STONHARD

STONBLEND® GSI

PRODUCT DATA

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. It's easy to maintain and the low gloss finish enhances the look of this floor.

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.

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.

LEED

Projects pursuing LEED EQ 4.2 should use Stonseal CF7 in lieu of Stonseal GS7.

PHYSICAL CHARACTERISTICS

Compressive Strength (ASTM C-579)	6,000 psi after 7 days
Tensile Strength (ASTM C-307)	1,500 psi
Flexural Strength (ASTM C-580)	2,200 psi
Flexural Modulus of Elasticity (ASTM C-580)	5.0×10^5 psi
Hardness (ASTM D-2240, Shore D)	85 to 90
Impact Resistance (ASTM D-2794)	>160 in./lbs.
Abrasion Resistance (ASTM D-4060, CS-17)	0.06 gm max. weight loss
Slip Resistance Index (ASTM F-1679)	Dry 0.81 Wet 0.56
Flammability (ASTM E-648)	Class 1
Thermal Coefficient of Linear Expansion (ASTM C-531)	18×10^{-6} in./in.°F
Water Absorption (ASTM C-413)	0.2%
Heat Resistance Limitation	140°F/60°C (for continuous exposure) 200°F/93°C (for intermittent spills)
VOC Content (EPA Method 24)	183 g/l(GS7) 50 g/l (CF7)
Cure Rate (@ 77°F/25°C)	16 hours for foot traffic 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.

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 TD9) 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 safety glasses is required during mixing and application.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with impervious 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 on line at www.stonhard.com under Tech Info or 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.

06/09
Rev. 01/11

STONHARD
www.stonhard.com
An RPM Company

Worldwide Offices:

USA	800.257.7953	Mexico	(52)55.9140.4500	Europe	(32)2.720.8982	Africa	(27)11.254.5500
Canada	800.263.3112	South America	(54-3327)44.2222	Middle East	(971)4.3470460	Asia	(86)21.5466.5118