

## Flexible Polymer Cement Waterproofing

### Description

**Cem Seal 135** is a two part, prepacked system, consisting of a first grade of liquid polymer as part A and a premixed powder as part B. The two parts on mixing yield a brushable, smooth slurry with excellent bond to most substrates. The product is based on selected flexible polymer synthetic resins and type I of cements.

**Cem Seal 135** is suitable in:

Contact with Potable Water – WRC (UK)

Contact with Potable Water – SS245:81, Appendix H

Contact with Potable Water – Albury Lab. (UK)

**Cem Seal 135** is in compliance with:

Bureau Ventas Portability test for used in drinking water reservoirs or tanks.

Surface Spread of Flame test:- BS 476:Pt.7:71 (class 1)

### Recommended For

**Cem Seal 135** is designed to be used as an effective waterproofing membrane on a variety of substrates. Application includes:

- ❖ Waterproof coatings to the internal faces of water tanks, sumps, reservoirs, planter boxes etc., before tiling or other surface finishing.
- ❖ Treating terraces, balconies, kitchen and toilet floors as a sandwich treatment, to prevent water ingress.
- ❖ Treating bridge & flyover decks before wearing course to protect concrete from rainwater ingress.

### Features and Benefits

#### Polymer modified

Improved bond strength on a variety of substrate.

#### Permeable to water vapours

Allows surface to breath, preventing build up of vapour pressure

#### Flexible

Can stand moderate movements of hairline cracks. Crack bridging up to 0.3 mm cracks width.

#### Resistant to weathering

Suitable for use in exposed conditions.

#### Brushable consistency

Easy to apply by brush or spray.

#### Non toxic

Can be applied on surfaces in contact with drinking water.

### Mechanical of Properties Specification (Result tested at 25 °C)

Tensile Strength	7 days	0.92 N/mm <sup>2</sup> (Test speed: 200 mm/min)
Tensile Strength	28 days	1.46 N/mm <sup>2</sup> (Test speed: 200 mm/min)
Elongation at break	%	34
Elongation at max. force	%	Nil
Flexibility Test	(</mm)	No Crack
Water Penetration Test	(0.5kg/cm <sup>2</sup> )	<0.10mm
Coefficient of Permeability	(0.3kg/cm <sup>2</sup> )	2.27 x 10 <sup>-13</sup> m/s
Supply Form		Part A: Liquid      Part B: Powder
Working Time		20°C: 45 minute      30°C: 25 minute
Chloride Ion Diffusion		30 days: 1 mg/l      90 days: 8 mg/l

<b>Method of Application</b>	Surfaces should be structurally sound, clean, and free from loose particles, oil, grease, or any other contaminants. Cement laitance, loose particles, mould release agents, curing membranes, and other contaminants must be removed by wet grit blasting, high pressure water jetting (approx. 150 bars) or such other effective methods. Fill surface irregularities such as below holes, honeycombs etc., with as <u>Cem Strength</u> repair mortars to achieve a smooth and level surface. Saturate the prepared substrate with clean water before applying <b>Cem Seal 135</b> .
<b>Mixing:</b>	Mechanical mixing is necessary. A slow speed (600 rpm), heavy duty electric drill with a wing type paddle is recommended. Place approx. 75% of Part A of the pack in a clean pail. Keeping the mixer running, add the Part B slowly. Mix for at least 3 minutes to get a lump-free homogenous mix. While continuing to mix, add all of the remainder of Part A if applying on a horizontal surface, or a part of it if applying on vertical surfaces till the required consistency is obtained.
<b>Placing</b>	It is extremely important that the area being treated is shaded from direct sun rays and wind to prevent rapid drying of the coating. Apply <b>Cem Seal 135</b> evenly with a stiff brush or by a spray, onto the prepared surface, to give a continuous film. The total film build up should be 1 to 2 mm on vertical & overhead surfaces and 1 to 3 mm in case of horizontal surfaces which should be built up in at least two coats, applied one day apart. To avoid pin holes, apply the second brush coat at right angles to the direction of first coat. In hot climates, it may be necessary to retard the setting time of <b>Cem Seal 135</b> to minimize the risk of frequent choking of the spray nozzle.
<b>Estimating Data</b>	The minimum recommended coverage of <b>Cem Seal 135</b> is 1.0 to 1.5 kg/m <sup>2</sup> to get 0.50 mm to 0.75 mm thick film build per coat. Actual coverage depends upon the method of application, the texture and porosity of the surface. Therefore material requirement is approximately 2 kg/m <sup>2</sup> for 1 mm thick coating.
<b>Thickness Require Packing</b>	<b>Floor Surface: 1.5 to 3.00mm</b> <b>Wall Surface: 1.0 to 1.50mm</b> 36 kg set    Part A: 8kg (Liquid)    Part B: 28kg (Powder)
<b>Available of Color</b>	Grey/Powder & White/Liquid
<b>Storage Shelf Life</b>	12 months from date of manufacture if stored in tightly sealed original packaging, in dry and cool enclosed area.
<b>Handling Precautions</b>	For Health, safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

**The General Term & Conditions**

All recommendations for use of our product, whether given by us in writing, verbally, or to be implied from the results of tests carried out by us are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for this intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefore. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

The above mentioned details Specified key data are individually checked throughout, guarantee, and included in the certificates of Analysis (CoAs). & Typical key data are spot checked, the value are typical for the product and are indicated for information only. The values are not guaranteed or included in the CoAs.



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