

ConFib Multifilament Microsynthetic Fiber



PRODUCT DESCRIPTION

ConFib Micro Fibers increase impact, abrasion, fatigue resistance, durability and toughness of concrete and extend the service life of concrete. It minimizes the shrinkage and settlement cracks in the concrete through its multidimensional and homogeneous distribution in the concrete. ConFib Micro Fibers are used as secondary reinforcement in concrete, plaster, screed, precast, spraying applications and construction chemicals.

ADVANTAGES

- Minimizes shrinkage and settlement cracks.
- Increases impact, shatter and abrasion resistance.
- Increases durability of concrete
- Reduces permeability and increases freeze-thaw resistance.
- Increases fatigue strength and extends concrete service life.
- Increases toughness of concrete and makes it flexible
- Increases cohesion, reduces segregation.
- Reduces rebound in shotcrete applications.
- It solves the problems such as cracking, abrasion and chipping in dusty product applications (repair mortar, ready-made plaster, screed, surface hardener, etc.) and increases the surface resistance of the applied mortar.

PACKAGING

- ConFib Micro Fibers are packaged in 600 grams of water-soluble papers.

APPLICATIONS

- Slabs on ground
- Shotcrete applications
- Plaster, mortar and screed applications
- Precast and prefabric applications
- Cement-based composites
- Tunnel applications
- Concrete roads and under rail concrete
- Coastal structures

GENERAL SPECIFICATIONS

- ConFib Micro Fibers can be used by adding directly to fresh concrete in a concrete plant or on the construction site
- ConFib Micro Fibers cannot be used as a substitute for steel reinforcement, but when used with reinforcement, it greatly reduces surface cracks.
- ConFib Micro Fibers do not have a positive or negative effect on compressive strength when used in the recommended dosage.

MIXING AND RECOMMENDED DOSAGE

- Optimum dosing for crack control is 1 pack of 600 grams per m^3 .
- ConFib Micro Fiber usage in concrete should be between 0.6 kg/m^3 and 1.8 kg/m^3 .
- After all the packages are added into the truck mixer, mixing should be ensured in the truck mixer for at least 5 minutes.
- Slump reduction may be observed in usages above 1.8 kg/m^3 dosing.

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Technical Informations

FIBER SPECIFICATION				
Standard	ASTM C1116/C1116M, EN 14889-2			
Raw Material	Polipropilen			
Colour	Naturel			
Density	0,91 g/cm ³			
Product Form	Multifilament			
Product Name	MF-06	MF-12	MF-19	MF-25
Length	6mm	12mm	19mm	25mm
Aspect Ratio	55	110	173	227
Tensile Strength	360 MPa			
Modulus of Elasticity	3,5 GPa			
Elongation	25%			
Fiber Quantity / Kg	160.000.000	80.000.000	52.500.000	40.000.000
Filament Diameter	30 µm			
Ignition Point	340 °C			
Melting Point	140 °C			
Alkali Resistance	High			
Acid and Salt Resistance	High			
Thermal Conductivity	High			
Electrical Conductivity	Low			
UV Resistance	High			
Water Absorption	None			

This informations are provided as guide of utilization for only under certain and controlled conditions. Before using the ConFib products, user should always read the instructions and follow the warnings regarding the product and safety informations. It is recommended that, user should consult to the authorities and use professional services to determine the suitability of the product in any project or application before commercial use.