

ICC-ES Evaluation Report

ESR-3685

Reissued September 2020

This report is subject to renewal September 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 04 00 00—MASONRY

Section: 04 71 00—Manufactured Brick Masonry Section: 04 73 00—Manufactured Stone Masonry

REPORT HOLDER:

CREATIVE MINES, LLC

EVALUATION SUBJECT:

CREATIVE MINES ADHERED MASONRY VENEER

1.0 EVALUATION SCOPE

- 1.1 Compliance with the following codes:
- 2015 International Building Code® (IBC)
- 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:

- 2019 California Green Building Standards Code (CALGreen), Title 24, Part 11
- 2015, 2012 and 2008 ICC 700 National Green Building Standard™ (ICC 700-2015, ICC 700-2012 and ICC 700-2008)

Attributes verified:

See Section 3.0

2.0 USES

Creative Mines Adhered Masonry Veneer is used as an adhered, nonload-bearing exterior veneer on nonfireresistance-rated wood-framed or light gage steel stud walls, masonry walls and concrete walls.

3.0 DESCRIPTION

Creative Mines Adhered Masonry Veneer is a precast concrete product made to resemble natural stone or brick in color and texture. The concrete is comprised of cement, aggregate, water, admixtures and coloring. The veneer units are molded and cured at the plant. The average saturated weight of the installed veneer units does not exceed 15 pounds per square foot (73.2 kg/m²). Recognized patterns of veneer are listed in Table 1.

The attributes of the Creative Mines Adhered Masonry Veneer have been verified as conforming to the provisions of (i) CALGreen Section A5.406.1.2 for reduced maintenance; (ii) ICC 700-2015 and ICC 700-2012 Sections

602.1.6 and 11.602.1.6 for termite-resistant materials and Sections 601.7, 11.601.7, and 12.1(A).601.7 for site-applied finishing materials; and (iii) ICC 700-2008 Section 602.8 for termite-resistant materials and Section 601.7 for siteapplied 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. See Section 5.7 for limitations on termite-resistance use.

4.0 DESIGN AND INSTALLATION

4.1 General:

Installation of Creative Mines Adhered Masonry 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. The veneer may be applied over backings of cement plaster or over concrete or masonry walls.

4.2 Preparation of Cement Plaster Backing:

Cement plaster backings may be applied over plywood, OSB or gypsum sheathing, supported by wood or steel studs, or over masonry or concrete walls when installed as described in Sections 4.2.1 and 4.2.2, respectively.

4.2.1 Installation over Studs: The cement plaster backing must be installed over a water-resistive barrier complying with IBC Section 1405.10.1.1 or IRC Section R703.12.3, as applicable. Also, flashing must be installed as required by IBC Section 1405.10.1.2 or IRC Section R703.12.2, as applicable, and weep screeds must be installed at the bottom of the masonry veneer. The weep screeds must comply with, and be installed in accordance with, IBC Section 1405.10.1.2.1 or IRC Section R703.12.2, as applicable. In addition, the weep screeds must have holes with a minimum diameter of ³/₁₆ inch (4.8 mm) spaced at a maximum of 33 inches (838 mm) on center, as required by Section 12.1.6.2 of TMS 402/ACI 530/ASCE5, which is referenced in IBC Section 1405.10. The veneer must be installed with the clearances required by IBC Section 1405.10.1.3 or IRC Section R703.12.1, as applicable.

Studs must be spaced no more than 16 inches (406 mm) on center. Lath must be 2.5 lb/yd2 (1.4 kg/m2), self-furred metal lath conforming to ASTM C847. All lath must be installed over the water-resistive barriers by following the lath manufacturer's installation instructions. Lath must be fastened to each of the wall studs as required by ASTM





C1063 and 2015 IRC Section R703.7.1. Fasteners must be spaced a maximum of 6 inches (153 mm) on center.

A scratch coat of Type N mortar (cement plaster) complying with ASTM C926 must be applied over the lath to a thickness of $^{1}/_{2}$ inch (13 mm). The scratch coat must be allowed to cure in accordance with IBC Section 2512.6, prior to the application of the veneer units.

4.2.2 Installation over Concrete and Masonry: Lath must be minimum 2.5 lb/yd² (1.4 kg/m²), self-furred metal lath complying with ASTM C847. The lath must be fastened to the wall in accordance with Section 7.10 of ASTM C1063 and IRC Section R703.7.1, as applicable. The fasteners must be spaced a maximum of 6 inches (152 mm) on center vertically and 16 inches (406 mm) on center horizontally. The gravity load (shear capacity) and negative wind load (pull-out) capacity of the proprietary fasteners must be justified to the satisfaction of the code official. The scratch coat must be applied as described in Section 4.2.1.

4.3 Installation over Concrete and Masonry:

Installation over concrete and masonry must comply with 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 4.4. When adhering the veneer units to a lath and mortar scratch coat, the lathing and scratch coat preparation must comply with Section 4.2.2.

4.4 Application of Veneer Units:

A minimum ¹/₂-inch-thick (12.7 mm) setting bed of Type N mortar must be applied to the back of the veneer units, and the veneer units must be pressed firmly in place in accordance with the manufacturer's published installation instructions. Joints between veneer units must be grouted and tooled in accordance with the veneer manufacturer's published installation instructions.

