

### PRODUCT DESCRIPTION

Stonblend HDF is a nominal 5 mm flooring system that is a heavy duty version of our Stonblend GSI system. HDF is formulated to have higher physical properties than the GSI system for use in areas that require a more durable system. Stonblend HDF has excellent wear resistance, cleanability, stain and UV resistance.

It is comprised of:

#### **Stonblend Primer**

A two-component, penetrating, epoxy primer

#### **Stonblend HDF 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

### 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 HDF is packaged in units for easy handling. Each unit consists of:

#### **Stonblend HDF Base**

2 cartons, each containing:

6 foil bags of Amine

6 poly bags of Resin

12 individual bags of part C aggregate

#### **Stonblend Groutcoat**

0,5 carton containing:

4 foil bags of Amine

4 poly bags of Resin

#### **Stonkote CE4**

0.25 carton, 1 carton containing:

6 foil bags of Amine

6 poly bags of Resin

#### **Stonseal CF7**

1 carton containing:

1 foil bags of Isocyanate

(1) 1 gallon pail of Polyol

### PHYSICAL CHARACTERISTICS

Compressive Strength (ASTM C-579)	50 N/mm <sup>2</sup> after 7 days
Tensile Strength (ASTM C-307)	10 N/mm <sup>2</sup>
Flexural Strength (ASTM C-580)	19 N/mm <sup>2</sup>
Flexural Modules of Elasticity (ASTM C-580)	6.9 × 10 <sup>3</sup> N/mm <sup>2</sup>
Hardness (ASTM D-2240, Shore D)	85 to 90
Impact Resistance (ASTM D-4226)	> 18 Nm
Abrasion Resistance (ASTM D-4060, CS-17)	0.06 gm max. weight loss
Flammability (ASTM E-648,)	Class I
Thermal Coefficient of Linear Expansion (ASTM C-531)	1,8 × 10 <sup>-2</sup> mm/m°C
Heat Resistance Limitation	60°C (for continuous exposure) 93°C ( for intermittent spills)
VOC content (ASTM D-2369, method E)	Stonblend Primer – 75 g/L Stonblend HDF Base – 5 g/L Stonblend Groutcoat – 52 g/L Stonkote CE4 – 34 g/L Stonseal CF7 – 50 g/L (Method C)
Cure Rate (@ 25°C)	12 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. 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

Stonclad HDF 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 Stonblend HDF will cover approximately 18.6 m<sup>2</sup> of surface at a nominal 5 mm thickness.

## STORAGE CONDITIONS

Store all components of Stonblend HDF 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.

## COLOR

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

## SUBSTRATE

Stonblend HDF, 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 HDF. The Stonblend primer must be tacky during the application of Stonblend HDF. 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.
- Mortar requires mechanical mixing using a JB Blender (or equivalent 20 Liter pail mixer) or a larger mortar mixer (e.g., a Bough 3 Batch Mixer) is required.
- Sealer coats require mixing with a drill and mixing blade
- See Stonblend HDF Directions for further details.

## APPLYING

- DO NOT attempt to install material if the temperature of Stonblend HDF 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 HDF 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.

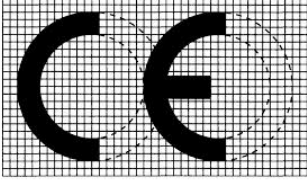
- After 8 hours of minimum cure time, roller apply the Stonseal CF7. Allow a minimum of 12 hours of cure before foot traffic and 48 hours before washdown/cleaning procedures commence. (Reference the Stonseal CF7 Product Data for further details.)
- Detailed application instructions can be found in the Stonblend HDF Directions.

## 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 Stonblend Chemical Resistance Guide.
- Safety Data Sheets for Stonblend HDF are available on line at [www.stonhard-europe.com](http://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 flooring products.
- Requests for technical service or 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.

## 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 3.3** and fulfill the requirements of the given mandate of the Construction Products Regulation no. 305/2011

	
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DOP-2013.02.003	
EN 13813 SR-AR0.5-B2.0-IR18	
Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet)	
Release of corrosive substances:	SR
Wear resistance:	AR0.5
Adhesion strength by pull-off:	> B2.0
Impact resistance:	IR18
Chemical resistance:	CRG*
*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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