

PRODUCT DESCRIPTION

Stonclad UT is a dense, liquid-rich, self-priming, textured, four-component, notch- trowel- applied, polyurethane mortar system. Stonclad UT consists of a urethane-urea binder, pigments and graded quartz aggregates. Stonclad UT is a nominal 6 mm system. Stonclad UT 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 as well as any other applications requiring these properties.

SYSTEM 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 may be specified.

Textures

To find the necessary balance between cleanability and slip-resistance, Stonclad UT is offered two levels of texture. The texture is specified as light, medium.

Waterproofing

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

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.

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

Mortar

- 2 cartons, each containing:
- 4 foil bags of Isocyanate
- 4 poly bags of Polyol
- 8 individual bags of part C-1 aggregate

Pigment

- 0.67 cartons containing:
- 12 bags of part C-2 pigment powder packs

Broadcast

- 2 individual bags of broadcast aggregate for light textured systems
- 2 individual bags of broadcast aggregate for medium textured systems

UT Topcoat

- 1 carton containing:
- 4 foil bags of Amine
- 4 poly bags Resin

USGBC LEED RATING

Stonclad UT meets the requirements of LEED;

- MR Credit 1 – Building Reuse
- MR Credit 2 – Construction Waste Management
- MR Credit 6 – Rapidly Renewable Materials
- IEQ Credit 4 – Low Emitting Materials
- VOC content of the total system <100 g/l

COVERAGE

Each unit of Stonclad UT will cover approximately 17.6 m² of surface at a nominal 6 mm thickness.

PHYSICAL CHARACTERISTICS

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|---|---|
| Compressive Strength | 53 N/mm ² |
| (ASTM C-579) | after 7 days |
| Tensile Strength | 7 N/mm ² |
| (ASTM C-307) | |
| Flexural Strength..... | 17 N/mm ² |
| (ASTM C-580) | |
| Flexural Modules of Elasticity | 1.7 x 10 ⁴ N/mm ² |
| (ASTM C-580) | |
| Hardness | 80 to 84 |
| (ASTM D-2240, Shore D) | |
| Impact Resistance | > 18 Nm |
| (ASTM D-2794) | |
| Abrasion Resistance | 0.03 gm* |
| (ASTM D-4060, CS17) | |
| Flammability | Class 1 |
| (ASTM E-648) | |
| Thermal Coefficient of Linear Expansion | |
| (ASTM C-531) | 1.98 x 10 ⁻⁵ mm/m°C |
| Water Absorption..... | < 1% |
| (ASTM C-413) | |
| VOC content | UT mortar – 7 g/L |
| (ASTM D-2369, method E) | UT topcoat - 53 g/L |
| Cure Rate..... | 6 hours for foot traffic |
| (@ 25°C) | 24 hours for normal operations |

* Test samples finished with one coat of high solids coating

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 are 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.

STORAGE CONDITIONS

Store all components of Stonclad UT between 16 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life of the liquids is one year while the C-1 has a 6-month shelf life in the original, unopened container.

COLOUR

Stonclad UT is available in 12 standard colours. Refer to the Stonclad colour sheet. Contact your local Stonhard representative or Technical Service with any questions.

SUBSTRATE

Stonclad UT, with the appropriate primer, is suitable for application over concrete, wood, brick, quarry tile, metal or Stonset TG6. For questions regarding other possible substrates or an appropriate primer, contact your local Stonhard's representative or Technical Service.

Note: Stonclad UT is suitable for application over new/green concrete. The concrete must be in place for a minimum of 5 days, be dry and have sufficient 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's representative or Technical Service.

PRIMING

Stonclad UT is a self-priming mortar. No additional primer is necessary.

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 Liter pail mixer) or a larger mortar mixer (e.g., a Baugh 3 Batch Mixer) is required.
- See Stonclad UT Directions for further details.

APPLYING

- Material must be used immediately after mixing.
- A Screed Applicator is used to distribute the mixed Stonclad UT onto the floor.
- Notched finishing trowels and spiked rollers are used to smooth the surface of the material to the required thickness.
- Texture aggregate is then broadcast into the wet mortar.
- After mortar cures, remove excess broadcast aggregate.
- Allow the mortar to cure 6 to 8 hours, then apply the sealer coat.
- Detailed instructions on application and installation can be found in the Stonclad UT 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.

NOTES

- Use only with adequate ventilation.
- 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. If a coating is utilized to seal the Stonclad UT surface, please ensure that you consult the Product Data sheet for the coating on details regarding chemical resistance of the coating utilized.
- Stonclad UT Part C-1 contains Portland Cement and silica fines. A NIOSH approved dust/mist respirator is required during mixing. Use only with adequate ventilation.
- Safety Data Sheets for Stonclad UT 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.

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


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| StonCor Europe Rue du Travail 9 1400 Nivelles, Belgium 13 |
| DOP-2013.01.007 |
| EN 13813 SR-AR1.0-B2.0-IR18 |
| Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet) |
| Reaction to fire: B_f-S¹ Release of corrosive substances: SR Wear resistance: AR1.0 Adhesion strength by pull-off: > B2.0 Impact resistance: IR18 Chemical resistance: CRG* |
| *CRG: See Stonhard Chemical Resistance Guide |

CE MARKING

The harmonized European Standard EN 1504-2 „Products and systems for the protection and repair of concrete structures – Definitions, requirements, quality control and evaluation of conformity – Part 2: Surface protection systems for concrete” gives specifications for products and systems based on methods “hydrophobic impregnation”, “impregnation” and “coating” for the various principles presented under EN 1504-9.

Products which fall under this specification have to be CE-labelled as per Annex ZA. 1, Tables ZA1a to ZA 1g according to the scope and relevant clauses there indicated, and fulfill the requirements of the given mandate of the Construction Products Directive (89/106):

For flooring systems not dedicated to protect or reinstate the integrity of a concrete structure, EN 13813 applies. Products acc. EN 1504-2 used as flooring systems with mechanical loads also must fulfil EN 13813. Here below indicated are the performance classes achieve according to the standard. For the specific performance results of the product to the particular tests, please see the actual values above in the PDS.

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| StonCor Europe Rue du Travail 9 1400 Nivelles, Belgium 13 | |
| DOP-2013.01-007 | |
| EN 1504-2 Surface protection product | |
| Physical Resistance/Surface Improvement Coating | |
| Reaction to fire | B _{fi} -S ¹ |
| Capillary absorption and permeability to water: | $W_{24} < 0.1 \text{ kg/m}^2 \times \text{h}^{0.5}$ |
| Impact resistance: | Class II |
| Adhesion by pull off strength: | $> 2.0 \text{ N/mm}^2$ |
| Abrasion resistance: | $> 3000 \text{ mg}^*$ |
| **Tested in combination with one coat of protective coating | |

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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