STONHARD

STONBLEND® GSI

PRODUCT DESCRIPTION

Stonblend GSI is a nominal 5 mm flooring system that offers a cost-effective alternative to terrazzo. It combines decorative looks with excellent chemical, wear, stain and UV resistance. It is comprised of:

Stonblend Primer

A two-component, penetrating, epoxy primer

Stonblend GSI Base

A three-component, troweled mortar consisting of epoxy resin, curing agent and colored quartz silica aggregate

Stonblend Groutcoat

A two-component, clear, epoxy sealer

Stonkote CE4

A two-component, clear, leveling epoxy sealer

Stonseal CF7

A two-component, clear flat, high performance, water-based, VOC compliant polyurethane coating

SYSTEM OPTIONS

Waterproofing

To ensure that the entire system is watertight, the use of Stonhard's Stonproof ME7 membrane is required with strict adherence to application instructions.

Cove Base

To provide for an integral seal at the joint between the floor and the wall, cove bases in heights from 5 to 15 cm may be specified.

PACKAGING

Stonblend GSI is packaged in units for easy handling. Each unit consists of:

Stonblend GSI Base

2 cartons, each containing:

6 foil bags of Amine

6 poly bags of Resin

12 individual bags of part C aggregate

Stonblend Groutcoat

I carton containing:

2 foil bags of Amine

2 poly bags of Resin

Stonkote CE4

 $0.25\ carton,\ I\ carton\ containing:$

6 foil bags of Amine

6 poly bags of Resin

Stonseal CF7

I carton containing:

I foil bags of Isocyanate

(I) I gallon pail of Polyol

PHYSICAL CHARACTERISTICS

 $\begin{array}{lll} \mbox{Compressive Strength} & \mbox{40 N/mm}^2 \\ \mbox{(ASTM C-579)} & \mbox{after 7 days} \\ \mbox{Tensile Strength} & \mbox{10 N/mm}^2 \\ \end{array}$

(ASTM C-307)

Flexural Strength 15 N/mm²

(ASTM C-580)

Flexural Modules of Elasticity $3.4 \times 10^3 \text{ N/mm}^2$

(ASTM C-580)

Hardness 85 to 90

(ASTM D-2240, Shore D)

Impact Resistance > 18 Nm

(ASTM D-2794)

Abrasion Resistance 0.05 gm* max. weight loss

(ASTM D-4060, CS-17)

Flammability Class I

(ASTM E-648)

Thermal Coefficient of

Linear Expansion 1,8 x 10⁻² mm/m°C

(ASTM C-531)

VOC content Stonblend Primer – 75 g/L
(ASTM D-2369, method E) Stonblend GSI Base – 17 g/L

Stonblend Groutcoat – 52 g/L Stonkote CE4 – 34 g/L

Stonseal CF7 – 47 g/L (Method C)

Cure rate 12 hours for foot traffic (@ 77°F/25°C) 24 hours for normal operations

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. All sample preparation and testing is conducted in a laboratory environment, values obtained on field applied materials may vary and certain test methods can only be conducted on lab made test coupons.

COVERAGE

Each unit of Stonblend GSI will cover approximately $18.6\ m^2$ of surface at a nominal $5\ mm$ thickness.

USGBC LEED RATING

Stonclad GSI meets the requirements of LEED;

- MR Credit I Building Reuse
- MR Credit 2 Construction Waste Management
- IEQ Credit 4 Low Emitting Materials
- VOC content of the total system < 100 g/l

COLOR

Stonblend GSI is available in 12 standard colors. Refer to the Stonblend color sheet. Custom colors are available upon request

STORAGE CONDITIONS

Store all components of Stonblend GSI between 16 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 except for Stonseal CF7 which is one year.

SUBSTRATE

Stonblend GSI, with the appropriate primer, is suitable for application over concrete, wood, brick, quarry tile, metal or Stonhard Stonset grouts. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard's representative or Technical Service.

SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond and system performance. The substrate must be dry and properly prepared utilizing mechanical methods. Questions regarding substrate preparation should be directed to your local Stonhard's representative or Technical Service.

PRIMING

The use of Stonblend primer is necessary for all applications of Stonblend GSI. The Stonblend primer must be tacky during the application of Stonblend GSI. If the primer becomes tack-free, the area must be re-primed prior to continuing the application.

MIXING

- Proper mixing is critical for the product to exhibit the proper application properties, cure properties and ultimate physical properties.
- Mechanical mixing using a JB Blender (or equivalent 20 Liter pail mixer) or a larger mortar mixer (e.g., a Baugh 3 Batch Mixer) is required.
- See Stonblend GSI Directions for further details.

APPLYING

- DO NOT attempt to install material if the temperature of Stonblend GSI components and substrate are not within 16 to 30°C. The cure time and application proper ties of the material are severely affected at temperatures outside of this range.
- Material must be applied immediately after mixing.
- A suitable screed applicator is used to distribute the mixed Stonblend GSI onto the floor.
- Steel finishing trowels are used to compact and smooth the surface of the material to the required thickness.
- Two coats of Stonblend Groutcoat are applied to the floor wet on wet and are allowed to cure.
- Stonkote CE4 is applied to the floor and allowed to cure.
- Two coats of Stonseal CF7 is applied to the floor and allowed to cure.
- Detailed application instructions can be found in the Stonblend GSI Directions.

NOTES

- Procedures for cleaning of the flooring system during operations can be found in the Stonhard Floor Maintenance Guide.
- Specific information regarding chemical resistance is available in the Stonblend Chemical Resistance Guide.
- Material Safety Data Sheets for Stonblend GSI are available online at 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 products.
- Requests for literature can be made through local sales representatives and offices, or corporate offices located worldwide.

CE MARKING

The harmonized European Standard EN 13813 "Screed material and floor screeds- Screed materials - Properties and requirements"specifies the requirements for screed materials for use in floor construction internally. Resinous flooring systems as well as resinous screeds fall under this specification they have to be CE-labeled as per Annex ZA., Table ZA.1.5 and 3.2 and fulfill the requirements of the given mandate of the Construction Products Regulation no. 305/2011



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Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet)

*CRG: see Stonhard Chemical Resistance Guide

IMPORTANT:

Stonhard believes the information contained here to be true and accurate as of the date of publication. Stonhard makes no warranty, expressed or implied, based on this literature and assumes no responsibility for consequential or incidental damages in the use of the systems described, including any warranty of merchantability or fitness. Information contained here is for evaluation only. We further reserve the right to modify and change products or literature at any time and without prior notice.



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