

# ICC-ES Evaluation Report

ESR-1500

Reissued October 2023


This report also contains:

- LABC Supplement
- CBC Supplement
- FBC Supplement

Subject to renewal October 2025

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<p><b>DIVISION: 07 00 00 —</b>  <b>THERMAL AND</b>  <b>MOISTURE</b>  <b>PROTECTION</b></p> <p><b>Section: 07 42 43 —</b>  <b>Composite Wall Panels</b></p>	<p><b>REPORT HOLDER:</b>  <b>STONE PANELS</b>  <b>INTERNATIONAL, LLC</b></p>	<p><b>EVALUATION SUBJECT:</b>  <b>STONELITE® VENEER</b>  <b>WALL PANELS</b></p>	
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## 1.0 EVALUATION SCOPE

### 1.1 Compliance with the following code:

2018, 2015, 2012, 2009 and 2006 [International Building Code® \(IBC\)](#)

For evaluation for compliance with codes adopted by [Los Angeles Department of Building and Safety \(LADBS\)](#), see [ESR-1500 LABC Supplement](#).

### Properties evaluated:

- Structural
- Durability
- Surface-burning characteristics
- Types I, II, III and IV (noncombustible) construction

### 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™ \(ICC 700-2015, ICC 700-2012, and ICC 700-2008\)](#)

### Attributes verified:

- See Section 3.1

## 2.0 USES

The StoneLite® Veneer Wall Panels are used as a nonload-bearing, interior finish and exterior wall cladding, on the exterior of walls in buildings of Types I through V construction.

## 3.0 DESCRIPTION

### 3.1 General:

The panels consist of a minimum  $3/16$ -inch-thick (4.8 mm) veneer of natural stone factory-laminated to a prepreg faced aluminum honeycomb core. Aluminum plates are factory-installed in the panels to allow for jobsite attachment of the panels to aluminum channels, which are used to hang the panels from the supporting structure. The panels are nominally  $15/16$  inch or 1 inch thick (23.8 or 25.4 mm), depending on the type of stone

veneer, and are available in sizes up to 5 feet by 10 feet (1525 by 3050 mm). The panels weigh up to 4.0 psf (19.5 kg/m<sup>2</sup>). Three combinations of prepreg facings and aluminum honeycomb are available as models SP-1-6-3, SP-1-10-3 and SP-1-10-7. The SP-1-6-3 model panels have an aluminum honeycomb core with a cell size of 1/4 inch (6.4 mm) while the SP-1-10-3 and the SP-1-10-7 models have an aluminum honeycomb core with a cell size of 3/8 inch (9.5 mm). For interior use, the stone veneer wall panels have a Class A finish in accordance with ASTM E84.

The attributes of the StoneLite<sup>®</sup> Veneer Wall Panels have been verified as conforming to the provisions of (i) CALGreen Sections A4.405.1.3 (prefinished materials) and A5.406.1.2 (reduced maintenance); (ii) ICC 700-2020 Sections 601.7 and 11.601.7 and ICC 700-2015 and ICC 700-2012 Sections 601.7, 11.601.7, and 12.1(A).601.7 (site-applied finishing materials); and (iii) ICC 700-2008 Section 601.7 (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. The code may provide supplemental information as guidance.

### 3.2 Materials:

**3.2.1 Prepreg Facings:** The prepreg facings are fiberglass fabrics which have been impregnated with an epoxy resin. These are factory-installed on both sides of the aluminum honeycomb.

**3.2.2 Aluminum Honeycomb:** The aluminum honeycomb cores are expanded from aluminum alloy 3003-H19 or 3104-H19. The honeycombs with 1/4-inch (6.4 mm) cells and 3/8-inch (9.5 mm) cells have densities of 5.2 pcf and 3.6 pcf (83 and 58 kg/m<sup>3</sup>), respectively.

**3.2.3 Attachment Plates:** The attachment plates are stamped from steel complying with ASTM A653 CS Type B, having a G90 galvanized coating and a minimum base-metal thickness of 0.0705 inch (1.8mm) or plates stamped from 5052-H32 10-gauge Aluminum alloy with a minimum thickness of 0.095 inch (2.4mm).

**3.2.4 Stone:** Available stone includes marble, granite, limestone, sandstone, dolomite, and porcelain. The marble and granite veneers are nominally 3/16 inch thick. The limestone, sandstone, dolomite, and porcelain veneers are nominally 1/4 inch thick (6.4 mm).

