

Product Evaluation

EC21 | 0422

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-21

Effective Date: April 1, 2022

Re-evaluation Date: April 2026

Product Name: Cultured Stone®, ProStone®, or Cultured Brick® Manufactured Stone Veneer

Manufacturer: Westlake Royal Building Products™
2801 Post Oak Blvd
Suite 600
Houston, TX 77056
(855) 769-2585

General Description:

Cultured Stone®, ProStone®, and Cultured Brick® are precast manufactured stone made from Portland cement, an aggregate formulation, and mineral oxide agents to resemble natural stone in color and in texture. The stone products are used as non-loadbearing exterior veneer.

Limitations:

Design Pressure: +110 psf / -70 psf

Wall Bracing: The Cultured Stone®, ProStone®, or Cultured Brick® manufactured stone is not to be used to resist lateral loads (must not be used as wall bracing or as a shearwall).

Installation:**General Installation Requirements:**

The stone veneer must be installed in accordance with the "Installation Guide and Detailing Options for Compliance with ASTM C1780 for Adhered Manufactured Stone Veneer" issued by the National Concrete Masonry Association (NCMA), referred to as 'Installation Guide' in this evaluation report, and this product evaluation report. Where differences occur between the Installation Guide and this evaluation report, this evaluation report must be followed.

All fasteners must be corrosion resistant in accordance with IRC and IBC requirements.

Wall Framing: Wall framing must be capable of resisting the design loads specified. Wall framing members must be minimum nominal 2x4 Spruce-Pine-Fir dimension lumber. Space the wall framing members a maximum of 16" on center.

Wall Sheathing: The exterior surface of the wall framing must be sheathed with wood structural panels (either minimum 1/2" plywood or minimum 7/16" OSB). The sheathing must be secured to the wall framing to resist the required wind loads.

Wall Bracing: Wall bracing must be installed as required for the structure.

Water-Resistive Barrier: Install two layers of a water-resistive barrier (WSB) over the wall sheathing in accordance with either IRC requirements or IBC requirements. The WRB must be installed as specified in the Installation Guide.

Lath: The lath must be minimum 2.5lb/yd² corrosion resistant diamond mesh conforming to ASTM C847. The lath is applied over the water-resistive barrier oriented with cups up to retain the mortar in accordance with the manufacturer's installation instructions. The lath is secured to the wall studs with minimum 0.120" smooth shank corrosion resistant nails with a minimum 7/16" diameter head. The fasteners must have a sufficient length to penetrate into the wall studs a minimum of 1". The fasteners must be spaced a maximum of 6" on center vertically along each wall stud.

Mortar: Mortar to be comply with one of the following:

- Type N or Type S of Specification C270
- Type N or Type S of Specification C1714
- ANSI A118.1-2013.1, ANSI A118.4-2013.1, or ANSI A118.15-2012.1

The mortar must be mixed to a firm, moist consistency. Mortar that is too wet will be weak and messy. Mortar that is too dry and crumbly will not provide a proper bond.

Stone Installation: Using a notched trowel, apply an average thickness of 1/2" scratch coat or mortar over the metal lath. Apply setting bed mortar to wall, back butter stone, or both. Do not apply more mortar to the wall than a workable area given weather conditions. Apply pressure to the stone to ensure a good bond. Ensure complete contact between the mortar bed and the back

surface of the stone. Install the corner pieces first. Stone may be applied either from the bottom up or from the top down, working from the corners to the center.

If the stone is being applied in extremely hot or dry weather, then the back of each stone and the surface to which it is being applied must be moistened with a fine spray of water. The stone must not be applied in below freezing temperatures.

Note: Keep the manufacturer's installation instructions available on the job site during the installation. Use corrosion resistant fasteners as specified in the IRC and the IBC.