

**Essential Information &
Order Specifications Form**

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ICC-ES Evaluation Report

ESR-3339

Reissued May 2019

This report is subject to renewal May 2021.
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A Subsidiary of the International Code Council®

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

REPORT HOLDER:
STONEMASTER™, INC.
EVALUATION SUBJECT:
STONEMASTER™ AND BUILDERSCHOICE™ STONE
1.0 EVALUATION SCOPE
1.1 Compliance with the following codes:

- 2012 *International Building Code*® (IBC)
- 2012 *International Residential Code*® (IRC)
- 2013 *Abu Dhabi International Building Code* (ADIBC)*

*The ADIBC is based on the 2009 IBC. 2009 IBC code sections referenced in this report are the same sections in the ADIBC.

- Other Codes (see Section 8.0)

Properties evaluated:

- Veneer strength and durability
- Surface burning characteristics

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

- 2016 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

StoneMaster™ and BuildersChoice Stone™ are used as adhered, non-load-bearing exterior veneer and as interior finish on non-fire-resistance-rated wood-framed or light gage steel stud walls, concrete walls or concrete masonry walls.

3.0 DESCRIPTION

The veneer is a precast concrete product made to resemble natural stone or adobe in color and in texture. The veneer is composed of cement, aggregate, water, admixtures and coloring. The veneer units are molded and cured at the plant. Recognized patterns are: Castle Rock, Cobble Stone, Cut Face, Fieldstone, Ledgestone, Limestone, Quickfit Stone, River Stone, Split Face, Stackstone, and Blends.

The veneer units are of various thicknesses, with the thickness averaging 3/4 inch to 1.85 inches (19 to 47 mm). The average saturated weight of the veneer units does not exceed 15 pounds per square foot (73.2 kg/m²).

The precast veneer has a Class A finish rating in accordance with IBC Section 803.1.1, and complies with the flame-spread and smoke-development requirements of IRC Section R302.9.

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 700-2015 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 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 INSTALLATION
4.1 General:

Installation of the StoneMaster and BuildersChoice precast 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. The veneer may be applied over backings of cement plaster, concrete or concrete masonry.

4.2 Preparation of Backing:

4.2.1 Cement Plaster Backing: Cement plaster backings may be applied over plywood, OSB or gypsum sheathing supported by wood or steel studs; over open wood or steel studs; over concrete walls; and over concrete masonry walls, when installed as described in Sections 4.2.1.1 through 4.2.1.3.

4.2.1.1 Installation over Sheathing: For exterior installations, the cement plaster backing must be installed over a water-resistive barrier complying with IBC Sections 1404.2 and 2510.6 or IRC Sections R703.2 and R703.6.3, as applicable. Also, flashing must be installed as required by IBC Sections 1405.4 and 1405.10.1.2 or IRC Sections R703.8 and R703.12.2, as applicable, and weep screeds must be installed at the bottom of the stone veneer. The weep screeds must comply with, and be installed in

accordance with, IBC Section 1405.10.1.2 or IRC Section R703.12.2, as applicable. In addition, the weep screeds must have holes with a minimum diameter of $\frac{3}{16}$ inch (4.8 mm) spaced at a maximum of 33 inches (838 mm) on center, as required by Section 6.1.6.2 of TMS 402/ACI 530/ASCE 5, which is referenced in IBC Section 1405.10. The veneer must be installed with the clearances required by IBC Section 1404.10.1.3 or IRC Section R703.12.1, as applicable.

Studs must be spaced no more than 16 inches (406 mm) on center. Lath must be corrosion-resistant, self-furred, 2.5 lb/yd² (1.4 kg/m²), diamond-pattern metal lath complying with ASTM C847, or 1.4 lb/yd² (0.760 kg/m²), corrosion-resistant, woven wire plaster base complying with ASTM C1032. The lath must be lapped in accordance with Section 7.8 of ASTM C1063. The lath must be fastened to the wall framing in accordance with the minimum requirements of Section 7.10 of ASTM C1063 or IRC Section R703.6.1, as applicable. In addition, fasteners must be spaced a maximum of 6 inches (152 mm) on center and must penetrate a minimum of 1 inch (25.4 mm) into wood framing. For steel studs, fasteners must be corrosion-resistant, self-tapping screws with a head diameter of $\frac{7}{16}$ inch (11.1 mm) and sufficient length to penetrate the studs a minimum of $\frac{3}{8}$ inch (9.5 mm).

A scratch coat of Type S mortar (cement plaster) complying with ASTM C926 must be applied over the lath to a minimum thickness of $\frac{1}{2}$ inch (12.7 mm). The scratch coat must be scored horizontally in accordance with the manufacturer's published installation instructions, and must be allowed to cure in accordance with IBC Section 2512.6, prior to the application of the veneer units.

