

Pro FiberTex

Polypropylene Fiber Reinforcement



Description:

Pro FiberTex is an engineered polypropylene fiber designed specifically for secondary reinforcing of concrete. Pro FiberTex fibers are true monofilaments that totally disperse into the concrete mix when added at the batch plant or at the job site. Pro FiberTex is available in various lengths and deniers to provide optimum strength, reduced cracking and long-term concrete durability.

When a ready mix concrete supplier adds Pro FiberTex to a mix, the process of material settlements is altered. Millions of evenly dispersed fibers produce an internal support system that prevents or slows solids from sinking. This results in slower, more uniform bleeding and a reduction in concentrated internal tensile stresses that lead to plastic shrinkage cracking during early volume change. The stress induced micro cracks that do start are bridged and intersected by Pro FiberTex fibers, and crack propagation is stopped. Pro FiberTex fibers greatly reduce plastic shrinkage cracking and allows concrete to reach its designed strength & integrity without the use of welded wire fabric.

Primary Applications:

- Flatwork of industrial, commercial & residential concrete projects.
- Footings, foundations, walls and tank
- Concrete pipe, burial vaults and pre-stressed beams.

Features/Benefits (Plastic Concrete)

- Controls or eliminates plastic shrinkage cracks
- Reduces segregation
- Minimizes bleed water
- Provides three-dimensional reinforcing versus two dimensional with wire mesh.

Dosage Rate

Residential: (0.6 KG/M³)
Commercial: (0.9 KG/M³)

Hardened Concrete

- Reduces cracking
- Increase surface durability
- Reduces permeability
- Increases strengths

Others:

- Reduces in-place cost versus concrete with wire mesh
- Faster form removal
- Totally safe compared to extruded reinforcing mesh
- Easy to use and can be added to the concrete mix at any time prior to concrete placement.

Technical Data

Property	Typical Results
Material	Polypropylene
Specific Gravity	0.91
Alkali Resistance	Excellent
Acid Resistance	Excellent
Mildew Resistance	Excellent
Salt Resistance	Excellent
Thermal Conductivity	7 (Air = 1)
Electrical Conductivity	Low
Denier	30
Fiber Count	min (0.8M ³)
Fiber Type	Monofilament
Density	2.37 KG/m ³ (4 lbs.F ³)
Color	White
Absorption	Nil
Tensile Strength	75,000 psi min (517 Mpa) (40-100 ksi) (0.28 - 0.77 kN/mm ²)
Modulus of Elasticity	3793 MPa (0.55 x 10 ⁶ psi)
Youngs Modulus, 10 ³	2.1-3.5 kN/mm ² (0.3-0.5)
ksi Ignition Point	590°C (1100°F)
Melting Point	160°C - 170°C (320°F - 340°F)

Packaging

0.9 Kg Bags

