



Product Information

Product Description

DecoStone Handcrafted Natural Stone is applied to vertical surface exteriors and interiors of commercial buildings. Once applied at 5/8-inch to 1 1/4-inch thickness, the product is crafted into various stone patterns, textures and colors that closely resemble quarried stone patterns and pigments. The finished product delivers a highly durable, flexible and aesthetically appealing stone solution at a value engineering price without needing to meet structural load engineering requirements of quarried or cement based manufactured stone veneer.

Composition

DecoStone Handcrafted Natural Stone product is a proprietary blend of natural hydraulic lime, domestic natural stone and other ingredients.

Weight

The DecoStone product is typically applied at an average 5/8-inch thickness and weighs approximately 6 pounds per square foot.

Performance Specifications – All Certified by Intertek

ASTM E84 – Class A

Flamespread Index: 0

Smoke Developed Index: 0

ASTM C170

Compression Strength: >1,800 lbs psi

ASTM D7234

Pull-Off Adhesion Strength: >50 lbs psi

Warranty

DecoStone provides a 24-month warranty on installation and a 20-year warranty on product to be free from defects not related to structural movement, damage caused by abuse or due to force majeure.

Installation

For most new construction projects, the product is applied on exterior moisture/mold resistant sheathing material such as DensGlass, oriented strand board (OSB) and in some cases plywood. In addition, the following two materials are applied by our installation crews prior to application of the product.

1. **Two-Ply Super Jumbo Tex Weather-Resistive Barrier**
The weather resistive barrier delivers 15 times the water resistance requirement for standard Grade "D" paper, greatly exceeding minimum code requirements. Two-Ply Super Jumbo Tex is comprised of two layers of asphalt-saturated building paper. Dual layers result in better sealing around attachment fasteners and better building envelope integrations. It provides the ideal balance between water protection and vapor permeability. The product also reduces air filtration in exterior walls, contributing to energy savings.
2. **ClarkDietrich 2.5-lbs (per square yard) Galvanized Steel Self-Furring Dimple Lath**
The lath is manufactured with evenly spaced indentations that hold the lath ¼" away from the weather barrier and substrate surface.

For renovation and rehab projects, the DecoStone Handcrafted Natural Stone system can be applied directly to brick, tilt-wall, concrete or CMU. This is a significant advantage of the DecoStone Handcrafted Natural Stone solution given it eliminates or diminishes demolition requirements.

Application Process

1. **Substrate Preparation:**
A clean, stable substrate is the most important factor in proceeding with an application. Improper substrate often leads to improper application.

The DecoStone product can be applied directly to any masonry surface (e.g., brick, stone, cinder block) as long as the surface is sufficiently porous. If insufficiently porous, the surface often can be power washed or sand blasted to scour.

A proper substrate on non-masonry application is wood or fiberglass base (OSB, Dens-Glass) followed by a layer of Jumbo-Tex Weather Resistance Barrier and metal lath.

Control joints on large surfaces will be treated with Poly caulking BASF MasterSeal NP1 one component, elastomeric, gun-grade polyurethane sealant.
2. **Product Preparation:**
The DecoStone product is packaged in 66-pound bags and is mixed in a mortar mixer with 4-5 quarts of water per bag of product. The mixing process requires approximately 4-5 minutes.
3. **Application of the Product:**

The product is applied in one pass depending on the desired stone pattern, which determines the amount of product thickness to be applied. The standard product thickness is 5/8-inch.

The product is applied through a spray method using a hand held three-hole hopper gun with a minimum of 120 PSI compressed air. The distance between the nozzle and the substrate is no more than 6 inches.

Each 66-pound bag will cover an area of approximately 10 square feet, depending on the pattern chosen. Patterns requiring a depth in excess of 5/8-inch may require multiple product application passes and can reduce daily installation area coverage and productivity.

4. Set-up Timeline and Carving:

Once applied, the product requires 1-2 hours to firm up to a point that it can be carved or scraped. Upon initial point of carving and depending on climate conditions, the window of time to carve and handcraft the finished product can be up to 10 hours.

5. Color:

The color is natural iron oxide pigments diluted in water. Upon application, the pigment is absorbed into the stone and as the stone cures, water is evaporated and the pigments become a permanent part of the stone imbedding into its porous nature.

Color can be applied using three different methods:

- a. Pre-mixing the iron oxide pigments into the product prior to preparation
- b. Applying using a standard spray gun during the firm up stage prior to carving
- c. Upon completion of carving by applying specific colors to specific stones in the pattern

An unlimited variation in colors is available. Color is not recommended to be applied beyond a 72-hour period of the initial application of the product.

6. Cure Period:

The initial set for the product is 8 hours with an intermediate cure period of 24-72 hours. The product reaches its maximum hardness in 21 days from initial application. Early stage curing is determined by climate conditions. The intermediate cure period is defined by being solid to any force within reason. Although not necessary, sealant (Okon S-40) can be applied after the intermediate cure period for additional water repellent protection.