

# ShaliCem<sup>®</sup> EWP

Two Part Acrylic Based Cementitious Elastomeric Waterproofing Coating



## Description

**ShaliCem<sup>®</sup> EWP** is a two-component, UV resistant, acrylic polymer modified cementitious coating system that is mixed on site to form an elastomeric waterproofing coating. It can be applied on concrete, masonry by brush, roller or trowel. The coating forms a hard finish, seamless surface that act as a barrier to waterborne salts and atmospheric gases.



Approved

## Approvals / Standards

DIN 1048: Water Penetration Test, BS 1881 part 5, USFDA-175.300 for contact with potable water.

## Product Information

<b>Form, Colour, Mixing Ratio</b>	Component A (Powder) - Grey, Component B (liquid) - Milky White Component A : Component B = 14.8 : 5.2 (w/w) / 37 : 13 (w/w)
<b>Handling &amp; Storage</b>	Store under cover out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
<b>Packaging</b>	Available in 20 kg & 50 kg unit packs.
<b>Shelf Life</b>	12 Months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 40°C.
<b>Handling Precautions</b>	As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. Keep away from children and animals. After opening the seal, always consume total material.

## Technical Characteristics @ 30°C, 55% RH

Properties	Standard	Result
Cement factor of Component A, %	--	44 - 50
Solid content of Component B, %	--	50 - 54
Component B, pH	--	7 - 9
Working time, minutes	--	45 - 60
Mixed Density, gm / cc	ASTM D 1457	1.80 ± 0.03
Recoating time @ 30°C, hours	IS 101	8 - 12
Initial cure at 30°C for pedestrian traffic, hours	--	24
Full cure, days	--	7
Elongation after 7 days, %	ASTM D 412	50 ± 10
Tensile strength after 7 days, MPa	ASTM D 412	0.75 - 0.82
Adhesion to Concrete, MPa	ASTM D 4541	0.7 - 0.8
Recommended DFT / coat, µm	--	1000
Theoretical coverage, kg / m <sup>2</sup> per mm in 2 coats **	--	1.6

\*\* Depending upon the concrete surface profile

## Field of Application

- Concrete, masonry
- Waterproofing treatment of roof, basement raft against rising dampness
- Roofs, terraces and damp patches on walls to seal joints through which there is a possibility of water ingress
- Underneath tile mortars in kitchens & toilets

## Advantages

- UV Resistant
- Breathable, water vapor permeable
- Non-toxic solvent free, environment friendly
- Flexible, bonds to porous and non-porous surface

## Application Information

- ✓ **Substrate Temperature** +10°C Min / +40°C Max
- ✓ **Ambient Temperature** +10°C Min / +40°C Max

## Application Methodology

### ➤ Surface Preparation

- Prior to application of **ShaliCem® EWP**, all surfaces must be prepared properly to avoid failure. The surface shall be cleaned to remove all dust, foreign materials/loose particles or any deposits of contaminants, which could affect the bond between the original substrate and the **ShaliCem® EWP** system. This can be done by scarifying, grinding, water blasting, sand blasting, acid washing or any other approved method.
- Repair any cracks, honeycombed pockets or holes by PMC mortar or **ShaliFix® FRM**.
- Ensure to dampen walls for an hour before application and keep damp allowing moisture to soak in. Wet dense concrete at least twice, not less than 30 minutes apart. Surface must be damp during application. Do not allow standing water.

### ➤ Material Preparation

- Add total Component B into a suitable container containing and thereupon, add whole Component A slowly and mix with the help of paddle mixer at low speed (300 - 400 rpm).
- The mix has to be stirred thoroughly, until lump-free smooth slurry is obtained.
- Stand for 4-5 minutes after mixing to release air from the mix.

### ➤ Application of Material

- All concrete surfaces (flat and vertical / inclined) shall be thoroughly pre-wetted to saturated surface dry condition; at the same time there should not be any standing water on the surface or it should not be too wet prior to application of **ShaliCem® EWP**.
- Apply **ShaliCem® EWP** on clean and dampen surface with brush, roller, trowel or spray.
- Apply second coat when the first coat is dry.
- It is recommended for good waterproofing, DFT should be 1 mm.
- After application of **ShaliCem® EWP**, initial air-drying shall be done for 3 - 6 hours. During this period, no water should be used for curing. If there is a chance of rain or hot (temperature above 40°C), windy atmospheric conditions within this period, protect the coating by covering with waterproof plastic sheet.
- When surface becomes hard enough, fog spray with clean water keeping waterproofed surface damp for 2 - 3 days. Hotter the weather, more critical the curing. Light spraying of water is recommended more frequently and for several days.
- After the moist curing the **ShaliCem® EWP** coating shall be allowed to air dry for 3 days before submersion in water
- For better properties one may go for **ShaliCem® EWP 150**, which is the superior grade of **ShaliCem® EWP**.
- For reinforcement Glass fabric can be used.

### ➤ Protection of Waterproofing

- Apply PCC admixed with **ShaliPlast® IW** to protect the treated surface. Alternatively, for trafficable roof, use **ShaliProtek® PU HA** coating.

## Precautions

- During mixing and application, DO NOT ADD WATER TO DILUTE THE MATERIAL.
- Post final application of **ShaliCem® EWP** coating, at no point of time should be left completely dry or submerged in water.
- Reinforcement rods and other sharp materials should not be dragged over the **ShaliCem® EWP** membrane, as this can puncture the same.
- Two coats are always recommended for longevity and higher efficiency.

## Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

## Health and Safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- 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.

## Cleaning & Maintenance

- Clean all tools immediately after use with STP Thinner only. Do not allow the material to harden. Hardened materials should be removed mechanically.



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*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



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