4.2.1.2 Installation over Open Studs: For exterior installations, the cement plaster backing must be installed over a water-resistive barrier, flashing and weep screeds as described in Section 4.2.1.1. Studs must be spaced no more than 16 inches (406 mm) on center. Lath must be corrosion-resistant, 3.4 lb/yd² (1.8 kg/m²), $\frac{3}{8}$ -inch (9.5 mm) rib lath complying with ASTM C847. The lath must be fastened to wall framing and the scratch coat applied as described in Section 4.2.1.1.

4.2.1.3 Installation over Concrete and Masonry: The veneer units may be applied directly to concrete and masonry backing without lath, provided the concrete and masonry surface is clean. Where lath is used, it must be corrosion-resistant metal lath complying with ASTM C847, or 1.4 lb/yd² (0.760 kg/m²), corrosion-resistant, woven wire plaster base complying with ASTM C1032. The lath must be fastened to the wall in accordance with Section 7.10 of ASTM C1063, and IRC Section R703.6.1, 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 4.2.1.1.

4.2.2 Concrete and Masonry Backing: Concrete masonry and poured concrete wall surfaces must be prepared in accordance with Section 5.2 of ASTM C926, and IBC Section 2510.7, as applicable. Alternatively, a cement plaster backing may be installed as described in Section 4.2.1.3.

4.3 Application of Veneer Units:

Prior to the application of the veneer units, the scratch coat or other backing and the back of the veneer units must be

moistened in accordance with the manufacturer's instructions. A $\frac{1}{2}$ -inch-thick (12.7 mm) setting bed of Type S mortar is applied to the back of the veneer units, and the veneer units are pressed firmly in place, with the mortar squeezed out around all veneer unit edges. 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 StoneMaster™ and BuildersChoice Stone™ adhered veneers 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 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 installation on wood-framed, light-gage-steel-framed, concrete or concrete masonry 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 In jurisdictions adopting 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. At wall openings, the supporting members must be designed to limit deflection to $\frac{1}{600}$ of the span of the supporting members.
- 5.5 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 IRC Section R301.2.2.1, an engineered design of the wall construction must be performed in accordance with IRC Section R301.1.3.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Precast Stone Veneer (AC51), dated February 2008 (editorially revised April 2012).
- 6.2 Report of testing in accordance with ASTM E84.

7.0 IDENTIFICATION

- 7.1 Packaging of StoneMaster™ and BuildersChoice Stone™ products is identified with the manufacturer's name (StoneMaster™, Inc.), the product name, the manufacturing location and the evaluation report number (ESR-3339).
- 7.2 The report holder's contact information is the following:

STONEMASTER™, INC.
 15105-D JOHN J. DELANEY DRIVE, SUITE 26
 CHARLOTTE, NORTH CAROLINA 28277
 (704) 333-0353
www.builderschoicestone.com

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:

- 2009 *International Building Code*[®] (2009 IBC)
- 2009 *International Residential Code*[®] (2009 IRC)
- 2006 *International Building Code*[®] (2006 IBC)
- 2006 *International Residential Code*[®] (2006 IRC)

The StoneMaster™ and BuildersChoice Stone™ products described in this report comply with, or are suitable alternatives to what is specified in, the codes listed above, subject to the provisions of Sections 2.0 through 7.0 except as noted below:

Cement Plaster Backings: Revise the first paragraph of Section 4.2.1.1 as follows:

4.2.1.1 Installation over Sheathing: For exterior installations, the cement plaster backing must be installed over a water-resistive barrier complying with 2009 and 2006 IBC Sections 1404.2 and 2510.6 or 2009 and 2006 IRC Sections R703.2 and R703.6.3, as applicable. Also, flashing must be installed as required by 2009 IBC Section 1405.4 (2006 IBC Section 1405.3) or 2009 and 2006 IRC Section R703.8, as applicable, and weep screeds must be installed at the bottom of the stone veneer. The weep screeds must comply with, and be installed in accordance with, 2009 and 2006 IBC Section 2512.1.2 or 2009 and 2006 IRC Section R703.6.2.1, as applicable. In addition, the weep screeds must have holes with a minimum diameter of $\frac{3}{16}$ inch (4.8 mm) spaced at a maximum of 33 inches (838 mm) on center, as required by Section 6.1.5.2 of TMS 402/ACI 530/ASCE 5 (Section 6.1.5.2 of ACI 530/ASCE 5/TMS 402), which is referenced in 2009 IBC Section 1405.10 (2006 IBC Section 1405.9).



SPECIFICATIONS

Complies with all testing criteria of AC51.



