

ShaliFloor® SL PU

PU Dispersion Based Self-Leveling Cement Slurry Flooring



Description

ShaliFloor® SL PU is a four-component, 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.

Approvals / Standards

USFDA - 175.300, contact with potable water IS: 10500: 2012

Characteristics - Physical

Colour	Grey, Terracotta, Mid-Buff (Brown), Apple Green & Phiroza Blue	Theoretical Coverage*, kg / m ² / mm thickness	1.9
Density, kg / m ³	1920	Service Temperature, °C	-20 to +90
Pot life, minutes	15		

*These figures are theoretical and do not allow any additional material due to surface porosity, surface profile, wastage and mode of application etc. It is recommended to check the actual coverage on a small area along with its finish before calculating the exact total consumption.

Characteristics - Technical @ 30°C, 60% RH

Property	Standard	Result
Compressive Strength, N / mm ²	BS 6319: Part 2	50 ± 5
Tensile strength, N / mm ²	BS 6319: Part 7	7 ± 0.5
Flexural strength, N / mm ²	BS 6319: Part 3	17 - 19
Hardness after 7 days, Shore D	ASTMD 2240	> 80
Abrasion Resistance, CS 17, 1000 cycles, mg loss	ASTM D 4060	125 ± 5
Flame resistance	BS 476: Part 7	Class 2
Resistance to Impact, Joules	ASTM D 2794	8.2 ± 0.2

System Recommendation

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

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 jointless 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 delamination of the **ShaliFloor® SL PU** from concrete.
- Concrete and other cementitious substrates must have minimum tensile (pull-off) strength of 1.5 N / mm² 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.
- 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 becomes uniform, typically 3 - 5 minutes.

➤ Application of Material

- After substrate preparation, apply **ShaliPrime® 2E / ShaliPrime® 2E SF** directly onto the substrate (if porous) as per coverage mentioned in the respective TDS and allow it to full dry.
- Apply the 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 before exposing it to any chemical.
- Do not expose the applied surface to sunlight for at least 24 hrs.
- 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

6 months in original unopened sealed condition (all components).



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