**3.2.5 Aluminum Channels:** The aluminum channels used to support the panels are provided by Stone Panels International, LLC. The adequacy of the channels and their connections to the panel and the supporting structure must be verified for each installation by a registered design professional and are outside the scope of this report.

## 4.0 DESIGN AND INSTALLATION

### 4.1 General:

The panels must be installed in accordance with the manufacturer's published installation instructions and the approved plans. The panels may be installed vertically or horizontally, as shown in the approved plans. Spacing of the panel attachments to the supporting channels must comply with [Table 1](#). The joints between panels must be sealed in accordance with the manufacturer's installation instructions. A water-resistive barrier, flashing and a means of drainage must be provided behind the stone veneer panels and comply with and be installed in accordance with the IBC. The allowable positive and negative transverse loads on the panels are shown in [Table 1](#). For installations in Seismic Design Categories other than A and B, the design of the connections of the panels to the channels and the channels to the supporting structure must comply with Section 13.5.3 of ASCE 7.

### 4.2 Exterior Walls of Types I, II, III or IV Construction:

When installed as described in [Table 2](#) of this report, the StoneLite<sup>®</sup> Veneer Wall Panels may be used on the exterior face of exterior walls of buildings required to be of Type I, II, III or IV construction.

## 5.0 CONDITIONS OF USE:

The StoneLite<sup>®</sup> Veneer Wall Panels described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

**5.1** Installation complies with this report, the manufacturer's published installation instructions and the applicable code. If there is a conflict between the installation instructions and this report, the most restrictive governs.

- 5.2** The aluminum attachment channels have not been evaluated and are outside the scope of this report. The design, fabrication, and attachment of these channels to the panels and to the supporting structure must be justified to the satisfaction of the code official.
- 5.3** Drawings, design details, calculations and test data verifying compliance with this report and the adequacy of the connections and supporting framing must be submitted to the building official for approval. The drawings and calculations must be prepared by a registered design professional when required by the statutes of the jurisdiction in which the project is to be constructed.
- 5.4** The out-of-plane deflection of the supporting wall framing must be limited to  $L/240$ .
- 5.5** Where exterior walls covered with the Stone Veneer Panels are required to have a fire-resistance rating, the rating must be justified to the code official.
- 5.6** The StoneLite<sup>®</sup> veneer wall panels are manufactured in Marble Falls, Texas, under a quality control program with inspections by ICC-ES.

## 6.0 EVIDENCE SUBMITTED

- 6.1** Data in accordance with the [ICC-ES Acceptance Criteria for Sandwich Panels \(AC04\)](#), dated June 2019 (editorially revised December 2020).
- 6.2** Reports of testing of attachment plate capacity.
- 6.3** Report of testing in accordance with ASTM E84.
- 6.4** Report of testing in accordance with NFPA 285 and fire analysis addressing installation in Types I, II, III and IV construction.

## 7.0 IDENTIFICATION

- 7.1** Each panel is identified by labels bearing the manufacturer's name (Stone Panels International, LLC) and address, the product name, the model number, and the evaluation report number (ESR-1500).
- 7.2** The report holder's contact information is the following:

**STONE PANELS INTERNATIONAL, LLC**  
**2400 HIGHWAY 1431 WEST**  
**MARBLE FALLS, TEXAS 78654**  
**(830) 201-4505**  
[www.stonepanels.com](http://www.stonepanels.com)

**TABLE 1—ALLOWABLE POSITIVE AND NEGATIVE TRANSVERSE LOADS<sup>1</sup> (psf)**

MODEL	HORIZONTAL SPACING OF PANEL ATTACHMENTS (inches)		
	32	24	16
SP-1-6-3	49	64	96
SP-1-10-3	52	68	102
SP-1-10-7	23	31	47

For SI: 1 inch = 25.4 mm, 1 psf = 47.99 Pa.

<sup>1</sup>Maximum vertical spacing of panel attachments to the supporting channels is 24 inches.