Compressive Strength

1,800 psi to 3,000 psi
(ASTM C39 - 99ae1)

Tensile Strength

200,000 psi
(Average Tested)
(ASTM C190 - 1985)

Water Absorption

13% to 15%
(AC51 - 2008)

Flexural Strength

593 psi
(Average Tested)
(ASTM - C348 - 1986)

Fire Rating

Class A Interior Finish
FSI = 0, SDI = 10
(ASTM E84 - 10b)

Freeze/Thaw

Less than 3%
(ASTM C67 - 03ae01)

Weight

Approximate Shipping Weight
8 - 10 lbs. per square foot
(ASTM C567)

STONEMASTER, INC.

2949 S Ridge Avenue
Concord, NC 28025

www.BuildersChoiceStone.com

tel: 704-333-0353

fax: 866-352-9334



ADVANTAGES

A unique combination of factors that make BuildersChoice the best choice.



COLOR-CORE TECHNOLOGY

Color is one of the most important factors affecting customer satisfaction. With this in mind we use Bayer iron oxide pigments imported from Germany to produce the most natural color. Pigments are included in the base mix, as well as applied to the surface of the stone to create the most natural looking colors and protect against fading.

QUALITY INGREDIENTS

Even though more expensive, we use only the best ingredients to assure outstanding appearance and durability.



Bayer MaterialScience



TITAN
AMERICA



ROANOKECEMENT

HAND-MADE

Experienced stone craftsmen pay close attention to detail and quality control. By choice, we avoid a totally automated manufacturing approach as it lends itself to air gaps, color distortion, cracks, and potential mix inconsistencies.

NATURAL APPEARANCE

We use "single stone" molds so no discernable pattern is seen on the finished project. Careful selection of stones when creating molds further adds to natural appearance. Many budget products are made up of "flats" or panels that rarely achieve the most desirable outcome.

SELECTION

We offer four "Classic" styles; Stackstone, Split Face, Ledgestone, and Fieldstone and two "Prestige" styles; Southern Appalachian Ledgestone and Limestone. A variety of colors are available that may be mixed and customized. Use a single style or combination of multiple styles to create just the right look and feel.

FLEXIBILITY

For greater creativity custom styles and colors can be created. If you don't see it in our catalog provide a description of your desired stone and we will do everything possible to give you what you want.

INSPECTION AND AUDITS

All stone that leaves our facility has been inspected numerous times. And, an annual independent audit of our plant insures that we are in ICC process compliance.

STONEMASTER, INC.

2949 S Ridge Avenue
Concord, NC 28025

www.BuildersChoiceStone.com

tel: 704-333-0353

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StoneMaster™, Inc
BuildersChoice™ Manufactured Stone Products
50-year Limited Warranty

StoneMaster™ BuildersChoice Stone™ line of products carries a 50-year limited warranty when used on structures that conform to local building codes and when installed in accordance with the manufacturer's instructions.

This warranty stipulates that the products manufactured by StoneMaster™ will be free from defects in materials, manufacturing and workmanship. The warranty excludes damages from improper installation, abuse, misuse, negligence or damage resulting from fire, lightning, settlement or failure of the structure, wall movement, force contact, contact with chemicals or paint, discoloration due to airborne contaminants, staining or oxidation, efflorescence, or acts of God beyond the control of StoneMaster™ Inc.

This warranty does not apply to manufactured stone products, accessories or hearthstone products when used on surfaces such as decks, walkways, patios, uses for foot or auto traffic, or other improper uses of StoneMaster™ products. This Warranty is void if the products are misused, mishandled, altered, damaged or modified.

StoneMaster, Inc. will, at its option, 1) repair the defective product or component part; 2)replace the defective product or component part; or 3) reimburse the original purchase price of the defective product or component part. These remedies are the only remedies available for breach of warranty. StoneMaster, Inc. is not liable for any special, incidental and consequential damages, however occasioned, whether by negligence or otherwise, including, without limitation, labor costs to remove or replace defective products.

No distributor, dealer or representative of StoneMaster™, Inc., has the authority to change or modify this warranty either orally or in writing in any respect.

This warranty is extended only to the "original purchaser." The term "original purchaser" as used in this warranty, means the contractor, distributor, purchaser and the initial owner of the structure on which the product is installed. This warranty is not assignable or transferable to any other party. Any action for breach of this Warranty must be commenced within one (1) year after the cause of action has occurred.

