

# **Polyflex Super**

Provenperformance

# 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.

# FEATURES

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

# USES

- o For the total water proofing of water tanks both external and internal.
- o Provides a good anti carbonation protective coating to exposed concrete structures.
- o For coating on sea water structures.
- o 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.
- o Specially designed for permanent ponding.

# • TECHNICAL PROPERTIES

Tensile Strength ASTM D 412-92	:>1.5 N/mm <sup>2</sup>
Elongation at Break ASTM D 412-92	:>100%
Adhesion to Concrete ASTM D 4541	:>1.5 N/mm²
Crack Bridging ASTM C 836: 95	: up to 2mm crack width
Positive water pressure resistance BS EN 12390 Part 8: 2000 Negative Water pressure resistance	: 5 bar (50 m head of water) : 3 bar (30 m head of water)
Chemical resistance	: 0.5 % Nacl 1 % NH4OH 3.5 % Hcl
Chloride Content	: <0.01 %
Pot Life, 30° C	: 45 minutes
Drying Time	: 2-3 hours
Foot Trafficable	: 24 hours
Full Cure	: 7 days
Specific Gravity	: 1.75
Suitability for use with potable water tank BS 6920 Part 1: 1990 Color	: Confirms : Grey/ White
Application temperature	: +5° C to + 45° C
Service Temperature	: -5° C to +80° C

## APPLICATION

## Surface Preparation

The surface must be clean and free from oil, grease, dust, loosely adhering particles and any other contaminations. The substrate to be coated with **Polyflex Super** must be structurally sound. Cracks and pot holes are to be repaired with **Polycrete** 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 1.8 kg/m<sup>2</sup>/coat to get a Dry Film Thickness of 1mm.

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 6.9 m<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.

# PACKING

Part A (Powder) - 7.5 kg kit. Part B (Liquid) - 5 kg kit.

## STANDARDS

BS-1881 Part 5 1983-ISAT/BS-476 Part 6, BS 6920 Part 1: 1990, BS EN 12390 Part 8: 2000

# STORAGE

Store under cover and out of direct sunlight. Protect from extreme temperatures. The shelf life is 6 months when stored as per recommendation and in un-opened conditions. Part B, liquid component should be stored in an air conditioned environment at less than 25°C

# 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.

Last revised on March 2009

Technical information given in this data, is to the best of our knowledge and is true and accurate
All data are averages of several tests conducted under lab condition.

Climatic variation such as temperature, humidity and prososity of substrate may affect the values.



Henkel

