of an approved validation entity (or the code official when the report holder does not possess an approval by the Commission).

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