

LA FibreFlex Ultra

Ultra Flexible two-component Cementitious Waterproofing System

Product Description

La 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 La FibreFlex Ultra powder and La Bond Ultra.

La 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 La 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 D4541, ASTM D882, ASTM D 1653, ASTM D 570 $\,$

Uses

La 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.

La 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 block work 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 accommodate thermal movements
- Superior water impermeability
- Excellent barrier to carbon dioxide, chloride & 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

Technical Properties				
	Comp A	Comp B		
Consistency	Powder	Liquid		
Color	Grey	White		
Bulk Density (g/cm³)	1.4±0.1	NIL		
Density (g/cm³)	NIL	1.04±0.2		
Dry Solids Content (%)	100	>47		
Mixing Ratio	Comp A : Comp B = 1:1			
Application temp.	+ 5°C to + 40°C			
Pot Life	30mins @ 30°C			
Performance of cured coating @ 1mm thickness*				
Bond Strength (N/mm²) ASTM D 4541		2.0		
Elongation ASTM D 882		> 200%		
Static Crack bridging ability (mm)*		> 2.0		
Water Absorption ASTM D 570		1%		
Tensile Strength (N/mm²) ASTM D 882*		0.82		
Water Vapour Permeability (gm./m²/hrs) Test ASTM D 1653		1.3		
Shore 'A' Hardness		70		

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 La Greens Products.



Ultra Flexible two-component Cementitious

Primina

To further improve waterproofing and bonding properties on porous substrates, we recommend La BrushSeal, a penetrating water repelling acrylic primer. La BrushSeal which ensures proper adhesion of all brushable elastomeric membrane 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 La BrushSeal.

Application

In order to obtain the protective properties of La 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 sandwich 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 La FibreFlex Ultra to cover the fabric and smooth over the surface using flat-bladed trowel.

The application of La FibreFlex Ultra should not be done if the temperature of the substrate is below 10°C. When applying La FibreFlex Ultra on hot substrates i.e., over 30°C surface temperature, saturate the surface with water. Apply La FibreFlex Ultra in 2 coats to achieve 1mm thickness. The second coat of La FibreFlex Ultra shall be applied as soon as the first coat has reached touch dry state. It is recommended that for general surfacing La FibreFlex Ultra 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 La FibreFlex 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.

Mixina

La Bond Ultra concentrate should be poured into a suitable container. Mix the polymer concentrate thoroughly 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. La FibreFlex Ultra should be immediately used after mixing. Do not mix more material than can be used within the pot life.

Keep stirring La FibreFlex Ultra during the application.

No mixing of additional water is recommended.

Mixing Ratio

La FibreFlex Ultra

Components	Indl Pack	Bulk Pack
Part A: Powder	10kgs	20kgs
Part B: La Bond Ultra	10kgs	20kgs

Cleaning

La 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:

La FibreFlex Ultra		
Coverage* (10kgs + 10kgs pack)	15 - 16m ²	

* On primed surface using La BrushSeal

La BrushSeal

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

Packaging

20kg Packing (10kg Powder + 10kg Liquid)

40kg Packing (20kg Powder + 20kg Liquid)

60kg Packing (30kg Powder + 30kg Liquid)

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 Ultra material in a dry place.

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 La Greens 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: La FibreFlex Ultra system is non-flammable

Important: La Greens India Pvt. Ltd., 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, **La Greens India** 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.

