STONHARD

STONSHIELD® FE

PRODUCT DESCRIPTION

Stonshield FE is a nominal 1/8" thick flooring system with a decorative, stain-resistant surface. The Stonshield broadcast layer results in an attractive floor surface with unlimited color options and is sealed with a high build epoxy overlayment to provide a smooth surface finish. It is comprised of:

Stonkote FE4
A two-component, high-solids, high-performance, epoxy undercoat & overlayment

Stonshield Aggregate
Decorative colored quartz

OPTIONS

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.

Thickness
For areas requiring increased thickness, a 1/8 to 3/16 in./0.31 to 0.47 cm of epoxy mortar may be added.

PACKAGING

Stonshield FE is packaged in units for easy handling. Each unit consists of:

Stonkote FE4
3.5 cartons of Flex Epoxy containing:
4 foil bags of amine
4 poly bags of resin

Stonshield Aggregate
10 individual bags of colored quartz aggregate

IMPORTANT: Final sealer **must** be ordered separately.

PHYSICAL CHARACTERISTICS*

Flexural Strength (ASTM D-790)	2,200 psi
Flexural Modulus of Elasticity (ASTM D-790)	8.6 x 10^5 psi
Hardness (ASTM D-2240, Shore D)	45 to 50
Impact Resistance (ASTM D-2794)	>80 in./lbs.
Cure Rate (@ 77˚F/25˚C)	24 hours for foot traffic 48-72 hours for normal operations
Flammability (ASTM E-648)	Class 1
Linear Coefficient of Thermal Expansion (ASTM C-531)	5x10^{-6} in./in. ˚F
VOC Content (ASTM D-2369, Method E)	STONKOTE FE4- 12 g/l

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.

*All properties tested in Stonkote FE4

COVERAGE

Each unit of Stonshield FE will cover approximately 300 sq. ft./27.9 sq. m of surface at a 1/8" nominal thickness.

STORAGE CONDITIONS

Store all components of Stonshield FE between 60 to 85˚F/16 to 30˚C in a dry area. Avoid excessive heat and do not freeze. The shelf life is three years in the original, unopened container.

COLOR

Stonshield FE is available in 2 solid color and 10 decorative tweed standards. Refer to the Stonshield Color Sheet. Custom colors are available upon request.

SUBSTRATE

Stonshield FE is suitable for application over properly prepared concrete. For installations over wood, brick, quarry tile, metal, or Stonhard Stonset grouts, an additional primer step may be required. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard 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 representative or Technical Service.

PRIMING
Over properly installed concrete with no known outgassing issues, Stonshield FE is a self-priming system. Primer 150 must be used over green concrete. For questions regarding other substrates, contact your local Stonhard representative or Technical Service.

MIXING
- Proper mixing is critical for the products to exhibit the proper application properties, cure properties, and ultimate physical properties.
- Mechanical mixing is required for all components.
- See Stonshield FE Directions for further details.

APPLYING
- DO NOT attempt to install material if the temperature of Stonshield FE components and substrate are not within 60 to 85˚F/16 to 30˚C. The cure time and application properties of the material will be severely affected.
- The undercoat is mixed, applied to the floor, and broadcasted to refusal with Stonshield aggregate. The undercoat is allowed to cure and excess aggregate is removed.
- Stonkote FE4 is mixed, applied to the floor, and allowed to cure. The floor is lightly sanded and vacuumed.
- A final sealer is applied to the floor and allowed to cure.

Refer to the Stonshield FE Directions for further detail.

FINISH SEALER OPTIONS
Gloss Microtexture
Stonseal SK6-GT incorporates a high-performance, aliphatic polyurethane/polyurea topcoat along with a fine texture to offer improved slip resistance, wear resistance, and UV resistance.

Satin
Stonseal SK6-SF is a high-performance, aliphatic polyurethane/polyurea topcoat combined with a durable polymer microsphere which down glosses the coating and provides a satin finish. The satin finish offers excellent wear resistance, UV resistance, and is easy to clean.

Matte
Stonseal CF7, a two-component, high performance, water-based polyurethane coating combines improved wear resistance, UV resistance, and cleanability with a clear, flat appearance.

NOTES
- Procedures for maintenance of the flooring system during operations are described in the Stonkleen Floor Cleaning Procedures Brochure.
- Specific information regarding chemical resistance is available in the Stonhard Chemical Resistance Guide.
- Safety Data Sheets for Stonshield FE 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.
- 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.

CAUTION:
Avoid contact with liquids as they may cause skin/or eye irritation. In the case of eye contact, immediately flush the area with copious amounts of clean water for at least 15 minutes and seek medical attention. Workman should cover hands with impervious gloves and ware safety glasses. Wash hands thoroughly with soap and water after use and before eating, smoking etc. Use only with adequate ventilation.

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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