ArcusStonecoat™

Product Data Sheet

9-1-18

Product Description

A dry mix of crushed limestone, white Portland cement, sand, and various polymers, integrally colored using powdered mineral oxide pigments. It is suitable for interior, exterior, vertical and horizontal applications, wet locations such as shower surrounds and water features such as fountains. Product is available in 15 standard colors and can be custom colored to match virtually any color.

Uses

- As a decorative coating that replicates the look of quarried stone or other stone-like finishes
- Coating EPS foam shapes and panels
- Creating cast elements using EPS, rubber, or other molds
- For poured in place or cast countertops

Packaging

50 lb. bag

Coverage

One 50 lb bag will cover 15 sq. ft. @ 3/8" thickness.

Limitations

Do not apply to unstable or unapproved substrates such as asphalt. Do not apply directly over elastomeric or acrylic EIFS type finish coats. Do not apply directly to wood, GFRC, PVC, ABS, urethane, or other plastics. Do not apply to sheet metal or other metal or steel.

Technical Data

Application

Product is usually applied by trowel using a two-coat application method. It can also be sprayed and then back troweled.

Climatic and Environmental

Apply only if temperature is over 40º F (4.5º C) and rising, and less that 100º F (38º C). Do not apply to frozen or thawing substrates. Use sun shades and wind screens to protect material during initial cure. Unless work can be adequately protected form direct contact with precipitation, do not apply if precipitation is expected within 48 hours of application.

Substrate Preparation

ArcusStone Bonding Agent is required for most ArcusStone material applications. Thoroughly review the ArcusStone Substrate Preparation Section for the use of Bonding Agent. Do not use Bonding Agent for ArcusStonecoat over concrete on grade, retaining walls, or horizontal wet location applications where block pattern joints are to be left without a backfill of material in the joints. Refer to ArcusStone Technical Drawings for detailed substrate preparation requirements for the substrates listed.

Mixing

Material is typically mixed using 5 or 6-gallon plastic buckets.

- Place 3.5 quarts (14 cups) of cool potable water in a clean plastic bucket
- Add pigment to the water
- Blend in dry material gradually, using a low speed mixing drill.

Add small amounts of clean water to a desired consistency. Let material set for approximately 10 minutes, and then remix for 90 seconds before using. As with all products that contain colored pigments, the amount of water will effect the drying/curing time, which in turn effects the final color. It is very important to use the same amount of water in all batches.

General Application Procedures

Two coats are required to achieve the 3/8" thickness when using a trowel. Apply first coat to an approximate thickness of 3/16", with moderate trowel pressure, and allow to take up until firm enough to not leave a significant depression when pressed with fingertips. Apply second coat with less trowel pressure, to a total nominal thickness of about 3/8". After second coat has taken up like the first, material is ready for finishing.

Clean Up

Immediately clean tools and inadvertent applications with water and scrub brush, rinsing with clean water. If allowed to dry, mechanical means may be necessary to remove material.

Maintenance and Sealing

Product is required to be sealed with a water repellent type penetrating sealer when installed on exteriors in extreme climate areas subject to higher freeze/thaw cycles, or higher and more constant UV exposure, or higher altitudes, or higher humidity, subtropical and tropical locations. It is also required to be sealed with a penetrating water repellent type sealer when installed in wet locations, water features, countertops, and all exterior horizontal applications. An additional application of a commercial grade top coat sealer is strongly recommended for countertops, Bar-B-Q tops, bath, kitchen, garage floors, driveways, walkways, patios, and other applications where it is anticipated that there will be heavier exposure to grease and staining from other sources. It is also strongly recommended but not required to seal all other exterior applications to help ensure protection from efflorescence formation due to damp rainy environments, UV light fade, graffiti, caustic chemicals, or staining from acid rain, tree sap, bird or animal droppings.

Storage

Store on pallets under cover, not exposed to weather. Do not stack more than 2 pallets high. Do not allow contact with liquids or precipitation. Store in a cool place out of direct sunlight.

Shelf Life

Rotate stock. Product has a 1 year or more shelf life in unopened bags from stamped date of manufacture.

Technical Support

For questions concerning this product or its use, contact ArcusStone Technical Services at (415) 339-4060.

Warranty

ArcusStone Products LLC warrants that at the time of product shipment it will be in conformance with current published specifications.

ArcusStonecoat™ Test Results

Test Conducted	Standard	Results
Compressive Strength, psi	ASTM C-109	7 Day - 4316 28 Day -5805
Flexural Strength, psi	ASTM C-348	7 Day – 846 28 Day -1043
Tensile Strength, psi	ASTM C-190	7 Day - 409 28 Day -561
Coefficient of Friction Dry - 0.90 Wet – 0.87 Frictional Force, lbf (1)	ASTM C1028	
Freeze/Thaw (2)	ICC-ES AC-11 Section 4.2	Under 5X magnification, there was no indication of cracking, checking, or crazing
Water Resistance (3)	ASTM D870-02	Slight color change, no blistering, crumbling or disintegration
Water Vapor Transmission (4)	ASTM E96-00	3 Perms at a rate of 19 grams/m2/24 hours
Non combustibility (5)	ASTM E136-04	Passed – no burning
Flame Spread / Developed Smoke (6)	ASTM E84-07	0 Flame 0 Developed Smoke

(1) Rougher surfaces have higher values. Most dry materials in combination have friction coefficient values between 0.3 and 0.6. A zero value would mean no friction. Teflon® has a coefficient of 0.04. Rubber can yield coefficients from 1.0 to 2.0.

(2) Samples subjected to 10 freeze/thaw cycles consisting of air drying at 120º F for 8 hours, total immersion in water at 70º F for 8 hours, then exposure to -20º F for 16 hours.

(3) Specimens were immersed in 100º F water to approximately ¾ of their length for 24 hours, and then observations were made.

(4) Water vapor transmission is comprised of Permeability, which is the *rate* at which water vapor will pass through a material, and Permeance (perms), which is how the results of vapor transmission (permeability) are measured. The lower the number, the less vapor will come through.

(5) Samples subjected to vertical tube furnace temperatures of 1382º F. Test criteria included the requirement that there shall be *no* flaming from the specimens after the first 30 seconds.

(6) This test procedure comparable to UL 723, ANSI/NFPA No. 255, and UBC No. 8-1.