

ADVANCED URP 99[®] SBR LATEX



PROTECTION



HIGH STRENGTH



STRONG ADHESION



DURABLE



100% Silane



Eco Friendly



Long Life

Description

Engineer Plus Advanced URP 99 is based on modified styrene butadiene latex supplied as a ready to use bonding agent in liquid consistency. It is used for repair of spalled concrete – floors, columns, beams, chajjas, slabs, waterproofing of toilets & bathrooms, small terraces etc. It bonds strongly to old & new concrete and to plasters. It reduces shrinkage, prevents cracking, dust pick up & improves abrasion resistance.

Features & Benefits

- **Multipurpose** – It is multipurpose & economical product, easy to use.
- **Cracking** – It prevents cracking by improving flexural strength.
- **Hardness** – Improves the hardness & prevents dust generation.
- **Shrinkage** – Reduces drying & aging shrinkage cracks.
- **Bonding** – Bond strongly to concrete, masonry, stonework, plasters, cementitious surfaces, asphalt & most of the building materials.
- **Erosion & corrosion** – Improves erosion resistance & prevents corrosion.
- **Abrasion resistance** – Improves abrasion resistance of the cement mix.
- **Grouting** – Reduces viscosity of cement injection grout for better fluidity & bonding.

Method of Application

1. SURFACE PREPARATION

- Clean the surface with wire brush or scrubber to remove hidden dirt, loose particles, laitance & dust. Degrease the surface by using suitable solvents.
- Repair the spalled concrete portion by saw, cutting the extreme edges of the repair location to a depth of at least 10 mm to avoid featheredging & to provide strong bond.
- Clean the concrete surface to remove any contamination where breaking is not possible. Roughen the surface by light scabbling or grit blasting.
- Expose corroded rebar in the repairing area fully. Remove all loose scales & corrosion deposits and immediately clean the surface.

2. PRIMING

- For priming of steel surface, apply Engineer Plus Rust Arrest to all exposed reinforcement area and wash it with water jet before applying Engineer Plus Epoxy Zinc Rich Primer on the rebars.
- For priming of concrete substrate, the surface should be thoroughly saturated with potable water. Remove any excess of water prior to application. Slurry of primer coat is prepared by mixing of one part **Engineer Plus Advanced URP 99**, one part of water and 3 parts of fresh OPC cement. Slowly mix cement with binder to obtain a smooth consistency. Continue mixing the slurry during application to prevent settlement.

3. MIXING

- A forced action mixer is essential (Pan Mixer) & recommended to ensure that **Engineer Plus Advanced URP 99** mortar is thoroughly mixed or Use a suitable sized drum with heavy-duty electrical drill machine fitted with spiral paddle mixer at slow speed of 400-500 rpm.
- Hand mixing is permissible only for 25 kg or less quantity.
- Charge the mixer with required quantity of clean & dry sand, cement & mix for 1-2 minutes, then add **Engineer Plus Advanced URP 99** as per the dosages recommended. Mix for 2-3 minutes to avoid air entrapment. Keep on slowly adding water until the required consistency is achieved. do not add extra water.



FEATURES & BENEFITS:

- Styrene Butadiene co-polymer latex liquid that improves waterproofing.
- Strengthens bonding of new and old concrete & plaster.
- Enhances strength & water resistance of repair mix - concrete & mortar.



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Multiple uses and Applications

- Surface for treatment must be perfectly cleaned of all latent, oil, greases, mechanically and chemically finally vacuum cleaned & water washed to remove all loose material.
- **For waterproofing** : Mix Engineer Plus : Advanced URP 99 with neat cement in ratio of 1:1.5 by weight. Apply 2 coats in the interval of 2 hours. After 2nd coat when it is tacky protective screed is must.
- **As a mortar** : for repairs prepare a mortar with Engineer Plus Advanced URP 99 in the following proportion in the given sequence to get workable consistency.

333-URP	Water	Cement	Sand
150gm	200ml	1kg.	3kg
- **As Screed Concrete** : Concrete screeding mix Engineer Plus Advanced URP 99 with other ingredients in the following ratio as per the sequence for uniform consistency.

333-URP	Water	Cement	Sand	6mm crushed stones
150gm	200ml	1kg.	1.5kg	1.5kg
- **As a bond Coat** : Mix Engineer Plus : Advanced URP 99 and neat cement in 1:1 ratio by weight. Apply on pre wetted substrate immediately overlay repair mortar on the tacky surface.
- **As a protective coating** to robar's and cementitious substrate. Mix Engineer Plus Advanced URP 99 with neat cement in 1: 1.5 proportion by weight and apply.

Areas of Application

- For concrete repairs - spalled concrete of floors, columns, beams, chhajjas, slabs, parapets, etc.
- For waterproofing – small roof terraces, sunken portions of toilets & bathrooms, chhajjas & lift pits, balconies & staircases.
- For waterproofing – liquid & effluent tanks, car decks & walkways.
- As a bonding agent – bonding mortar for tiles & panels, as undercoat for special finishes such as top rendering coat for chemical resistant floors.
- As a bond coat – for bonding of new concrete to old concrete, masonry stone work, plastering.
- For cladding – fixing or re-fixing of slip bricks, tiles, stones & marble bedding.
- As external rendering – weatherproof & frost resistant render, high wear & erosion resistant render. As bonding slurry coat for pinhole treatment on concrete surface & as repair mortar for overhead application.

Coverage

- 2 - 2.2 sq. mtr/kg for 2 coats. (URP+cement in the proportion 1:1.5)

Technical Data Sheet

PROPERTIES	RESULTS
Base	SBR Latex (styrene, butadiene rubber)
Coverage OPCS URP 1:5	20-22 sq ft/kg for two coats
pbwt	1:1.5
Total active solid content	34 ± 2%
pH	8 - 9
pot life @ 30°C	30 - 45 minutes at 30°C
Specific gravity at 30°C	1.01 ± 0.02
pH	7 to 9
Compressive strength, N/mm ² -7 days	Passes the specification.
Tensile strength, N / mm ²	Passes the specification
Flexural strength, N/mm ²	9>
Slant shear bond, N/mm ²	30
Chemical resistance to mild acids, alkalis, sulphates.	Resists
Resistance to water pressure, bar	Upto 2
Freeze thaw resistance	Excellent