

ShaliCrete URP

Modified SBR Latex Based URP For Bonding, Repair & Concrete Rendering



STP Limited

Description

ShaliCrete URP is a multipurpose, ready to use, economical SBR based bonding agent in liquid consistency used as universal repair product (URP), for bonding coat for concrete, repair additive for concrete / mortars, waterproofing applications, protective coating for cementitious substrates, cladding including tiles / marble bedding and external rendering, besides improving strength and weather resistance.

Characteristics

Physical Appearance	Milky white liquid	Specific Gravity	1.00 approx
Theoretical Coverage *		Solid Content, %	36 + 2
• Mortar Modifier, kg	7 / 50 kg cement bag	Pot Life, 30 °C, minutes	30 - 40
• Bonding Agent, m ² / kg	4 – 4.5 / coat	pH	8 - 9
• WP Coating m ² / kg	2 – 2.5 / 2 coats		

* Depending upon surface condition.

Application

- Repair & Rehabilitation of concrete.
- Waterproofing mortars / concretes including terrace, toilets, chajjas, lift pits, balconies, masonry walls and slopping RCC roofs.
- Bedding for tiles / marbles.
- Bonding slurry.
- External rendering.
- General reconstruction work and latex modified overlays and topping.

Advantages

- Easy application by brush.
- Excellent concrete modifier.
- Withstands chloride ion diffusion & sulphate/CO₂ attack due to marine or industrial weather.
- Improves bond strengths to hardened concrete.
- Dense, impermeable, mortar for column & beam repairs.
- Reduces rate of corrosion when applied on steel bars.
- Reduces cracking through increased mortar flexural strength.
- Increases mortar wear resistance under rubber wheeled traffic.
- Increases mortar tensile strength.

Application Methodology

- Ensure that concrete is 3 days old if **ShaliCrete URP** is used as a slurry bond coat. Do not place slurry coat on standing water.
- Ensure that the concrete is clean and rough. Remove all oil, dirt, debris, paint and unsound concrete.
- The surface must be prepared mechanically using a scrubber, bush hammer, shot blast or scarifier. which will give a surface profile of a minimum 3 mm and expose the large aggregate of the concrete.
- Use vacuum cleaner or pressure washing to ensure thorough cleaning and removal of all residue.
- Ensure all concrete possess an open surface texture with all curing compounds and sealers removed.
- Pre-wet all areas to reduce moisture loss. Do not place product on standing water.

- To ensure durability and quality of repair or overlay, follow proper curing procedures. Maintain moist cure for 24 – 72 hrs to prevent surface cracking,
- **As Bonding Agent –**
 - Mix **ShaliCrete URP** and cement in the ratio of 1 : 3 by weight.
 - Apply a single coat by brush over the prepared surface. Do not dilute **ShaliCrete URP** for using as primer.
 - Apply fresh concrete / mortar over the bonding coat while it is tacky.
- **For Repairs –**
 - Apply bonding coat by mixing **ShaliCrete URP** and cement in 1 : 3 by weight and apply by brush a single coat over the prepared surface.
 - Prepare mortar with 50 kg cement, 150 kg dry sand, 7-8 Kg of **ShaliCrete URP** and 10-12 L of water to make a trowel-able mix.
 - Apply repair mortar at a thickness of 15 mm or more, when the bond coat is still tacky.
 - Finish with trowel for smoothness.
- **For Waterproofing –**
 - Repair all cracks in the prepared surface thoroughly with PlastiSeal.
 - Prepare slurry of cement and **ShaliCrete URP** in 4 : 1 proportion by weight with suitable addition of water.
 - Apply the first coat when the surface is in touch dry condition and allow it to dry for about 4 hrs.
 - Apply second coat and allow it to air cure for at least 72 hrs.
 - Protect the coating with a cement screed at least 25 mm thick, admixed with ShaliPlast LW.
- **Repair of Structural Beams / Columns –**
 - Apply bonding coat by mixing **ShaliCrete URP** and cement in 1 : 3 by weight and apply by brush a single coat over the prepared surface.
 - Prepare polymer mortar with 50 kg cement, 100 kg dry sand, 200 kg 6 mm down size washed aggregate, 8-10 Kg **ShaliCrete URP** and 10-15 L of water to obtain a flowable mix.
 - Execute structural repairs for columns & beams by applying polymer mortar. This can also be used for floor screed and PCC.
 - This is a dry pack method to build up the spalled areas of the cover zone concrete and has high compressive and tensile strengths.
 - Finish with trowel or wood batten.

Note : *Follow mixing using drill machine fitted with paddle or small mixer machine. Place the topping on the slurry coat before the slurry coat dries out
On large floor areas, use screed strips as guides in combination with vibratory screeding to level. Compact and finish by hand or machine trowel.
Slurry Application: Spread the slurry with a stiff bristle broom until the suggested coverage rate is achieved*

Cleaning & Maintenance

Clean tools and equipment with water before the material hardens

Health & Safety

- Use goggles and hand gloves and mask during application.
- Clean hands with warm soap water after application.

Packaging

Available in 5 kg, 20 kg & 200 kg drum.

Storage

Keep in cool and dry place, under shed, away from heat.

Shelf Life

12 months in original unopened sealed condition.



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

