

Description

ShaliCrete® is a multifunctional acrylic polymer for enhancing properties of concrete, mortar, grout, cement slurry etc. through better bonding, waterproofing and improvement in several other properties. **ShaliCrete®** is used for permanently bonding plaster to ensure durable finish of exterior walls, bonding new concrete to old concrete, making mortar for repairing and for waterproofing. **ShaliCrete®** is highly durable in wet condition as well.

Characteristics

Appearance	Free Flowing white liquid dries to a colourless coating	Flexural Strength, kg/cm ²	Refer chart
Bond Strength	Refer chart	Specific Gravity @ 27 °C	1.01
Theoretical Coverage, m ² / kg *	Refer chart	Solid Contents	30 ± 2
pH	> 7	Resistant to UV	Excellent

* Depending upon surface condition.

Application

- Toilets, sunken slabs, kitchen, sewers, aquariums and terrariums.
- Repairing walls, planters and small concrete terraces.
- Durable and aesthetic exterior finish with cement paint.
- Repair mortar for precast structural concrete members, toppings, patches, cracks etc.

Advantages

- Easy to use.
- Improves bond strength, facilitating tough and hard wearing surface.
- Allows trapped vapour to escape thus preventing peeling / blistering.
- Reduces cracking through increased mortar flexural strength.
- Increases mortar, wears resistance under rubber wheeled traffic.
- Increases mortar tensile strength.
- Offers greater impact resistance.
- Reduces permeability.
- Non-flammable and does not give toxic gases when exposed to fire.
- Not harmful to the health of the workman.

Application Methodology

A. Surface Preparation

- Ensure that structure is at least 3 days old, sound and free from dirt, soil, oil release agents, laitance and any other foreign materials which may impair the bond, penetration and / or the overall performance of **ShaliCrete®**. Do not etch with acid.
- Remove chemically any efflorescence, form oil, mould etc.
- Ensure to fill cracks / honeycombs / holes / faulty construction joints with mortar made of **ShaliCrete®**, cement and super fine sand in the ratio 1 : 2 : 3 and allow it to touch dry.
- Pre-wet / dampen all prepared concrete surface before application of **ShaliCrete®**. Do not allow standing water.

B Slurry Preparation

- Mix **ShaliCrete®** with neat cement in the ratio as shown in table below till obtaining homogeneous, lump free mixture with better brushable consistency:

Application	SC:W:C:S	Dilution in Water	Application Area	Coverage (SqM/Kg)	Strength (Kg/cm ²)		
					Compressive	Flxural	Bond
Water-proofing coating	1:Nil:2:Nil	No dilution	Waterproofing coating	2.5 Thickness approx. 1 mm (2 coats)	-	-	-
Cement slurry / Bond	1:Nil:2:Nil	No dilution	Bonding coat	2.5 Thickness approx. 1 mm (2 coats)	285	6	7.5
Mortar	1:Nil:2:5	No dilution	Polymer repair mortar	2.25 Thickness 2 mm (1 coat)	405	85	7.8
Concrete	Add SC 10% by wt of cement	As required	Repair concrete and screed	Depending on mixed design	Depending on mixed design		
Additive to cement based paint	Add SC upto 10% by wt of cement in cement paint	As required	External coating for bonding	-	NA	NA	Depends on paint properties

Legends : SC=ShaliCrete, W=Water, C=Cement, S=Sand

C. Waterproofing Compound

- Apply **ShaliCrete**[®] slurry by brush on the surface. Apply two or more coats depending on the surface condition.
- Ensure time interval of 5 -6 hr between two coats.
- Do not apply slurry coat on standing water.
- After 6 hrs of air drying the coated surface should be cured by means of spraying water for next 24 hr. Do not leave coated surface dry during this period. Do not allow the coated surface to be submerged under water during this period.
- Allow to dry for 24 hrs after moist curing. **Do not apply water through a hose or pressurized nozzle.**

D. Bonding Agent

- Bond coat with a mixing ratio of 1:2 (one part of **ShaliCrete**[®] and two parts of cement).
- The applied bonding agent should be in tacky condition before topping with new concrete.

E. Repair Mortar

- Bond coat with a mixing ratio of 1:2 (one part of **ShaliCrete**[®] and two parts of cement)
- Repair Mortar with a mixing ratio of 1:2:5 (one part of **ShaliCrete**[®], two parts of cement and five part of sand) applied in specified area.
- After the application of Repair Mortar to keep the surface moist for 12 - 24 hr.

Cleaning & Maintenance

Clean tools and equipment with water before the material hardens.

Precaution

Provide 15 – 25 mm protective plaster / screed over the **ShaliCrete®** membrane.

Health & Safety

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

Packing

Available in 1 kg, 5 kg, 20 kg, 50 kg and 200 kg containers.

Storage

Store in a cool dry place, under shed, away from heat.

Self Life

12 months in original unopened condition.



STP's Businesses
Waterproofing & Insulation
Road Surfacing
Pipeline Coating
Protective / Anti-Corrosive Coating
GARA (Grouts & Admixtures)
Sealant & Additives
Repairs & Rehabilitation
Epoxy Flooring
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