

## PRODUCT DESCRIPTION

Stonres RTZ is a nominal 5 mm resilient urethane flooring system. This easy to clean, seamless, resilient system provides exceptional acoustic efficiency and ergonomic comfort. The system combines superior aesthetics with the excellent wear and stain resistance offering progressive design options. It is comprised of:

**Note:** This product is highly recommended for healthcare environments.

### Stonres RTZ Mortar

A three-component, UV resistant, resilient urethane mortar consisting of urethane resin, curing agent and coarse aggregate

### Stonres Groutcoat

A two-component, clear, UV resistant, aliphatic, polyaspartic urethane grout coat

### Stonseal CF7

A two-component, non-reflective, high-performance, water-based, VOC compliant, polyurethane coating

## PACKAGING

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

### Stonres RTZ Mortar

- 12 cartons, each containing:
  - 1 foil bag of Isocyanate
  - (12) c.a. 20 liters pails of Polyol
- 12 bags of aggregate

### Stonres flex Groutcoat

- 0.5 carton containing:
  - 1 poly bag of Isocyanate
  - (1) c.a. 4 liters can of Amine

### Stonres RTZ Skim Coat

- 0.2 carton containing:
  - 1 can of Isocyanate
  - 1 can of Stonres RTZ Skim Coat Polyol
  - 1 bag of Stonres RTZ Part C Aggregate

### Stonseal CF7

- 1 carton containing:
  - 1 foil bag of Isocyanate
  - (1) c.a. 4 liters pail of Polyol

## COVERAGE

Each unit of Stonres RTZ will cover approximately 20.4 m<sup>2</sup> of surface at a nominal 5 mm finished thickness. A batch of Stonres RTZ Base is made up of one foil bag of Isocyanate, one c.a. 20 liter pail of Polyol, and one bag of Part C. When mixed, each batch will cover approximately 1.67 m<sup>2</sup> at the above thickness.

## STORAGE CONDITIONS

Store all components of Stonres RTZ between 18 to 30°C in a dry area. Avoid excessive heat and do not freeze. The shelf life of the Mortar is 3 years, all other components have a shelf life of one year in the original unopened containers. Do not store out-of-doors, in boiler rooms, compressor rooms, refrigerators, or near radiators, steam pipes etc.

## COLOR

Stonres RTZ is available in 8 standard colors and an extensive color palette. Refer to the Stonres RTZ Color Sheet. Custom Colors are available upon request.

## SUBSTRATE

Stonres RTZ is suitable for application over properly prepared concrete, wood or steel surfaces. It is not recommended for use over asphalt, mastic, gypsum-based products, brick or painted surfaces. These must first be removed by mechanical means to expose the substrate prior to overlayment.

## PHYSICAL CHARACTERISTICS

Tensile strength.....	8 N/mm <sup>2</sup>
(ASTM C-307)	
Hardness .....	85
(ASTM D-2440, Shore A)	
Percent Elongation .....	150%
(ASTM D-638)	
Impact Resistance.....	> 7 Nm
(ASTM D-2794)	
Static load limit.....	0.05 mm
(ASTM F-970).....	(57 kg load)
Resistance to heat.....	Delta E <8
(ASTM F-1514).....	(7 days@70°C)
Residual indentation.....	<1% thickness
(ASTM F-1914) .....	(64 kg load)
Abrasion Resistance .....	0.03 gm
(ASTM D-4060, CS-17)	
Thermal Coefficient	
Of Linear Expansion.....	5,94 x 10 <sup>-5</sup> mm/m°C
(ASTM C-531)	
Flammability.....	Class I
(ASTM E-648).....	
Noise Reduction Coefficient .....	0.05
(ASTM C-423)	
VOC Content.....	RTZ mortar - 13 g/l
(ASTM D-2369).....	Stonres Groutcoat - 90 g/l
.....	Stonseal CF7 – 47 g/l (method C)
Cure Rate.....	12 hours for Foot traffic
(@25°C) .....	48 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.

## **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.

**Note:** A flat level substrate is required for Stonres RTZ application and cannot be installed over a pitched surface.

## **PRIMING**

The use of the Standard Primer/SL Primer priming system is required for all applications of RTZ over concrete or wood. Metal substrates must be primed immediately following preparation with HT primer.

The substrate must be free of voids and pinholes after priming and prior to the start of the Mortar application and the primer layer must not be cured for longer than 24 hours to ensure proper intercoat adhesion.

## **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 Stonres RTZ Directions for further details

## **APPLYING**

- DO NOT attempt to install material if the temperature of the Stonres RTZ components and substrate are not within 18 to 30°C. The cure time and application properties of the material are severely affected if the temperatures are outside of this range.
- Stonres RTZ Mortar material is mixed just prior to use in accordance with prescribed directions. The base material is then screed rake applied and spike rolled to finish.
- After a minimum of 20 hours curing time, sand the surface of the RTZ Mortar using the recommended grit sandpapers.
- Squeegee apply and backroll Stonres Groutcoat with a medium nap roller.
- After 4 hours of minimum cure time, roller apply the Stonseal CF7. After 12 hours of cure, inspect and apply Stonres RTZ SkimCoat as per the directions. Apply a second coat of 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 detail)

**Note:** Two coats of Stonseal CF7 are required for all applications of Stonres RTZ.

- Detailed application instructions can be found in the Stonres RTZ 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.

## **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 Stonres Chemical Resistance Guide.
- Safety Data Sheets for Stonres RTZ are available online at [www.stonhard.com](http://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.
- A NIOSH approved air purifying respirator (APR) equipped with organic vapor cartridges is required during application of the the Stonres Flex Groucoat.
- 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-2013.03.004  EN 13813 SR-AR1.0-B2.0-IR7
Synthetic resin flooring system for use internally in buildings (system as per Product Data Sheet)  Release of corrosive substances: .....SR Wear resistance: .....AR1.0 Adhesion strength by pull-off test: .....> B2.0 Impact resistance: .....IR 7 Sound insulation: .....▲Lw 6dB 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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