

ShaliFloor® SL PU

PU Dispersion Based Self-Leveling Cement Hybrid Flooring



Description

ShaliFloor® SL PU is a multi-component, multipurpose, medium duty, self-leveling flooring system with dispersed PU based cement-filler slurry producing a smooth matt surface finish having 4 mm to 9 mm thickness in multiple laying. It has excellent chemical resistance and provides smooth, even and easy to clean, monolithic, seamless surface.

Characteristics - Physical

Colours	Grey, Terracotta, Mid-Buffer (Brown), Apple Green & Phiroza Blue	Theoretical Coverage*, kg / m ² / mm thickness	1.9
Density, kg / m ³	1920	Service Temperature, °C	-28 to 90
Pot life, minute	15 (approx.)		

*Depending upon surface condition, porosity

Characteristics - Technical

Property	Standard	Result
Tensile Strength, N / mm ²	ASTM D 412	7 ± 0.5
Flexural Strength, N / mm ²	ASTM D 790	15 ± 1.5
Hardness after 3 days, Shore D	ASTM D 2240	> 80
Compressive Strength, 7 days, N / mm ²	BS 6319 : Part 2	50 ± 5
Taber abrasion loss, CS 17, 1000 cycles, mg	ASTM D 4060	<50

System Recommendation

Service temperature (°C)	Application thickness (mm)
-18 to 90	1 mm scratch coat + 3 mm top coat
-19 to -28	1 mm scratch coat + 4 mm mid coat + 4 mm topcoat

Field of Application

- Textile and film plants.
- Food and beverages production.
- Confectionary production.
- Warehousing and storage.
- Electronic component manufacturer & assembly.
- Pharmaceutical production.
- Chemical plants.

Advantages

- Fast application and rapid access.
- Hygienic and safe.
- Durable and long life.
- Excellent chemical resistance.
- Provide smooth, even and easy to clean joint less surface.

Application Methodology

➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application.
- A damp-proof membrane is essential where rising moisture may cause a delaminating of the **ShaliFloor® SL PU** from concrete.

- The surface moisture content of the substrate should be **less than 4%** at the time of application.
- Concrete and other cementitious substrates must have minimum tensile (pull-off) strength of 1.5 N / mm² in order to ensure that failure of the substrate does not occur before acceptable bond stress has been reached. Minimum compressive strength should be 25 N / mm² of the concrete substrate.
- In order to produce the good bond between the substrate and the floor topping the substrate shall be prepared by mechanical means using captive shot blasting machine or mechanical scarifier.
- After substrate preparation by mechanical means the surface should be inspected to measure surface soundness. Any weak or suspect patches must be removed.
- Substrate must be free from dust & loose particles. Vacuum cleaning should be used to remove dust and loose particles.
- All traces of contaminants, including oils, fats, greases, paint residues, chemicals, algae and laitance, should be removed prior to starting surface preparation.
- Concrete and other cementitious substrate must be visibly dry before application of the floor topping.
- Surface defects exposed during surface preparation viz. shrinkage cracks, blow holes, minor honeycombing, minor damage to joint etc. shall be filled with **ShaliFloor® SL PU**.
- Every 4 to 5 m² along length and breadth and at the termination Groove cutting is essential. Groove must be double the size of the thickness of the **ShaliFloor® SL PU**.

➤ **Material Preparation**

- Mix Resin, Catalyst, Hardener and Pigment thoroughly with the help of drill mixer till homogenous coloured mix is obtained.
- Gradually add the Filler while mixing continues; mix until the aggregate is thoroughly dispersed and the mix become uniform, typically 3 - 5 minutes.

➤ **Application of Material**

- In case where hygiene or aesthetic is desired, prime the prepared concrete surface with a scratch coat (1.9 kg / m²) of **ShaliFloor® SL PU** and allow drying.
- Spread prepared **ShaliFloor® SL PU** to the desired remaining thickness (2 - 5 mm) with steel trowel. Pass a spiked roller through the material to assist flow and release any entrapped air.
- Allow **ShaliFloor® SL PU** to fully cure for 7 days at 30°C before exposing it any chemical.
- Do not push the roller more than 10 cm into the mix.
- Do not allow any activities or traffic for at least 24 hrs. In case of lower temperature more time will be required.

Health & Safety

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packing

Available in pre-packed system as indicated below:

BELOW 25 MT

Unpigmented Resin	:	3.00 kg
Hardener (Activator)	:	3.00 kg
Filler (Powder)	:	14.00 kg
Catalyst	:	0.7 kg
Pigment	:	0.15 kg
TOTAL	:	20.85 kg

ABOVE 25 MT

Pigmented Resin	:	3.00 kg
Hardener (Activator)	:	3.00 kg
Filler (Powder)	:	14.00 kg
Catalyst	:	0.7 kg
TOTAL	:	20.70 kg

Storage

- Store in a cool dry place under shed away from heat above 5°C and away from direct sunlight.
- Component A and Component B must be protected from frost and if frozen to be discarded.

Shelf Life

12 months in original unopened sealed condition.



STP Limited
Enhancing Structures' Life

Product Range

- Waterproofing and Insulation ■ Road Surfacing
- Sealants and Additives ■ Pipeline Coating
- Protective / Anti-Corrosive Coating ■ Epoxy Flooring
- Grouts / Admixtures ■ RestoFix- Repair / Rehabilitation
- Other Construction Chemicals



Advisory Cell: +91 81302 81114