TABLE 2—TYPES I, II, III AND IV (NONCOMBUSTIBLE) CONSTRUCTION ASSEMBLIES COMPLYING WITH NFPA 285

Wall Component	Materials
Base Wall System- Use either 1, 2 or 3	<ol style="list-style-type: none"> <li>Concrete wall</li> <li>Concrete Masonry wall</li> <li>One layer of <math>\frac{5}{8}</math>-inch-thick Type X gypsum wallboard installed on the interior side of minimum <math>3\frac{5}{8}</math>-inch-deep, minimum 16-gauge-thick steel studs spaced at a maximum of 16 inches o.c.</li> </ol>
Floorline Firestopping	4 pcf density mineral wool in each stud cavity at each floorline-friction fit or mechanically attached.
Cavity Insulation- Use either 1, 2 or 3	<ol style="list-style-type: none"> <li>None</li> <li>Noncombustible insulation (mineral wool)</li> <li>Fiberglass insulation-</li> </ol>
Exterior Sheathing- Use either 1 or 2 (applies to Base Wall System 3)	<ol style="list-style-type: none"> <li><math>\frac{1}{2}</math>-inch-thick, exterior type gypsum sheathing complying with ASTM C1177</li> <li><math>\frac{5}{8}</math>-inch-thick Type X exterior gypsum sheathing complying with ASTM C1177</li> </ol>
Water-resistive barrier applied to exterior sheathing- Use either 1 or 2	<ol style="list-style-type: none"> <li>None (applies only to Base wall systems 1 and 2)</li> <li>Henry Blueskin<sup>®</sup> Self-Adhering Waterproofing Membrane or a water resistive barrier complying with IBC Section 1403.2 (2015, 2012, 2009 and 2006 IBC Section 1404.2) and meeting the following parameters when Item 2 in Exterior Insulation is used: <ul style="list-style-type: none"> <li>Flame-spread index of 25 or less and a smoke-developed index of 450 or less as determined in accordance with ASTM E84 or UL723.</li> <li>Peak heat release rate of less than 150 kW/m<sup>2</sup>, a total heat release rate of less than 20 MJ/m<sup>2</sup> and an effective heat of combustion of less than 18 MJ/kg as determined in accordance with ASTM E1354 and conducted on specimens at the thickness intended for use, in the horizontal orientation and at an incident radiant heat flux of 50 kW/m<sup>2</sup>.</li> </ul> </li> </ol>
Exterior Insulation- Use either 1 or 2	<ol style="list-style-type: none"> <li>None (applies only to Base Wall Systems 1 or 2)</li> <li>Minimum 2-inch thickness of any mineral wool insulation that meets the requirements of <a href="#">Table 3</a> of this report.</li> </ol>
Exterior Veneer	<p>StoneLite<sup>®</sup> veneer wall panels- Models Nos. SP-1-6-3, SP-1-10-3 or SP-1-10-7. Any stone veneer <math>\frac{3}{16}</math> to <math>\frac{1}{4}</math> inch thickness depending on type of stone.</p> <p>Note: Panels must be installed in accordance with the manufacturer's instructions and this report.</p>
Flashing of window, door, or other exterior wall penetrations	Openings must be framed with minimum 1/8-inch thick aluminum channel. Additionally, window, door and other exterior penetrations are permitted to be flashed with maximum 12-inch-wide (305 mm) self-adhering flashing.

For SI: 1 inch=25.4 mm.

TABLE 3—MINERAL WOOL INSULATION INSTALLATION REQUIREMENTS

Wall Component	Requirements
Mineral wool Insulation Installation Requirements	<ol style="list-style-type: none"> <li>1- Mechanical Attachment- Mineral wool insulation must be mechanically fastened to the wall surface using screws with minimum 1-inch diameter washers. Screws spacing must be such that one screw is located in each corner of each mineral wool batt as well as one pin located in the geometric center of each batt. All pins must be located nominally 2-inches in from the edge of the batt. Mineral wool batts shall be tightly fitted against adjacent batts and joints shall be staggered a minimum of one-half batt insulation width (minimum 12 inches).</li> <li>2- Friction Fit Attachment- When using aluminum channel standoff support system, the mineral wool batts can be friction fit between the vertical channels and additionally held in place by the horizontal hanging channels.</li> </ol>
Mineral Wool Specifications	<ol style="list-style-type: none"> <li>1- Mineral wool insulation must meet the requirements of ASTM C612.</li> <li>2- Mineral wool insulation must be unfaced</li> <li>3- Mineral wool insulation must be noncombustible when tested in accordance with ASTM E136</li> <li>4- The mineral wool insulation density must be a minimum of 4 pcf</li> <li>5- The R-value per inch for the mineral wool insulation must be a minimum of 3.45</li> <li>6- Mineral wool insulation must be installed as described above</li> </ol>

For SI: 1 inch=25.4 mm.

