PRODUCT DESCRIPTION

Stonclad UF is a four component, textured, hand trowel applied polyurethane mortar system. Stonclad UF consists of a urethane urea binder, pigments and an aggregate blend of calcined flint and graded quartz aggregates. Stonclad UF can be applied at thicknesses ranging from 6-9 mm depending on application requirements. Stonclad UF is a high-impact resistant mortar which exhibits excellent abrasion, thermal shock, thermal cycling, and chemical-resistant characteristics, making it ideal for the food and beverage industry or any other applications requiring these properties. It cures to an impervious surface requiring no additional sealer. Additionally, Stonclad UF is self-priming, making it ideal for quick installations to minimize down-time.

FOOD SAFETY

Stonclad UF is certified safe by HACCP International and suitable for food and beverage facilities that operate in accordance with standards outlined in HACCP International's Food Safety Certification Systems. Stonclad UF has also been "taint tested" by an independent third-party Sensory Testing Lab. Stonclad UF was applied and allowed to cure in the presence of chocolate samples. Sensory test results concluded Stonclad UF had a low risk of taint when applied in the presence of food.

SYSTEM OPTIONS

Waterproofing

Where the total system must be waterproof, use of Stonhard's Stonproof ME7 membrane system with Texture #3 broadcast to refusal is required with a strict adherence to application instructions.

Cove Base

To provide an integral seal at the joint between the floor and the wall cove bases in heights from 5 to 15 cm are available.

Crack Treatment

When crack treatment is needed due to cracks in the substrate, the use of Stonhard's Stonproof CT5 or RH7 with Texture #3 broadcast to refusal is required with a strict adherence to application instructions.

**Stonproof materials must fully cure before applying Stonclad UF.*

Texture

The default level of finished texture can be adjusted based on the area's intended use. Wet areas will receive a higher level of texture, whereas dry areas can receive a less textured finish. The level of texture is determined through application techniques. No additional materials are needed to achieve these textures. Note that with increased texture comes a general decrease in "cleanability" of the floor. It is important to find the necessary balance between slip resistance and cleanability for each installation.

PHYSICAL CHARACTERISTICS

Compressive Strength (EN 13892-2) after 7 days	45.5 N/mm^2
Tensile Strength (ASTM C-307)	5.86 N/mm^2
Adhesion Strength (EN 13892-8)	>B2.0 N/mm^2 (cohesive failure of concrete substrate)
Flexural Strength (EN/ISO 178)	13.8 N/mm^2
Flexural Modulus of Elasticity. (ASTM C-580)	4.95 N/mm^2
Hardness (ASTM D-2240, Shore D)	85
Abrasion/Wear Resistance (EN 13892-4)	< 0.25 µm (A0.5)
Impact Resistance (EN/ISO 6272-1)	IR23
Coefficient of Thermal Expansion	
Linear Expansion (ASTM C-531)	2.9 x 10^{-5} m/m˚C
Fire Resistance (EN 13501-1)	B_{fl}-S^1
Water Absorption (ASTM C-413)	< .025%
VOC Content (ASTM D-2369)	6 g/l
Cure Rate (@ 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. 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.

Accelerator

Stonplus Rapid can be used with this material to limit downtime and/or help guarantee curing windows in cold temperatures. Not all projects are suitable for accelerator use. Refer to the Stonplus Rapid Product Data Sheet for specific information and usage restrictions.

PACKAGING

Stonclad UF is packaged in units for easy handling. Each unit consists of:

Stonclad UF AB

3 cartons of Stonclad UF AB, each containing:
- 4 foil bags of Isocyanate
- 4 poly bags of Polyol

12 individual bags of Part C-1 Aggregate

1 carton of Stonclad C-2 Pigment, containing:
- 12 bags of Part C-2 powdered pigment packs.

COVERAGE
Each unit of Stonclad UF will cover approximately 20.4 m^2 of surface at a nominal 6 mm thickness (1.7 m^2 per mix).

