



### PRODUCT DESCRIPTION

Stonblend GSI is a nominal 3/16 in./5 mm flooring system that offers a cost-effective alternative to terrazzo. It combines decorative looks with excellent chemical and wear resistance and cleanability. Its surface provides a moderate degree of slip resistance while remaining resistant to staining, marring, and yellowing. It is comprised of:

#### **Stonblend Primer**

A two-component, penetrating, UV resistant epoxy primer

#### **Stonblend GSI Base**

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

#### **Stonblend Grout Coat**

A two-component, clear, UV resistant epoxy sealer

#### **Stonshield Sealer**

A two-component, clear UV resistant, leveling epoxy sealer

#### **Stonseal GS7 Clear Flat**

A two-component, non-reflective, waterborne, aliphatic polyurethane coating

### USES, APPLICATIONS

Applications vary from light manufacturing, such as food and pharmaceutical processing, to laboratories, hallways, offices and holding areas in healthcare, educational and correctional facilities. Its easy-to-maintain, low gloss finish enhances Stonblend GSI's appeal wherever functional, attractive flooring is required.

### SUBSTRATE

Stonblend GSI, in conjunction with its appropriate primer, is suitable for application over properly prepared concrete, wood or steel surfaces. Not recommended for use over asphalt, mastic, gypsum based products, brick or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to priming and overlayment.

### PHYSICAL CHARACTERISTICS

<b>Compressive Strength</b> . . . . .	6,000 psi
(ASTM C-579)	after 7 days
<b>Tensile Strength</b> . . . . .	1,500 psi
(ASTM C-307)	
<b>Flexural Strength</b> . . . . .	2,200 psi
(ASTM C-580)	
<b>Flexural Modulus of Elasticity</b> . . . . .	5.0 x 10 <sup>5</sup> psi
(ASTM C-580)	
<b>Hardness</b> . . . . .	85 to 90
(ASTM D-2240, Shore D)	
<b>Bond Strength</b> . . . . .	>250 psi
(ASTM D-7234)	
<b>Impact Resistance</b> . . . . .	>160 in./lbs.
(ASTM D-2794)	
<b>Abrasion Resistance</b> . . . . .	0.06 gm max. weight loss
(ASTM D-4060, CS-17)	
<b>Slip Resistance Index</b> . . . . .	Dry 0.81
(ASTM F-1679)	Wet 0.56
<b>Flammability</b> . . . . .	Self-extinguishing
(ASTM D-635)	Extent of burning 0.25 in. max.
<b>Thermal Coefficient of</b>	
<b>Linear Expansion</b> . . . . .	1.8 x 10 <sup>-5</sup> in./in.°C
(ASTM C-531)	
<b>Water Absorption</b> . . . . .	0.2%
(ASTM C-413)	
<b>Heat Resistance Limitation</b> . . . . .	140°F/60°C
	(for continuous exposure)
	200°F/93°C
	(for intermittent spills)
<b>Cure Rate</b> . . . . .	16 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.

### OPTIONS

#### **Waterproofing**

To ensure that the entire system is watertight, the use of Stonhard's Stonproof ME7 membrane system 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 2 to 6 in./5 to 15 cm are available.

### **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 curing agent
- 6 poly bags of epoxy resin)

12 individual bags of Part C (aggregate)

#### ***Stonblend Grout Coat***

0.5 carton containing:

- 4 foil bags of amine curing agent
- 4 poly bags of epoxy resin

#### ***Stonshield Sealer***

0.25 carton containing:

- 6 foil bags of amine curing agent
- 6 poly bags of epoxy resin

#### ***Stonseal GS7 Clear Flat***

1 carton containing:

- 1 pint can of amine curing agent
- (1) 1 gallon pail of polyol resin

### **COVERAGE**

Each unit of Stonblend GSI will cover approximately 200 sq. ft./18.58 sq. m of surface at a nominal 3/16 in./5 mm thickness.

### **STORAGE CONDITIONS**

Store all components of Stonblend GSI between 60 to 85°F/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.

### **COLOR**

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

### **SUBSTRATE PREPARATION**

Proper preparation is critical to ensure an adequate bond. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e., abrasive blasting or scarifying. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Stonkleen DG9) and rinsing with clean water. The surface must show open pores throughout and have a sandpaper texture. For recommendations or additional information regarding substrate preparation, contact Stonhard's Technical Service Department.

### **PRIMING**

The use of Stonblend Primer is necessary for all applications of Stonblend GSI over most substrates. 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.

### **APPLICATION**

Application of the Stonblend GSI system is accomplished as follows:

1. Stonblend GSI Base material is mixed, just prior to use, in accordance with the prescribed directions. This base material is then screed applied and trowel finished.
2. Allow a minimum of 8 hours curing time before applying the Stonblend Grout Coat.
3. Stonblend grout coat is applied immediately after mixing. Poured onto the floor in the form of a bead, the liquid is spread over the surface using a squeegee. Once the first coat is finished, apply a second coat immediately over the first coat in a wet-on-wet application.
4. After the Stonblend Grout Coat has cured a minimum of 8 hours, Stonshield Sealer is applied immediately after mixing. Pour out a bead, squeegee and backroll out a uniform coating at the proper coverage.
5. After the Stonshield Sealer has cured (12 hours minimum), apply the first coat of Stonseal GS7 using a medium nap roller.
6. After approximately 6 hours, apply a second coat of Stonseal GS7.

Refer to the Stonblend GSI Directions for further detail.

## RECOMMENDATIONS

- DO NOT attempt to install material if the temperature of Stonblend GSI components and substrate are not within 60 to 85°F/16 to 30°C. **The cure time and application properties of the material are severely affected.**
- DO NOT use water or steam in the vicinity of the application. **Moisture can seriously affect the working time and other properties.**
- The use of NIOSH/MSHA approved respirators and safety glasses is recommended.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with rubber gloves.
- Use only with adequate ventilation.

## NOTES

- Procedures for maintenance of the flooring system are described in the Stonblend Cleaning Procedures.
- Specific information regarding chemical resistance is available in the Stonblend Chemical Resistance Guide.
- Material Safety Data Sheets for Stonblend GSI are available upon request.
- A staff of technical service engineers is available to assist with installation, or to answer questions related to Stonhard flooring products.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located worldwide.

**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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