StoneMaster™, Inc
2949 S Ridge Avenue
Concord, NC 28025
704-333-0353



Effective January 2011

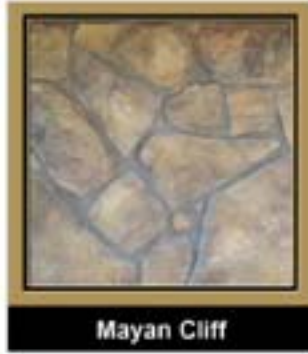
Fieldstone



Autumn Brown



Charleston

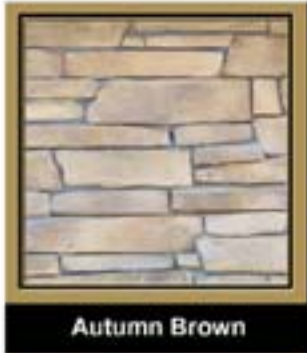


Mayan Cliff



Tennessee Mountain

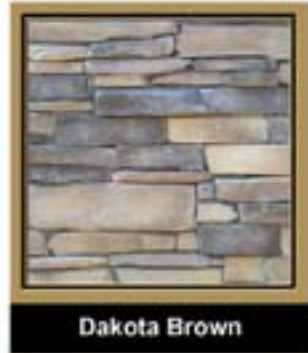
Ledgestone



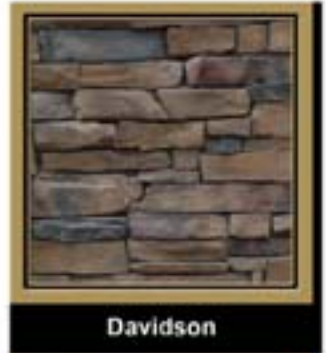
Autumn Brown



Black Rock



Dakota Brown



Davidson



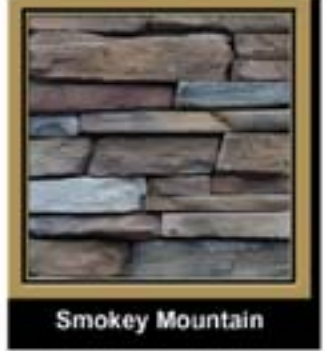
Lantana



Oklahoma Black



Sierra

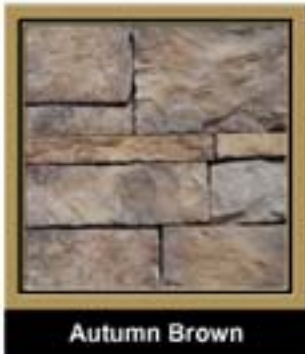


Smokey Mountain

Split Face



Asheville



Autumn Brown



Carolina



Castle Blend



Highlands Brown



Kentucky



Lantana



Oklahoma Black

Stackstone



Autumn Brown



Coastal Brown



Crab Orchard



Fall Meadows



Montego



Piedmont



Savannah



Smokey Mountain

Prestige
COLLECTION

Southern Appalachian
Ledgestone



Autumn Brown



Carolina



Coastal Brown



Lantana



Montana



Sierra



Smokey Mountain



Vermont Stream

Limestone



Mountain Island



Natural Tan



Corner Stone
 Available in all styles and colors

Accessories available in three colors
 Light Brown Dark Brown Black



Trim Stone
 6" x 8"



Sill
 Length 18"
 Depth 3.75"
 Thickness at base 2.375"
 Thickness at tip 2.125"



Light Box
 7.5" x 11"
 Hole
 4.125" Diameter



Light Box
 7.5" x 11"
 Opening
 4.25" x 4.25"



Receptacle
 4.875" x 6.875"
 Opening
 2.25" x 3.875"



Keystone
 Height 9.75"
 Top 7.75"
 Bottom 5.5"



Hearthstone / Flat Wall Cap
 14" x 20" | 19" x 20"
 22" x 22" | 24" x 24"
 2" Thick



Beveled Wall Cap
 12" x 19"
 2" Thick, 3" at Peak



Peaked Column Cap
 19" x 19"
 3" Thick, 4" at Peak



PROJECT: _____
CONTACT: _____

DATE: _____
NOTES: _____

STONE STYLE

FIELDSTONE

- Autumn Brown Charleston Mayan Cliff Tennessee Mountain

LEDGESTONE

- Autumn Brown Black Rock Dakota Brown Davidson
- Lantana Oklahoma Black Sierra Smokey Mountain

SPLIT FACE

- Asheville Autumn Brown Carolina Castle Blend
- Highlands Brown Kentucky Lantana Oklahoma Black

STACKSTONE

- Autumn Brown Coastal Brown Crab Orchard Fall Meadows
- Montego Piedmont Savannah Smokey Mountain

SOUTHERN APPALACHIAN LEDGESTONE

- Autumn Brown Carolina Coastal Brown Lantana
- Montana Sierra Smokey Mountain Vermont Stream

LIMESTONE

- Mountain Island Natural Tan

CUSTOM / BLEND

ACCESSORIES

- Corner Stone Sill Recepticle Keystone
- Trim Stone Light Box Hearthstone Cap Stone

COMMENTS

OFFERED BY: _____
CONTACT: _____