> **Note**: For 9 mm installations Stonclad UF will cover approximately 13.6 m^2 per unit (1.13 m^2 per mix).

STORAGE CONDITIONS
Store all components of Stonclad UF between 16 to 30˚C in a dry area. Avoid excessive heat and do not freeze. The shelf life of the liquids is 1 year while the C-1 aggregate has a 6-month shelf life each in their original, unopened containers.

COLOUR
Stonclad UF is available in 10 standard colours. Refer to the Stonclad Colour Sheet for more information. Contact your local Stonhard representative with any questions.

SUBSTRATE
Stonclad UF, in conjunction with an appropriate primer where necessary, is suitable for application over properly prepared concrete, both new* and old, wood, brick, quarry tile, metal, or Stonset TG6. For questions regarding other substrates or an appropriate primer, contact your local representative or Technical Service.

> ***Note**: Stonclad UF is suitable for application over new/green concrete. The concrete must be in place for a minimum of 5 days, have a vapor barrier installed beneath it, be sufficiently dry, and have achieved enough strength to handle mechanical preparation.

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
Stonclad UF is a self-priming system over concrete in good condition. For rougher concrete, the use of Primer 205 is necessary. Questions regarding the necessity of primer should be directed to your local Stonhard representative or Stonhard Technical Service.

MIXING
Proper mixing is critical for the product to exhibit the proper application properties, cure properties and ultimate physical properties. Mechanical mixing using a JB Blender (or equivalent 20 L pail mixer) or a larger mortar mixer (e.g., a Baugh 3 Batch mixer) is required. See Stonclad UF Directions for further details.

APPLYING
- DO NOT attempt to install material if the temperatures of Stonclad UF components are not within 16 to 25˚C and substrate/air temperatures are not within 7 to 25˚C. The cure time and application properties of the material are severely affected in temperatures outside these ranges.
- For applications below 15˚C. or above 25˚C. please contact Stonhard Technical Service for additional installation information and advice.
- Material must be applied immediately after mixing.
- If Primer 205 is being used, mix, and apply the primer to the floor and allow it to fully cure (6-8 hours) before application of Stonclad UF.
- Stonclad UF is hand-trowel applied. Avoid over-working or polishing the material to ensure texture remains consistent throughout the floor.
- Detailed instructions on application and installation techniques can be found in the Stonclad UF Directions.

PRECAUTIONS
- Use these materials only in strict accordance with the manufacturer’s recommended safety procedures. Dispose of waste materials in accordance with government regulations.
- The selection of proper protective clothing and equipment will significantly reduce the risk of injury. Body covering apparel, safety goggles or safety glasses and impermeable gloves are required.
- In case of contact, flush area with water for 15 minutes and seek medical attention. Wash skin with soap and water.
- If material is ingested, immediately contact a physician. DO NOT INDUCE VOMITING.
- During prep-work of floor substrate or mixing of Stonhard product while adding aggregate, dust masks must be worn.
- Use only with adequate ventilation.

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 Stonclad Chemical Resistance Guide.
- Safety Data Sheets for Stonclad UF are available online at www.stonhard.com 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.

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-labelled as **per Annex ZA., Table ZA.1.5 and 3.3** and fulfil the requirements of the given mandate of the Construction Products Regulation no. 305/2011

CE

StonCor Europe
Rue du Travail 9
1400 Nivelles, Belgium

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DOP-2020.01-011

EN 13813 Screed Material and Floor Screeds

Synthetic resin flooring system for use in buildings
(system as per Product Data Sheet)

Reaction to Fire:	B_{fl} S^1
Release of corrosive substances:	SR
Water permeability:	NPD*
Compressive strength:	C40
Flexural strength:	F10
Wear resistance:	AR0.5
Bond strength:	B2.0
Impact resistance:	IR 24
Sound insulation:	NPD*
Sound absorption:	NPD*
Thermal resistance:	NPD*
Chemical resistance:	CRG**

*NPD: No Performance Determined
**CRG: See Stonhard Chemical Resistance Guide

12/23

STONHARD EST. 1922

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