

Product Description

Techno FibreFlex Ultra is a two component elastomeric coating waterproofing system based on cementitious binders reinforced with compatible micro fibres, special additives, fine-grained selected aggregates, high grade acrylic polymers to provide superior water protection which consists of Techno FibreFlex Ultra powder and Techno Bond Ultra.

Techno FibreFlex Ultra can simply be applied by stiff brush, roller or trowel to obtain the desired thickness. Also, it can be spray applied both on horizontal and vertical surface.

The hardened layer of Techno FibreFlex Ultra remains constantly flexible under all environmental conditions.

It has excellent bonding properties on all cementitious substrates as long as they are sound and sufficiently clean. Its high resistance to deteriorating effect of UV Rays, a principle characteristic of the product ensures the structures are protected and waterproofed even in extreme climatic conditions including saline-rich atmosphere and polluted industrial areas.

Standard

Tested to ASTM 2369, ASTM D4541, ASTM D638, ASTM C836 ASTM D412 BSEN 14891

Uses

Techno FibreFlex Ultra 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 Ultra 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 blockwork substrates and is equally suitable for new and existing structures. The product is designed to reface 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, swimming pools, drainage culverts basements, terraces 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

	comp A	comp B
Consistency	Powder	Liquid
Color	Grey	White
Bulk Density (g/cm ³)	1.4	NIL
Density (g/cm ³)	NIL	1.01
Dry Solids Content (%)	100	55
Mixing Ratio	comp A : comp B = 1:1	
Application temp.	+ 5 ⁰ C to + 40 ⁰ C	
Pot Life	30mins @ 30 ⁰ C	
Performance of cured coating		
Bond strength (N/mm ²)		> 1.6
Elongation		> 225%
Static Crack bridging ability (mm)		> 2.0
Impermeability to water under 7 bar pressure		No penetration
Tensile Strength (N/mm ²)		> 6.5

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 Techno Greens Products.

Priming

To further improve waterproofing and bonding properties on porous substrates, we recommend Techno Brush Seal, a penetrating water repelling acrylic primer. Techno Brush Seal which ensures proper adhesion of all brushable 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.

Application

In order to obtain the protective properties of Tevhno FibreFlex Ultra, 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.

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 La FibreFlex Ultra using flat-bladed trowel to make sure that it is perfectly buttered. Apply second coat of TechnoFibreFlex Ultra to cover the fabric and smooth over the surface using flat-bladed trowel.

The application of Techno FibreFlexUltra should not be done if the temperature of the substrate is below 10 °C. When applying Techno FibreFlexUltra on hot substrates i.e., over 30 °C surface temperature, saturate the surface with water. ApplyTechno FibreFlex Ultra in 2 coats to achieve 1mm thickness. The second coat of TechnoFibreFlex Ultra shall be applied as soon as the first coat has reached touch dry state. It is recommended that for general surfacing TechnoFibreFlexUltra 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 TechnoFibreFlex Ultra coating to properly cure and dry before covering with screed. Sprinkle coarse sand on wet surface of coating for better adhesion of screed. Average drying time is 4 to 6 hours at normal temperatures.

Mixing

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

Mixing Ratio

Techno FibreFlex Ultra			
Components	Indl Pack	Small	
Powder	10kgs	5kgs	
Techno Bond Ultra	10kgs	5kgs	

Cleaning

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

Coverage

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

Techno FibreFlex Ultra	
Coverage (10kgs + 10kgs pack)	13 - 15m ²
Coverage (5kgs + 5kgs pack)	6 - 7m ²

Techno BrushSeal
Coverage - 10-12sqm/kg after diluting (1:3)

Packaging

Powder component	: 10kgs & 5kgs
Liquid polymer component	: 10kgs & 5kgs
Techno BrushSeal	: 5kgs & 20kgs

Precautions & Limitations

FibreFlex Ultra system has a limited resistance to water permeability. To provide effective protection to the building, when used on concrete surfaces, this system should be used in conjunction with Technokem range of Waterproofing Systems.

Health & Safety

FibreFlex Ultra 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.

Fire

FibreFlex Ultra system is non-flammable

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 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.

For Complaints/Suggestions:

Please write to our Customer Care Executive at

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