STONHARD

STONTEC®ERF

PRODUCT DATA

PRODUCT DESCRIPTION

Stontec ERF is a nominal 2mm thick decorative flooring system with a stain resistant surface. The color flake broadcast layer results in an attractive floor surface with unlimited color options and is sealed with an epoxy sealer to form a seamless surface. It is comprised of:

Stonhard Primer

Appropriate primer for sealing and bonding to the substrate.

Stonshield Aggregate

Brightly colored, quartz broadcast aggregate

ERF undercoat

A three-component, high solids, epoxy undercoat consisting of resin, curing agent and filler

Stontec Flakes

Brightly colored flakes

Stonkote CE4

A two-component, high solids, high performance, UV resistant, clear epoxy sealer.

OPTIONS

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 are available.

Thickness

For areas requiring increased thickness, a 3 to 5 mm of epoxy mortar may be added.

PACKAGING

Stontec ERF is packaged in units for easy handling. Each unit consists of:

Stonshield Aggregate

2 bags of colored quartz aggregate

Stontec ERF undercoat

0.66 carton containing:

- 6 foil bags of Amine
- 6 poly bags of Resin

Stontec flakes

0.67 individual boxes of small (1.5 mm) colored flakes

or

0.50 individual boxes of large (6 mm) colored flakes

Stonkote CE4

1 carton containing:

- 6 foil bags of Amine
- 6 poly bags of Resin

IMPORTANT: Appropiate Pprimer must be ordered seperately depending on the substrate.

PHYSICAL CHARACTERISTICS

Tensile Strength (ASTM D-638)	35 N/mm²
Flexural Modulus of Elasticity (ASTM D-790)	1.1 x 10^4 N/mm²
Hardness (ASTM D-2240, Shore D)	85 to 90
Impact Resistance (ASTM D-4226)	> 18 Nm
Abrasion Resistance (ASTM D-4060, CS-17)	0.03 gm max. weight loss
Cure Rate (@25˚C)	12 hours for Foot traffic 24 hours for normal operations
Flexural Strength (ASTM D-790)	27,6 N/mm²
Flammability (ASTM E-648)	Class 1
Linear Coefficient of Thermal Expansion (ASTM C-531)	30x10^{-5} mm/m˚C
VOC Content (ASTM D-2369)	ERF Undercoat - 34 g/l Stonkote CE4 - 34 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.

USGBC LEED RATING

Stontec ERF meets the requirements of LEED;

- MR Credit 1 – Building Reuse
- MR Credit 2 – Construction Waste Management
- IEQ Credit 4 – Low Emitting Materials
- VOC content of the total system <100 g/l

COVERAGE

Each unit of Stontec ERF will cover approximately 18.6 m² of surface at a 2 mm nominal thickness.

STORAGE CONDITIONS

Store all components of Stontec ERF 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

COLOR

Stontec ERF is available in 12 standard colors in small (1.5 mm) or large (6 mm) sized flakes. Refer to the Stonshield color sheet. Custom colors are available upon request.

Note: Micro (0.8 mm) flakes are available upon special request.

SUBSTRATE

Stontec ERF, with the appropriate primer, is suitable for application over properly prepared concrete that does not require renovation. In most cases, this will be new or very smooth concrete. For questions regarding other 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's representative or Technical Service.

PRIMING

The use of the appropriate primer is necessary for all applications of Stontec ERF. The primer must be fully cured prior to application of the undercoat.

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 Stontec ERF Directions for further details.

APPLYING

- DO NOT attempt to install material if the temperature of Stontec ERF components and substrate are not within 16 to 30˚C. **The cure time and application properties of the material will be severely affected.**
- The primer is mixed, applied to the floor and broadcasted to refusal with Stonshield aggregate. The primer is allowed to cure and excess aggregate is removed.
- The undercoat is mixed, applied to the floor and broadcasted to refusal with Stontec flakes. The undercoat is allowed to cure and excess flake is removed.
- Stonshield sealer is mixed, applied to the floor and allowed to cure. The floor is lightly sanded and vacuumed.
- A second Stonshield sealer is applied to the floor and allowed to cure.

Refer to the Stonstec ERF Directions for further detail.

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 Stontec Chemical Resistance Guide.
- Safety Data Sheets for Stontec ERF are available on line at www.stonhard-europe.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 build up 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.

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

CE
StonCor Europe Rue du Travail 9 1400 Nivelles, Belgium
13
DOP-2013.06.001
EN 13813 SR-AR0.5-B2.0-IR18
Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet)

Reaction to fire:	C_{fl}-S^{1}
Release of corrosive substances:	SR
Wear resistance:	AR0.5
Adhesion strength by pull-off test:	> B2.0
Impact resistance:	IR18
Chemical resistance:	CRG*

* CRG: see Stonhard Chemical Resistance Guide

STONHARD A Division of StonCor Group www.stoncor-europe.com

Belgium	+32 67493710	Spain/Portugal	+351 707200088	Germany	+49 240541740
France	+33 160064419	United Kingdom	+44 1256336600	The Netherlands	+31 165585200
Poland	+48 422112768	East Europe	+31 165585200	Italy	+39 02253751