



ZEN FIBRE



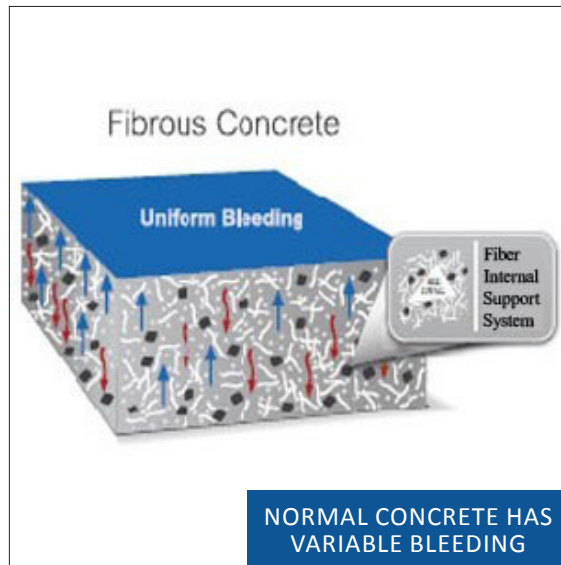
FIBRE MIXED INTO CONCRETE NOW AVAILABLE IN WATER SOLUBLE BAGS



CONCRETE SLUMP TEST



CONCRETE POUR WITH FIBRE MIXED IN



DRIED CONCRETE AFTER 28 DAYS

Zenith STEEL FABRICATORS LTD

DESIGN, FABRICATE & ERECT STRUCTURAL STEEL WORK

An ISO 9001:2008 Certified Company

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ZEN FIBRE

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ZEN FIBRE

PRODUCT DESCRIPTION

Zen Fiber is a high-performance monofilament polypropylene fiber developed for controlling cracking in concrete brought about by plastic and drying shrinkage, by reducing permeability. Just as graded aggregates enhance concrete strength, the graded range of Zen Fibers are designed to enhance structural integrity. The Zen Fibre consists of short discrete fibers that are uniformly distributed and randomly oriented within the concrete.

TECHNICAL SPECIFICATIONS

Composition	Polypropylene
Fibre Type	Microfilament/Graded
Specific Gravity	0.91g/cm ³
Available Lengths	Various
Equivalent Diameter	19.8 (Minimum Tolerance +/- 3%)
Colour	White
Ultimate Strength	400-500 Mpa In Triazone
Elastic Module	Approximately. 7-9 Gpa
Water Absorption	Nil
Resistance To Acids	Excellent
Fusion Point	>1600C
Electrical/Thermal Conductivity	Low
Dosages	From 0.8 To 3Kg/m ³ According To Desired Performance

MIXING INSTRUCTIONS

Zen fibers can be added to the concrete mixer at the batching plant or on site.

BATCHING PLANT

1. Add Zen fiber to the empty mixer.
2. Add about 50% water.
3. Add other constituents.
4. Mix for a minimum of seventy revolutions.

IN-SITU

1. Add Zen fiber to the back of the mixer.
2. Mix for a minimum seventy revolutions or five minutes whichever is the greater.

PACKAGING CONFIGURATION

Zen fibers are packed in pre-dosed paper degradable bags and are ready for use. The material is packed as follows: 0.6kg water soluble bags. The water-soluble bags are then packed into boxes for ease of handling.

STORAGE

If stored correctly, these fibers have no expiry date. Do not store fibers near highly flammable materials or any heating source. UV exposure will degrade the product. Should be kept in a dry area in order to avoid the degradation of bags and boxes.

ADVANTAGES

- Improve mix cohesion, improving pumpability over long distances
- Improve resistance to explosive spalling in case of a severe fire
- Improve impact and abrasion-resistance
- Increase resistance to plastic shrinkage during curing
- Improve structural strength
- Improve ductility
- Reduce crack widths and control the crack widths tightly, thus improving durability
- Safe and easy to use
- Requires no minimum amount of concrete cover
- Non-magnetic
- Rustproof and alkaline proof

COST-BENEFIT ANALYSIS

- Cost savings in secondary reinforcement steel mesh for ground supported slabs
- Faster construction (removes the need to lay mesh and spacers etc.)