

Techno FibreFlex XL

High Performance Elastomeric Cementitious Fibre Reinforced Waterproofing System

Product Description

Techno FibreFlex XL is a two component elastomeric cementitious fibre reinforced waterproofing system based on cementitious binders, high grade acrylic polymer, graded aggregates, special additives to provide superior water proofing system.

When the two component is mixed with recommended proportion of clean water, a blend with a plastic consistency is obtained.

BrushFlex XL can be applied by stiff brush, roller or trowell to obtain the desired thickness on horizontal and vertical surfaces.

Standards

Tested to ASTM D4060, ASTM D4541, ASTM D638, ASTM C836

Uses

Techno FibreFlex XL is an high performance elastomeric cementitious coating used for waterproofing and to protect atmospherically exposed reinforced concrete structures from attack by acid, gases, chloride ions, oxygen & water

Techno FibreFlex XL remains constantly flexible under all environmental conditions and is suitable for all types of concrete structures.

The product can be used on concrete, brick and block-work substrates and is equally suitable for new and existing structures. The product is designed to re-surface and even out variations in concrete and masonry surfaces and bridge shrinkage cracks. It provides a seamless, flexible waterproof coating suitable for water tanks, reservoirs, basements, balconies, swimming pool and roofs. The product provides a tough durable water resistant coating which can withstand light pedestrian traffic and also has excellent weather resistance for exterior applications.

Advantages

- Flexible and Fibre Reinforced to accomodate thermal movements
- Superior water impermeability
- Excellent barrier to carbon dioxide, chloride and sulphate ions
- Allows water vapour to escape from the structure
- High resistance to the effect of long-term weathering, durable in all climate conditions including UV attack
- Non-toxic ideal for potable water tanks Flexible with thermal expansion similar to concrete
- Excellent bond to concrete and masonry
- Excellent crack bridging ability

Properties

Pot life	: 30mins @30°C
Mixed density	: 1.75g/cc (brushable consistency)
Tensile strength	: 0.85 N/mm ² (at 1.5mm thk) (as per ASTM D 638)
Colour	: Grey
Application temp.	: Not less than 10 °C
Adhesion to concrete	: Excellent
Toxicity	: Non-toxic
Static crack	: 1.2mm

Application Instructions

Surface Preparation

All surfaces which are to receive the coating must be free from oil, laitance, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Typically concrete surfaces can be cleaned using high pressure water jet or grit blasting or by proper wire brushing. Spalled surfaces or those containing large blow holes, cracks and other such defects should be repaired using Technokem concrete repair mortars.

Priming

To further improve waterproofing and bonding properties on porous substates, we recommend Techno Brush Seal, a penetrating water repelling acrylic primer. Techno Brush Seal which ensures proper adhesion of all brushbable elastomeric memberane when waterproofing is done on porous substrates. It also acts as a bond layer between elastomeric coating and substrate.

The surfaces to be primed must be dried before treating with Techno BrushSeal.

Mixing

Techno FibreBond concentrate should be poured into a suitable container. Clean fresh water is added in the proportions shown below and mixing commenced with mechanical mixer using slow speed drill (500rpm). The powder component should be added gradually to the liquid to avoid lump formation and mixed for 2-4 minutes. Techno FibreFlex XL should be immediately used after mixing. Do not mix more material than can be used within the pot life. Keep stirring Techno FibreFlex XL during the application.

Mixing Ratio

Techno FibreFlex XL Techno FibreFlex XL Application

Components Indl Pack
Powder 20kgs
Techno FibreBond 5kgs
Water 4ltrs

Applications

For best results, surfaces should be damp. In order to obtain the protective properties of TechnoFibreFlex XL, it is important that the correct rates of application are observed. Use a short stiff brush preferably 120-150mm width and apply the mixed material like paint.

The application of Techno FibreFlex XL should not be done if the temperature of the substrate is below 10 CoWhen applying Techno FibreFlex XL on hot substrates i.e., over 30°C surface temperature, saturate the surface with water. Apply Techno FibreFlex XL in 2 coats to achieve 1mm thickness. The second coat of Techno FibreFlex XL shall be applied as soon as the rst coat has reached touch dry state. It is recommended that for general surfacing Techno FibreFlex XL should be applied at a minimum thickness of 1mm. Areas subjected to moderate and heavy loads/hydrostatic pressure, minimum 2mm thickness coating is recommended with screed above.

Allow the Techno FibreFlex XL coating to dry before covering with screed. Sprinkle coarse sand on wet surface of nal coating for better adhesion of screed.

To further improve elongation at failure and crack-bridging on horizontal surfaces, we recommend sand-wich layer of non-woven macro-holed polypropylene fabric on the first coat of freshly laid Techno FibreFlex XL using flat-bladed trowel to make sure that it is perfectly buttered. Apply second coat of Techno FibreFlex XL to cover the fabric and smooth over the surface using flat-bladed trowel.

Average drying time is 4 to 6 hours at normal temperatures. Cleaning

Cleaning

Techno FibreFlex XL should be removed from tools and equipment with clean water immediately after use. Hardened material can only be removed mechanically.

Packaging

Powder component : 20kgs Liquid polymer component : 5kgs

Coverage

This depends on the required consistency. The approximate coverage per pack at even consistency (1mm thickness) is as follows:

Consistency Brush application

Coverage (20kgs + 5kgs pack) 18 - 20m²
Primer Coat : La BrushSeal 8 - 10m²/ltr

1 (polymer): 3 (water)

Health & Safety

Techno FibreFlex XL system is non-toxic but alkaline in nature. Gloves and goggles should be worn while handling. Any splashes on the skin or eyes should be washed off with clean water. In the event of prolonged irritation, medical advice should be sought.

Shelf Life

The Powder component may be stored for upto 12months when contained in its original sealed packing.

The Liquid component may be conserved for upto 18months when contained in its original sealed packing.

Store Techno FibreFlex XL material in a dry place.

Important: Technokem products are guaranteed against defective materials and are sold subject to its standard terms and conditions of sale. It is the Customer's responsibility to satisfy themselves by checking with the Company whether the information is still current at the time of use. The customer must be satisfied that the product is suitable for the use intended. All products comply with the properties shown on current Technical Literatures. However, Technokem does not warranty or guarantee the installation of the products as it does not have any control over installation or end use of the product. All information and particularly the recommendation relating to application and end use are given in good faith.

