

# Polyflex S

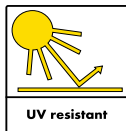
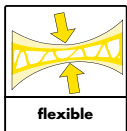
## Acrylic modified cementitious waterproofing coating

Two component acrylic modified cementitious coating, specially designed for structures continually immersed conditions.



### CHARACTERISTICS

- ▶ Factory produced and packed to avoid on site variations
- ▶ Seals light weight aerated blocks.
- ▶ Seals pre-cast joints.
- ▶ Non-Toxic, compatible with drinking water.
- ▶ Anti carbonation protection.
- ▶ Non corrosive to metal.
- ▶ Can withstand negative and positive water pressures.
- ▶ Excellent adhesion to most substrates.



### DESCRIPTION

Polyflex Super is a two part acrylic modified cementitious flexible water proofing system, especially designed for continually immersed conditions. Polyflex Super when mixed together forms a tough but flexible membrane which bonds to most concrete or masonry substrates to protect against possible ingress of water and water borne chemicals.

### FIELDS OF APPLICATION

- for the total water proofing of water tanks both external and internal.
- provides a good anti carbonation protective coating to exposed concrete structures.
- for coating on sea water structures.
- concrete reservoirs, lift walls and pits.
- water proof coating for roofs, domes, tunnels, swimming pools, lift wells, spillways, surge shafts, pre-cast slabs and other wet areas.
- specially designed for permanent ponding.

### ENVIRONMENTAL INFORMATION

Contributes toward satisfying LEED® v4 requirements of the EQ Credit- Low-emitting Materials (for the VOC content)

### APPLICATION INSTRUCTIONS

#### Surface Preparation

The surface must be clean and free from oil, grease, dust, loosely adhering particles and any other contaminations.



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The substrate to be coated with Polyflex Super must be structurally sound. Cracks and pot holes are to be repaired with Polycrrete repair mortar prior to the application of the system. Light mechanical grinding or high pressure water jet cleaning of the concrete surface can be done to remove any contaminants on the surface. Saturate or thoroughly wet with water the surface and bring it to surface saturated dry condition prior to the application of the coating. However, ensure that there is no standing or flowing water.

#### Mixing

Polyflex Super is supplied in two parts and pre-measured. Only on site mixing is needed. Slowly add the powder to the liquid and mix using a slow speed drill fitted with a suitable paddle. Mix only sufficient quantity which can be used within the pot life. Mixing is to be continued till a creamy, homogenous and lump free consistency is achieved.

#### Application

Apply the mixed material on to the damp surface by a soft bristled brush, roller or a suitable spraying machine. If the brush starts dragging, dampen the surface again. However, do not add water to the mixed material. Allow the first coat to dry considerably, which typically will be 4-5 hours at 35°C. Application of the second coat is to be done at

right angles to the first coat. However, pre wetting the first coat is not required prior to the application of the second coat. The typical coverage rate will be 1.75 kg/m<sup>2</sup>/coat to get a Dry Film Thickness of 1mm. In corners and joints, for added reinforcement, Watertite CL 252 mesh shall be embedded in first coat whilst still wet and can be covered with the second coat applications. Curing should be done immediately after the coating has attained its final set. Ponding or the use of wet Hessian cloth is recommended.

### COVERAGE

12.5 kg kit will cover approx. 7m<sup>2</sup> at 1mm Dry Film Thickness.

### CLEANING & DISPOSAL

Clean all tools with water immediately after use. Hardened materials can be removed mechanically only. Allow the waste to cure. Seal it into a suitable container and bury in landfill. Use licensed waste disposal contractor and consult the local authorities when disposing.

### SUPPLY

|                  |             |
|------------------|-------------|
| Part A (Powder)  | 7.5 kg kit. |
| Part B (Liquid)  | 5 kg kit.   |
| Watertite CL 252 | 100mm x 50m |

### STORAGE & SHELF LIFE

Store under cover and out of direct sunlight. Protect from extreme temperatures. The shelf life is 12 months when stored as per recommendation and in un-opened conditions. Failures to comply with the recommendations will result in premature deterioration of the product and reduce its shelf life.

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### HEALTH & SAFETY

As with all construction chemical products caution should always be exercised. Protective clothing such as gloves and

goggles should be worn. Treat any splashes to skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting but call for medical assistance immediately.

### TECHNICAL PROPERTIES

| PROPERTIES                                 | VALUES          | TEST STANDARDS       |
|--------------------------------------------|-----------------|----------------------|
| Color                                      | Grey/ off white | -                    |
| Mixed density, [g/cc]                      | 1.75±0.05       | ASTM D 1475          |
| Pot life, [minutes]                        | 45              | -                    |
| Tensile strength, [N/mm <sup>2</sup> ]     | >1.5            | ASTM D 412           |
| Elongation, [%]                            | >100            | ASTM D 412           |
| Adhesion to concrete [N/mm <sup>2</sup> ]  | >0.5            | ASTM D 4541          |
| Crack bridging ability [mm]                | >1              | ASTM C 836           |
| Hydrostatic pressure @5bar, [50m]          | No leakage      | BS EN 12390 [Part 8] |
| Hydrostatic negative pressure @3bar, [30m] | No leakage      | BS EN 12390 [Part 8] |
| Toxicity                                   | Non toxic       | BS 6920              |
| Touch dry, [hours]                         | 4-5             | -                    |
| Foot trafficable, [hours]                  | 24              | -                    |
| Full cure, [days]                          | 7               | -                    |
| Application temperature, [°C]              | 5 to 45         | -                    |
| Service temperature, [°C]                  | -5 to +80       | -                    |
| VOC, [g/L]                                 | <50             | ASTM D 3960 / D 2369 |

*All values given are subject to 5-10% tolerance*

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.



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