

Polyflex



TO SEAL & PROTECT

Technical Data Sheet

DESCRIPTION

Polyflex is a two part acrylic modified cementitious coating, mixed at site for easy application. Polyflex cures to form a tough flexible coating with excellent waterproofing properties.

USES

- ▶ Pile head waterproofing.
- ▶ Water proofing of potable water reservoirs, both interior and exterior.
- ▶ To provide protection for concrete against carbonation and chloride attack.
- ▶ Water proof coating for roofs, concrete water tanks, lift pit, swimming pools, spillways, bathrooms, kitchens and other wet areas.
- ▶ Waterproof lining for water retaining structures.
- ▶ As a backing to tiles, mosaic and marble to prevent water absorption.
- ▶ General construction waterproofing.
- ▶ As a protective coating for foundations.

ADVANTAGES

- ▶ Excellent performance and flexible in nature.
- ▶ Good adhesion to most surfaces.
- ▶ Non toxic, therefore suitable for potable water.
- ▶ Resistant to carbon dioxide and chloride ion diffusion. (Forms a film that provides an anti carbonation coating over concrete).
- ▶ Can resist up to 5 Bar of pressure.
- ▶ Unlike conventional coatings which require 7-28 days cure of concrete, Polyflex can be applied to 24 hours old concrete, thereby giving immediate protection to the concrete.
- ▶ Allows the substrate to breath.

APPLICATION PROCEDURE

Surface Preparation

The surface must be sound and free of oil, grease, dust and other unwanted residual material which will affect the bonding. The surface to be treated should be pre-saturated with water prior to application but remove any standing water prior to application.

Mixing

Polyflex is supplied in two parts, and pre measured. On site mixing is needed. Pour the liquid into a suitably sized container and slowly add the powder to the liquid and mix using a slow speed drill (300-400rpm) fitted with a suitable paddle until a lump free creamy consistency is obtained. Do not mix more material than that can be used within 45 minutes. Never add water to loosen the material at any stage.

Application

Apply the first coat using sufficient material at a rate of 1 kg/m² to completely cover the holes, cracks etc. A soft bristled brush or roller can be employed for this. Once the first coat is dry, apply a second coat in order to achieve the required thickness at an average rate of 0.75- 1 kg/m² per coat. Glass cloth reinforcement can be placed into the first coat when still wet and prior to the second coat application for a reinforced system.

COVERAGE

1.8 kg/m² per coat for 1mm Dry Film Thickness.

PACKING

Polyflex is available in 20 kg kits.
Contains 2 parts.
Part A - 15 kg powder
Part B - 5 kg liquid.

CLEANING

Clean all tools with water.

STORAGE

Store under cover, out of direct sunlight and protect from extreme temperatures. Shelf life is up to 12 months when stored as per recommendations.

HEALTH AND 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 the 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

Color	: Grey/ White (Other colors on request)
Density (mixed)	: 1.7 g/cc
Pot Life, 30°C	: 45 minutes
Tensile Strength ASTM D 412-92	: >1.5 N/mm ²
Elongation at Break ASTM D 41292	: >5%
Adhesion to Concrete ASTM D 4541	: 1.5 N/mm ²
Crack Bridging ASTM C 836: 95	: up to 0.5 mm crack width
Positive water pressure resistance DIN 1048	: 5 bar (50 m head of water)
Negative Water pressure resistance BS EN 12390 Part 8: 2000	: 3 bar (30 m head of water)
Water Absorption	: <1 %
Suitability for use with potable water tank BS 6920 Part: 11 990	: Confirms
Chemical resistance	: 0.5 % Na cl 1 % NH ₄ OH 3.5 % Hcl
Abrasion Resistance (Taber abraser)	: 70.5 mg./1000 cycles
Drying Time	: 2-3 hours
Foot Trafficable	: 4 hours
Application temperature	: +5° C to + 45° C
Service Temperature	: -5° C to +80° C