

Polypropylene Fibers

STRONGCRETE®

Fibrillated Mesh Fiber Based Concrete Additives in Graded Lengths with Chemical Surface Treatment for easy dispersion in concrete



Data Sheet

100% Virgin high tenacity fibrillated polypropylene mesh fibers with chemical treatment to the surface for uniform dispersion in wet concrete. This is available in graded lengths to give 3D micro-reinforcement. This is to be used as micro-reinforcement at minimum of 900 g / m³ of concrete. STRONGCRETE complies with ASTM C 1116, ACI committee report 544-1R

Function

- Reinforcement against shrinkage and intrinsic cracking
- Replaces welded wire mesh / secondary crack control steel used for crack prevention of concrete floorings.
- Reduces bleeding and dust formation in concrete.
- Improves impact resistance 3-4 times.
- Improves abrasion resistance by 30-40%
- Gives residual strength to concrete.
- Improves residual strength of concrete – thus avoids sudden failures and makes the concrete earth-quake resistant.
- Reduces permeability, thus protects rebar from corrosion. • Makes the concrete more durable.
- Makes hardened concrete more tough.

Areas of Application

Industrial Flooring, RCC Columns,Overlays Toppings Basement Waterproofing ,Warehouse Flooring, RCC Slabs Concrete Tanks Concrete Roads, Bridge Decks Precast Shortcrete,RCC Beams Driveways And all types of concrete, where toughness is required along with elimination of shrinkage cracks and other parameters mentioned earlier.

Properties

Length Graded, Construction

Fibrillated Melting Point -1650C

High Alkali Resistance - Full

Sp. Gravity - 0.92 g/cc

Absorption - Nil,

Salt Resistance - High

Elec.Conductivity -Low

Elongation -12-15%

Acid Resistance - High

Thermal Conductivity - Low

Tenacity - 4-5.5 GPD

Dosage

Minimum 0.9 kg / m³ of concrete. Contact us for recommendations for using fiber at higher dosage levels.

Mix Design

STRONGCRETE is physical micro-reinforcement hence additional water is not required.

Mixing Process

Mix directly in the concrete mixer @ 125 g / 50 kg bag of cement or 900 g/m³

Note

Fibers based additives is a micro-reinforcement and should not be used for replacement of structural or load bearing reinforcement.