

MONO ULTRA EWP

Elastomeric acrylic cement modified waterproof coating

Description

MONO ULTRA EWP is a two components; elastomeric polymer modified cementitious waterproof coating suitable for internal and external applications.

MONO ULTRA EWP provides a hardwearing, seamless, waterproof membrane for potable water retaining structures, tanks, basements, foundations and culverts.

MONO ULTRA EWP shows excellent crack accommodation and is suitable for use on concrete.

Applications

- Waterproofing of water retaining structures and reservoirs.
- Waterproofing of basements, roofs, and foundations.
- •Waterproofing of bathrooms and wet areas.
- Protection of concrete substrates and masory against carbon dioxide, chloride ions, water and de-icing salts.
- Works as a barrier for rising damp and efflorescence when applied on concrete or masonry walls.

Advantages

- Non-toxic, approved for use in contact with potable water.
- Elastomeric, can accommodate static and dynamic cracks.
- Fungus, mould resistant.
- Able to withstand high positive and negative pressures.
- Excellent bond to porous and non-porous surfaces.
- Breathable.
- Durable, excellent protection against carbon dioxide, chloride ions and water.
- Cost effective, quick and easy brush or spray application.
- Suitable for internal and external applications.

STANDARDS

MONO ULTRA EWP Approved by Water Byelaws Scheme; WRC.

Technical Properties

Mixed density: 1.85 ± 0.05 g/cm³ Working time: 45 min @ 300CColour: Grey or white

Resistance to > 70 m positive (7 bars)

water pressure

(2 mm coating): > 30 m negative (3 bars)

DIN 1048

Static crack accommodation: > 0.8 mm

Mixing ratio: 5.1 kg liquid polymer with 17.9 kg

powder

VOC: < 10 g/ltr (powder) < 20 g/ltr (liquid)

Minimum application temperature: 5°C

Bond strength: > 2 MPa @ 28 days(concrete failure)

(on normal concrete) ASTM D4541-02 Bond strength: > 2 MPa @ 28 days

(on fair face) ASTM D4541-02

Bond strength of > 2 MPa (plaster failure)

cement plasters: (like Decoplast)

on MONO ULTRA EWP

Tensile strength: > 1.5 MPa @ 28 days

(2 mm thickness) BS 6319, Part 7

Note: These results were achieved using 2 mm thickness.

Method of Use

SUBSTRATE PREPARATION

The surfaces to be coated should be clean, sound, and free from contamination. Remove any traces of curing compound, laitance, organic growth or any other loose materials. This is best obtained by using high pressure water or light grit blasting.

Substrate containing honey combing, damaged

or deteriorated concrete should be repaired using suitable repair mortars from STARKE repair systems before coating.

Priming

No special primer is required, but substrate should be pre-soaked with clean water prior to application of **MONO ULTRA EWP**.

Mixing

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. Add the liquid component of **MONO ULTRA EWP** to a clean container.

The powder component is then added slowly to

the liquid while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until a uniform consistency is obtained.

Application

MONO ULTRA EWP can be applied by brush, trowel, or spray machines. The mixed material should be brushed well into the surface. Strike off with brush in one direction.

- Care must be taken not to spread the materials too thin. The first coat should be applied at a wet film thickness of 1mm. When the material begins to drag, do not add any water, but dampen the surface again.
- •A minimum of 3 5 hours, depending on the prevailing ambient temperature, should be given for the first coat to cure before applying the second coat. If the first coat is left exposed for a long period of time, it is recommended to wash the surface with water before applying the second coat, in order to ensure a dust free surface.
- •For brush application, the second coat should be applied in a perpendicular direction to the previous layer to ensure good bond and coverage.

To achieve a smooth finish, it is recommended to finish the surface with a trowel immediately after brushing the second coat. The total dry film thickness for both coats should be 2 mm.

REMARKS

- MONO ULTRA EWP should not be applied to frozen substrates or if ambient temperature is below 5°C or expected to fall below 5°C.
- The area must not be exposed to moving water during application.
- MONO ULTRA EWP typically reaches a shore A hardness of over 80 after 24 hours from the application of the second coat (at $23 \pm 2^{\circ}$ C and relative humidity of $50 \pm 5\%$) which allows for the water ponding test to start at this period. However, at temperatures below 21°C or relative humidity higher than 55%, it is recommended to wait for a period of 48 hours after

the application of the second coat in order to conduct the water ponding test.

 Where cementitious plaster is to be applied over MONO ULTRA EWP, a mix of sand, cement and should be sprayed over MONO ULTRA EWP as key. Addition rate of MONOCURE should be 10 litre/bag of cement.

Cleaning: All tools should be cleaned immediately after finishing using clean water. Hardened materials should be cleaned mechanically.

Packaging: MONOULTRA EWP is available as 23 kg packs.

Coverage: Approximately 12 - 13 m2 per 23 kg for one coat @ 1 mm thickness, depending on the condition of the surface and method of application.

Storage: MONOULTRA EWP has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 35°C.

If these conditions are exceeded, STARKE Technical Department should be contacted for advise.

CAUTIONS

HEALTH AND SAFETY

As **MONO ULTRA EWP** contains Portland cement, **MONO ULTRA EWP** may cause irritation to skin or eyes. In case of accidental contact with eyes, immediatly flush with plenty of water for at least 10 minutes and seek medical advise if necessary.

For further information refer to the Material Safety Data Sheet.

Fire: MONO ULTRA EWP is nonflammable.

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Concrete admixtures.
Surface treatments
Grouts and anchors.
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