5.0 CONDITIONS OF USE

The precast 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 between the manufacturer's published installation instructions and this report, this report governs.
- 5.2 Use of the precast stone veneer is limited to installations on walls with cement plaster backings and masonry or concrete walls.
- 5.3 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.
- 5.4 For installation in accordance with the IBC, the supporting wall must be designed to support the installed weight of the veneer system, including veneer, setting bed and cement plaster backing, as applicable. Horizontal framing members such as lintels and headers, which support the precast stone veneer, must be designed to limit deflection to 1/600 of the span of the supporting members.
- 5.5 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 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.
- 5.6 The precast stone veneer units are manufactured under a quality control system with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Adhered Manufactured Stone Masonry Veneer (AC51), dated January 2016.

7.0 IDENTIFICATION

- 7.1 Packaged precast stone veneer units are identified with the manufacturer's name (Creative Mines, LLC), the pattern name, the manufacturing date and location, and the evaluation report number (ESR-3685).
- **7.2** The report holder's contact information is the following:

CREATIVE MINES, LLC 5840 EL CAMINO REAL SUITE 106 CARLSBAD, CALIFORNIA 92008 (800) 453-7040 www.creativemines.us

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 International Building Code® (IBC)
- 2012 International Residential Code® (IRC)

The Creative Mines Adhered Masonry 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 2015 IBC and IRC, as described in Section 4.0.

TABLE 1—RECOGNIZED STYLES

PRODUCT	STYLES
Craft Adhered Masonry Veneer	River Ledge, Foothill Rubble, Farmhouse Ledge, Orchard Limestone, Peak Ledge, Urban Ledge, Board Form, Innerpiece, Split Modular, Flamed Rectangle, Carved Rectangle, Chiseled Rectangle, Loft Paint-grade Brick, Brewery Paint-grade Brick, Modern Paint-grade Block, Chop Ledge, Urban Rectangle, Broken Rubble, Urban Strip, Cannery Brick, Trail Ledge, Urban Kings, Warehouse Brick, Urban Square, Weathered Plank, Mountain Ledge, and Split Modular Panel



ICC-ES Evaluation Report

ESR-3685 CBC and CRC Supplement

Reissued September 2020

This report is subject to renewal September 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 04 00 00—MASONRY

Section: 04 71 00—Manufactured Brick Masonry Section: 04 73 00—Manufactured Stone Masonry

REPORT HOLDER:

CREATIVE MINES, LLC

EVALUATION SUBJECT:

CREATIVE MINES ADHERED MASONRY VENEER

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Creative Mines adhered masonry veneer, described in ICC-ES evaluation report ESR-3685, has also been evaluated for compliance with the codes and applicable chapters noted

Applicable code editions:

■ 2016 California Building Code® (CBC), Chapters 8, 14 and 21

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

■ 2016 California Residential Code® (CRC), Chapters 3 and 7

2.0 CONCLUSIONS

2.1 CBC:

The Creative Mines adhered masonry veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3685, complies with CBC Sections 803.1.1, 1404.4, and 2101.2, provided the design and installation are in accordance with the 2015 International Building Code® (2015 IBC) provisions noted in the evaluation report and the additional requirements of CBC Sections 1405.1.1, 1405.3 and 1411, as applicable.

2.1.1 OSHPD:

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

The applicable DSA Sections 1405.1.1 and 1411 of the CBC are beyond the scope of this supplement.

2.2 CRC:

The Creative Mines adhered masonry veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3685, complies with the flame spread and smoke developed requirements of CRC Section R302.9 and with CRC Section R703, provided the design and installation are in accordance with the 2015 International Residential Code® (2015 IRC) provisions noted in the evaluation report and the additional requirements of CRC Sections R301.1.3 and R702.7.

This supplement expires concurrently with the evaluation report, reissued September 2020.





ICC-ES Evaluation Report

ESR-3685 FBC and FRC Supplement

Reissued September 2020

This report is subject to renewal September 2021.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 04 00 00—MASONRY

Section: 04 71 00—Manufactured Brick Masonry Section: 04 73 00—Manufactured Stone Masonry

REPORT HOLDER:

CREATIVE MINES, LLC

EVALUATION SUBJECT:

CREATIVE MINES ADHERED MASONRY VENEER

1.0 REPORT PURPOSE AND SCOPE

Purpose:

The purpose of this evaluation report supplement is to indicate that Creative Mines Adhered Masonry Veneer, described in ICC-ES evaluation report ESR-3685, has also been evaluated for compliance with the codes noted below.

Applicable code editions:

- 2017 Florida Building Code—Building
- 2017 Florida Building Code—Residential

2.0 CONCLUSIONS

The Creative Mines Adhered Masonry Veneer, described in Sections 2.0 through 7.0 of the evaluation report ESR-3685, complies with the Florida Building Code—Building and the Florida Building Code—Residential, provided the design and installation are in accordance with the 2015 International Building Code® provisions noted in the evaluation report and 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 or the Florida Building Code—Residential, as applicable.

Use of the Creative Mines Adhered Masonry 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 evaluation 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).

This supplement expires concurrently with the evaluation report, reissued September 2020.

