

PRODUCT DESCRIPTION

Stonlux SL is a two component pigmented liquid rich self-levelling epoxy flooring system, applied at either 2 or 3mm thickness. Stonlux SL cures to a hard, aesthetically pleasing surface that exhibits excellent impact and chemical resistance.

USES

Stonlux SL is formulated for ease of maintenance, super impact resistance, toughness and reduced gloss. Stonlux SL is specifically designed for those applications where a smooth, seamless, dense, impervious finish with good stain resistance is required. Stonlux SL is a popular choice for applications such as clean rooms, laboratories and electronic assembly areas.

SYSTEM OPTIONS

Moisture Barrier:

To ensure long-term adhesion to concrete slabs in the absence of a proper vapour barrier, the use of Stonprime 786 system is required with strict adherence to application instructions as indicated on the product data sheet.

Primer and Skim Coat:

To fill substrate voids and detect the possibility of "outgassing", the use of SL Primer is essential. If blow holes are detected in the primer, they could be skimmed level with Pro-Struct 30/35NS Quickset.

Cove Base:

To provide for an integral seal at the joint between the floor and the wall, Stonshield CR-980 Cove Bases in heights from 5 to 15cm may be specified.

PACKAGING, COVERAGE AND COLOUR RANGE

Stonlux SL is packaged in 20 litre kits, consisting of: Stonlux Base and Activator

Each kit of Stonlux SL will cover approximately:
10m² when applied at 2mm thick
6.6m² when applied 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.

Nine standard colours are available, as per the StonCor Africa Flooring Colour Card.

REFERENCE SAMPLE

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

STORAGE CONDITIONS

Store all components of Stonlux SL between 16 to 32°C in a dry area. Avoid excessive heat and do not freeze.

SHELF LIFE

24 Months if stored between 16°C to 32°C

TYPICAL PROPERTIES AT 25°C

Tensile Strength ASTM D-638	13.1 MPa
Flexural Strength ASTM D-790	26.7 MPa
Flexural Modulus of Elasticity ASTM D-790	3.6 x 10 ³ MPa
Hardness ASTM D-2240, Shore D	80-85
Bond Strength ASTM D-4541	> 2.7 MPa (100% concrete failure)
Indentation MIL-D-3134F	Pass
Abrasion Resistance ASTM D-4060, CS-17	0.1 mg max weight loss
Coefficient of Friction (Dry*) ASTM F-1679	0.81
Flammability ASTM D-635	Self-extinguishing Extent of burning 6mm max
Thermal Coefficient of Linear Expansion (ASTM C-531)	5.1 x 10 ⁻⁵ mm/mm/°C
Water Absorption ASTM C-413	0.2%
Heat Resistance Limitation	Continuous: 60°C Intermittent: 93°C
Cure Rate	16 Hours surface cure 48 Hours traffic 7 Days full cure
Pot Life	20 to 30 Minutes
Application Temperature Range	16°C to 30°C
Dew Point	Substrate to be 2°C above dew point
VOC	27 g/l

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 the field applied materials may vary.

PLACEMENT GUIDELINES

SCOPE OF WORK (BOQ)

Apply Stonlux SL as a 2 to 3mm seamless, self-levelling epoxy flooring system.

STONLUX SL CONSISTS OF

	KIT SIZE	THEORETICAL COVERAGE	
a) SL Primer	20 Litre	3.3m ² /litre	Primer
b) Stonlux SL	20 Litre	2 to 3mm	Topcoat
c) Stonseal 722	5 Litre	7m ² /litre	Optional – Non-slip sealer

TEMPERATURE

Apply Stonlux SL only in temperatures ranging between 16°C and 30°C.

SUBSTRATE PREPARATION

Remove all oils, grease and other contaminants by scrubbing with CarboClean 252 and rinsing with clean running potable water to obtain a water break-free surface. Allow to dry. If grinders are used to remove thin coatings, reduce or smooth the surface profiles, it will not give a surface pattern suitable for coatings unless followed by etching or vacublasting. The roughened surface should have a texture similar to 80-grit sandpaper, minimum tensile strength of 2 MPa and moisture content of 5% maximum. Refer to surface preparation methods for additional surface preparation requirements.

PRIMING

- Apply two coats of SL Primer solvent-free primer wet-on-wet to achieve 3.3m² per litre, using a rubber squeegee. Remove all ponded resin and squeegee lines before allowing the primer to cure. Do not backroll the primer.
- If blow holes are detected in the primer, they should be skimmed level with Pro-Struct 30/35NS Quickset.
- Allow the SL Primer to cure for 6 to 8 hours at 25°C, and ensure that Stonlux SL is applied within 16 hours of priming the substrate.
- Drive steel nails into the existing joints to demarcate the concrete cuts.

MIXING STONLUX SL

Under no circumstances are the supplies kits to be split. The contents of the base component in the kit are to be thoroughly mixed for 1 minute before use. Empty entire contents of the activator into the base component. Mix thoroughly for 2 minutes with an impeller fitted to a variable speed high torque 550 RPM mixer. Transfer mixed material into another mixing container, scraping the sides and bottom of the container, and remix for another 2 minutes. This step is critical to ensure complete cross-linking of components is achieved. Do not mix by hand.

APPLICATION PROCEDURE FOR STONLUX SL

- Using a 6mm notched rake, evenly apply Stonlux SL at a theoretical coverage of 0.5m² per litre to achieve a dry film thickness of 2mm (2 litres/m²). Wearing spiked shoes, spike the material with spiked rollers for a period not exceeding 20 minutes to increase the flow, level the material and de-aerate the product. Allow to cure for 16 hours at 25°C.
- Remove the nails and snap a chalk line down the length of the joints in the Stonlux SL for non-moving joints. Using a purpose-made joint cutting machine, saw cut through the Stonlux SL to a minimum depth of 25mm x 6mm wide. All joint edges or cracks should be squared and dust-free prior to application. (All movement joints should be treated as per the engineer's joint design detail). Mask either side of the saw cut and prime with Stonprime 639, allow to cure for 6 hours at 25°C (maximum 24 hours at 25°C). Fill the depth of the joint with Pro-Struct 748 non-moving joint sealant. Allow to cure for a minimum of 24 hours at 25° before placing into service.
- **A trial reference sample should be installed by the applicator prior to start of the contract to verify correct coverages, workmanship, colour and texture.**

SEALING OF STONLUX SL NON-SLIP FINISH

An easy cleaning, mild, non-slip finish can be achieved by overcoating with two coats of Stonseal 722 Clear Sealer to achieve theoretical coverage of 7m²/litre/coat, and allow to cure for 8 to 12 hours between coats.

TOUGH WEAR RESISTANT MATT SEALER

To create a uniform matt appearance which minimises substrate blemishes, overcoat with Stonseal CF7 as per the product data sheet instructions.

RECOMMENDATIONS

- DO NOT attempt to install material if temperature of components and substrate are not within 16 to 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.

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(Stonlux SL)

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- 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".
- Specific information regarding chemical resistance is available in the Chemical Resistance Guide.
- 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.