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 42 43—Composite Wall Panels

## REPORT HOLDER:

STONE PANELS INTERNATIONAL, LLC

## EVALUATION SUBJECT:

STONELITE® VENEER WALL PANELS

## 1.0 REPORT PURPOSE AND SCOPE

## Purpose:

The purpose of this evaluation report supplement is to indicate that StoneLite® Veneer Wall Panels, described in ICC-ES evaluation report [ESR-1500](#), have also been evaluated for compliance with the codes noted below as adopted by the Los Angeles Department of Building and Safety (LADBS).

## Applicable code editions:

- 2020 *City of Los Angeles Building Code* (LABC)

## 2.0 CONCLUSIONS

The StoneLite® Veneer Wall Panels, described in Sections 2.0 through 7.0 of the evaluation report [ESR-1500](#), comply with the LABC Chapters 8 and 14, and are subject to the conditions of use described in this supplement.

## 3.0 CONDITIONS OF USE

The StoneLite® Veneer Wall Panels described in this evaluation report supplement must comply with all of the following conditions:

- All applicable sections in the evaluation report [ESR-1500](#).
- The design, installation, conditions of use and identification of the veneer wall panels are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report [ESR-1500](#).
- The design, installation and inspection are in accordance with additional requirements of LABC Chapters 14, 16 and 17, as applicable.

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

# ICC-ES Evaluation Report

# ESR-1500 CBC Supplement

Reissued October 2023

*This report is subject to renewal October 2025.*

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**DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION**

**Section: 07 42 43—Composite Wall Panels**

## REPORT HOLDER:

**STONE PANELS INTERNATIONAL, LLC**

## EVALUATION SUBJECT:

**STONELITE® VENEER WALL PANELS**

## 1.0 REPORT PURPOSE AND SCOPE

### Purpose:

The purpose of this evaluation report supplement is to indicate that StoneLite® Veneer Wall Panels, described in ICC-ES evaluation report ESR-1500, have also been evaluated for compliance with the code noted below.

### Applicable code edition:

- 2019 *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) the and Division of State Architect (DSA), see Sections 2.1.1 and 2.1.2 below.

## 2.0 CONCLUSIONS

### 2.1 CBC:

The StoneLite® Veneer Wall Panels, described in Sections 2.0 through 7.0 of the evaluation report ESR-1500, comply with CBC Chapters 8 and 14, provided the design and installation are in accordance with the 2018 *International Building Code*® (IBC) provisions noted in the evaluation report and the additional requirements of CBC Chapters 16 and 17, 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.

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## ICC-ES Evaluation Report

## ESR-1500 FBC Supplement

Reissued October 2023

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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 42 43—Composite Wall Panels

### REPORT HOLDER:

STONE PANELS INTERNATIONAL, LLC

### EVALUATION SUBJECT:

STONELITE® VENEER WALL PANELS

### 1.0 REPORT PURPOSE AND SCOPE

#### Purpose:

The purpose of this evaluation report supplement is to indicate that StoneLite® Veneer Wall Panels, described in ICC-ES evaluation report ESR-1500, have also been evaluated for compliance with the codes noted below.

#### Applicable code edition:

- 2020 Florida Building Code—Building

### 2.0 CONCLUSIONS

The StoneLite® Veneer Wall Panels, described in Sections 2.0 through 7.0 of the evaluation report ESR-1500, comply with the 2020 Florida Building Code—Building. The design shall be in accordance with the 2020 Florida Building Code—Building. The installation requirements noted in ICC-ES evaluation report ESR-1500 for the 2018 International Building Code® meet the requirements of the Florida Building Code—Building, with the following condition:

- Clearance between exterior wall coverings and final earth grade must meet the requirements of Section 1403.8 of the Florida Building Code—Building.

Use of the StoneLite® Veneer Wall Panels for compliance with the High-Velocity Hurricane Zone provisions of the Florida Building Code—Building has not been evaluated, and is outside the scope of this evaluation report.

For products falling under Florida Rule 61G20-3, 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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