

### PRODUCT DESCRIPTION

Stonres STR is a nominal 3 to 5mm resilient urethane floor system. This seamless, resilient, stain-resistant floor has excellent ergonomic properties and is formulated for applications where a seamless, ergonomic, high-performance finish is required.

### USES

Stonres STR is an excellent choice for healthcare facilities, including operating rooms, pharmaceutical and other commercial applications that require excellent performance and aesthetics.

### SYSTEM OPTIONS:

#### Cove Base

To provide for an integral seal at the joint between the floor and the wall, Dural 618/22 sealed with either Stonkote HT4 or Stonkote GS4 in the chosen colour and finally sealed with Stonseal CF7.

The cove base can be made to match the colour of the floor. However, due to the angle at which light reflects off the cove, it is common for the cove base to appear slightly different to the floor. Use of a contrasting colour that complements the floor can eliminate this situation.

#### Coatings

Stonseal CF7 is a two-component, clear, flat, high-performance, water-based, VOC-compliant, polyurethane coating.

#### Primer

To fill substrate voids and detect the possibility of "outgassing", the use of SL Primer is essential. If blowholes are detected in the primer, they could be skimmed level with Dural 30/35NS Epoxy.

### PACKAGING AND COVERAGE

#### Stonres STR Self-Levelling Polyurethane

20-litre kit consisting of Parts A, B and UL Liquid Pigment Pack.

A 20-litre kit will cover 4m<sup>2</sup> at 5mm thick and 6.67m<sup>2</sup> at 3mm thick.

**NOTE: Coverage rates shown are theoretical. Actual coverage rates may vary. Make necessary allowances for the condition of the surface to be coated, working conditions, waste, spillage, experience level and skill of the installers, etc.**

### REFERENCE SAMPLE

A trial reference sample should be installed by the applicator prior to start of contract to ensure correct coverages and workmanship.

### STORAGE CONDITIONS

Store all components of Stonres STR between 16°C to 30°C in a dry area. Avoid excessive heat and do not freeze.

### SHELF LIFE

The shelf life is 1 year for all the components of Stonres STR in their original, unopened containers.

### TYPICAL PROPERTIES AT 25°C

Hardness ASTM D-2240, Shore D	60
Percent Elongation ASTM D-638	70%
Impact Resistance ASTM D-2794	> 18 Nm
Static Load Limit ASTM C-4060	0.025mm (113 kg. load)
Abrasion Resistance ASTM C-4060	0.03gm
VOC Content	STR Self-leveller – 4.4 g/l Stonseal CF7 – 47 g/l
Cure Rate at 25°C	24 Hours foot traffic 48 Hours normal operation

**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, values obtained on field applied materials may vary and certain test methods can only be conducted on lab-made test coupons.

## PLACEMENT GUIDELINES

### SCOPE OF WORK (BOQ)

Prepare surface and apply Stonres STR as a 3 to 5mm thick, self-levelling, resilient, ergonomic, polyurethane flooring system.

### SUBSTRATE PREPARATION

Proper preparation is critical to ensure an adequate bond and system performance. A flat, level substrate is required for Stonres STR application, it cannot be installed over a pitched surface. The substrate must be dry and free of all wax, grease, oils, fats, soil, loose or foreign materials and laitance. Laitance and unbonded cement particles must be removed by mechanical methods, i.e. abrasive blasting or grinding. Other contaminants may be removed by scrubbing with a heavy-duty industrial detergent (Carboclean 250 or Carboclean 252) and rinsing with clean water. The surface must show open pores throughout with main aggregate in concrete exposed and have a sandpaper texture. Substrate moisture content prior to coating should be below 5% and substrate tensile strength 2 MPa. For recommendations or additional information regarding substrate preparation, refer to Surface Preparation data sheet or contact StonCor Africa Technical Service Department.

### PRIMING

The use of SL Primer is required for all applications of Stonres STR over concrete. Mix SL Primer Parts A & B for 90 seconds in a 25 litre pail using a 600 rpm high torque mixer, fitted with a spiral impeller. Add part C and mix for a further 90 seconds, ensuring no lumps exist. Do not mix by hand. Apply 2 coats of SL Primer wet-on-wet to achieve 3.3m<sup>2</sup>/litre, using a rubber squeegee. Remove all ponded resin and squeegee lines before allowing the primer to cure. Do not backroll the primer. If blowholes are detected in the primer, they should be skimmed level with Dural 30/35NS. Allow the SL Primer to cure for 4 to 6 hours at 25°C, ensuring that Stonres STR is applied within 16 hours or priming the substrate.

### 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.

Premix the contents of the Base (Part B) component for 30 seconds before adding the pigment pack. Empty out the contents of the pigment pack into the Part B and mix for a further 30 seconds or until the colour is uniform. Pour out the entire contents of the Activator (Part A) component and mechanically mix for 2 minutes. Immediately send the mixed material to the application floor area and within 30 seconds start another mix.

### APPLICATION

- **For 5mm Application:** Using a 15mm notched rake, evenly apply Stonres STR at a theoretical coverage of 0.2m<sup>2</sup> per litre to achieve a dry film thickness of 5mm (5 litres/m<sup>2</sup>).
- **For 3mm Application:** Using a 7mm notched rake, evenly apply Stonres STR at a theoretical coverage of 0.33m<sup>2</sup> per litre to achieve a dry film thickness of 3mm (3 litres/m<sup>2</sup>).
- Wearing spiked shoes, spike the material with a spike-roller for a period not exceeding 10 minutes to increase the flow, level the material and deaerate the product.
- Before applying the chosen sealer coat, lightly sand the surface with 100 to 120 grit sandpaper and wipe clean with solvent. Do not use any solvents containing alcohol as alcohol can react with not fully cured polyurethanes.
- Allow to cure 12 hours at 25°C before sealing with Stonseal CF7. Allow the first coat of Stonseal CF7 to cure for 12 hours before applying the second coat.
- The Stonres STR system must be allowed to cure for 24 hours after the final coat of Stonseal CF7 before foot traffic.
- **A trial reference sample should be installed by the applicator prior to the start of the contract to verify correct coverages, workmanship, colour and finish.**

### CURING

If temperatures are between 16-30°C, allow a minimum of 24 hours cure time before foot traffic and 48 hours before washdown/cleaning procedures commence.

### RECOMMENDATIONS

- **DO NOT** attempt to install material if temperature of components and substrate are not within 16-30°C. The cure time and application properties of the material are severely affected.
- **DO NOT** use water or steam in the vicinity of the application. Moisture can seriously affect the working time and other properties.
- Protect areas from dust and isolate access. Contamination between layers will affect the final appearance.
- Avoid contact with all liquid Parts A and B as they may cause skin and/or eye irritation. Workmen should cover hands with protective creams or rubber gloves and wear safety glasses.
- Use only with adequate ventilation.

### NOTES

- Procedures for maintenance of the flooring system during operations are described in "StonCor Cleaning Procedures".
- Material Safety Data Sheets are available on request.
- A staff of technical service engineers is available to assist in installation or to answer questions related to our flooring products specifically or flooring problems in general.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located throughout the world.