

### PRODUCT DESCRIPTION

Stonglaze VSM is a three-component, 100% solids, epoxy mortar material that is impact and chemical resistant. For use on vertical surfaces.

### USES, APPLICATIONS

Stonglaze VSM is specifically designed for general service vertical applications where impact problems exist. Typical applications for Stonglaze VSM are:

- Walls in heavy industrial areas requiring additional impact, abrasion and chemical resistance
- Vertical surfaces of concrete curbs and machinery bases
- Patching of deteriorated, cementitious industrial walls
- Walls of drainage trenches
- As a wainscot in industrial areas for added durability

### OPTIONAL FINISHES

Stonglaze VSR: A smooth, high performance wall system

Stonkote HT4: A high solids, epoxy coating with increased chemical resistance

Stonkote GS4: A high solids, general service epoxy coating

Stonglaze VSE: A secure, waterproof urethane wall system

### PRODUCT ADVANTAGES

- Durable mortar trowels to an attractive finish
- Long-term protection against chemical attack. Lightweight; adheres to vertical surfaces without slumping
- Excellent abrasion and impact resistance

### PACKAGING

Stonglaze VSM is supplied as a pre-measured unit for easy handling to eliminate on-site proportioning. Each unit consists of:

2 cartons each containing:

- 4 foil bags of Part A (curing agent)
- 4 poly bags of Part B (resin)

8 individual bags of Part C (aggregate)

### COVERAGE

Each unit of Stonglaze VSM will cover approximately 200 sq. ft./18.6 sq. m at 1/8 in./3 mm thickness.

### PHYSICAL CHARACTERISTICS

Compressive Strength . . . . .	6,500 psi after 7 days (ASTM C-579)
Tensile Strength . . . . .	1,000 psi (ASTM C-307)
Flexural Strength . . . . .	3,200 psi (ASTM C-580)
Flexural Modulus of Elasticity . . . . .	1.2 x 10 <sup>6</sup> psi (ASTM D-790)
Hardness . . . . .	75 to 80 (ASTM D-2240, Shore D)
Indentation . . . . .	no indentation (MIL-D-3134F)
Linear Coefficient of . . . . .	1.2 x 10 <sup>-5</sup> mm/mm-°C
Thermal Expansion (ASTM C-531)	
Working Time @ 75°F/24°C . . . . .	25 to 35 minutes (ASTM C-308)
Initial Set @ 75°F/ 24°C . . . . .	3 1/2 hours
Curing Time . . . . .	8 hours at 77°F/25°C
Impact Resistance . . . . .	Exceeds 160 in.-lbs. (ASTM D-2794)
V.O.C. . . . .	5 g/l (ASTM D-2369)

**Note:** The above physical properties were measured in accordance with the referenced standards. Samples of the actual floor system, including binder and filler, were used as test specimens.

### SUBSTRATES/PREPARATION

When used in conjunction with Stonset Primer, Stonglaze VSM is suitable for use over wall board, wood, metal and concrete substrates. These substrates must be clean, dry, and free of any laitance or unbonded materials.

Any wall board surface must be finished to a level 1,2, or 3 dry-wall finish with an appropriate spackle compound (green board and cement board will require water resistant drywall compound or setting compound). **To ensure excellent, long term performance, it is critical that Stonglaze VSM is never installed over a level 4 or 5 drywall finish.**

Concrete block walls (CMU) must be given sufficient time for the mortar to fully cure. Excess mortar and any residual laitance or debris must be removed by mechanical means prior to installing Stonglaze VSM.

Formed or poured concrete walls must be prepared by mechanical means to remove any laitance or efflorescence and provide a sandpaper texture suitable for bonding.

### STORAGE CONDITIONS

Store all components of Stonglaze VSM between 65° to 85°F/18° to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life is 3 years in the original, unopened container.

### PRIMING

Stonset Primer must be applied to the prepared surface before installing the Stonglaze VSM. The primer must remain tacky and not set prior to the application.

### MIXING

Empty entire contents of one foil bag Part A (liquid) and one poly bag Part B (liquid) into a mixing pail.

Place the mixing pail on a JB Power Blender and set timer to 60 seconds. Activate the timer to start blending.

When the blender stops, reactivate the timer and immediately pour the entire contents of one bag of Part C aggregate into the rotating pail. Allow the contents to mix for the complete cycle.

When the blender stops, scrape off excess from mixing blade and remove pail, delivering it to the area for application.

### APPLYING

Application of Stonglaze VSM, which begins immediately after mixing, may be accomplished by hand-troweling. Spread the Stonglaze VSM evenly over the prepared primed surface using a flexible spatula or steel trowel to build-up low spots. Using a 3 in. x 12 in. or a 3 in. x 7 1/2 in. steel finishing trowel, trowel the Stonglaze VSM to a smooth, dense finish. This finishing must be done as soon as possible, but no more than 30 minutes after spreading.

**Note:** A damp sponge can be used to remove trowel marks and imperfections.

### CURING

Stonglaze VSM will be tack-free in 8 hours at 77°F/25° C, and may be coated at this time. Ultimate physical characteristics will be achieved in 7 days.

### RECOMMENDATIONS

- DO NOT attempt to install material if temperature of Stonclad GS components are above 85°F/30°C. High temperatures will cause material to harden more quickly than desired.
- DO NOT attempt to install if temperature of Stonglaze VSM components are below 65°F/18°C. Low temperature will cause the material to be stiff and difficult to apply.
- DO NOT use steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- Application equipment must be cleaned immediately after use with scouring pads and warm soapy water or mineral spirits.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation.

### NOTES

- Procedures for maintenance of the flooring system during operations are described in the Stonkleen Floor Cleaning Procedures Brochure.
- Safety Data Sheets for Stonglaze VSM are available on line at [www.stonhard.com](http://www.stonhard.com) under Products or upon request.
- A staff of technical service engineers is available to assist with installation, or to answer questions related to Stonhard's products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.
- The appearance of all floor, wall and lining systems will change over time due to normal wear, abrasion, traffic and cleaning. Generally, high gloss coatings are subject to a reduction in gloss, while matte finish coatings can increase in gloss level under normal operating conditions.
- Surface texture of resinous flooring surfaces can change over time as a result of wear and surface contaminants. Surfaces should be cleaned regularly and deep cleaned periodically to ensure no contaminant buildup occurs. Surfaces should be periodically inspected to ensure they are performing as expected and may require traction-enhancing maintenance to ensure they continue to meet expectations for the particular area and conditions of use.

#### IMPORTANT:

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