

MasterFiber

Monofilament polypropylene fibres for cementitious system

DESCRIPTION OF PRODUCT

MasterFiber is a high performance fibrillated polypropylene fibre developed as a crack-controlling additive for concrete and mortar.

PRIMARY USES

MasterFiber is used to inhibit the formation of small cracks, which can occur through plastic shrinkage and settlement, premature drying and early thermal changes, in order to provide utilisation of the intrinsic properties of hardened cementitious material.

Specifically designed for crack control in cementitious materials covering areas such as ready mix concrete, pre-cast concrete, conventional shotcrete, screeds, rendering mortars, etc.

Principle uses of fibre concrete include: concrete slabs, pavements, driveways, imprinted concrete, curbs, pipes, overlays patch repair, micro silica concrete, thin section walling, water retaining structures, marine concrete, heavy industrial floors, etc.

ADVANTAGES

- Can replace anti-crack wire mesh in factory and warehouse floors
- Inhibits intrinsic cracking in concrete
- Disperse uniformly throughout the mix
- Improves finishing characteristics
- Improves concrete durability
- Increases impact and abrasion resistance
- Rustproof
- Impervious to alkali attack
- Decreases construction time and labour
- Reduced risk of subsequent damage
- Improves fire resistance – reduces the incidence of explosive spalling during heating

PACKAGING

MasterFiber is available in bags **0.9 kg** for **6-12-18mm** lengths.

TYPICAL PROPERTIES

Specific gravity:	0.91
Alkali content:	Nil
Sulphate content:	Nil
Air-entrainment:	Air content will not be significantly increased
Chloride content:	Nil
Constituents:	Pure homopolymer polypropylene Available in
Fibre length:	6-12-18 mm
Tensile strength:	Approx. 350N/mm ²
Melting point	Approx. 165°C
Absorption:	Nil
Thermal conductivity:	Low
Electrical conductivity:	Low
Resistance to acids/alkalis:	Excellent
Colour:	Transparent
Modulus of elasticity	Approx. 1000MPA

STANDARDS

- ASTM C 1116 - Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- EN 14889-2: 2006 Fibers for concrete part 2

COMPATIBILITY

MasterFiber can be used with all types of cement and is compatible with other admixtures.

ADDITION METHOD

MasterFiber is supplied ready for use, and in measure quantities for addition to the concrete mix, whether at the batching plant or on site.

SPECIFICATION

Concrete and mortar shall be manufactured using crack controlling additive, such as **MasterFiber** a polypropylene fibre with an individual fibre **length of 18mm, 12mm and 6mm.**

ADDITION RATE

It is recommended to use **6mm length** for plastering. While for other applications **12-18mm lengths** can be used at the rate of 0.9kg/m³.

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EFFECTS OF OVER DOSAGE

Overdosing of **MasterFiber** will generally produce a reduction in workability and an increase in the cohesiveness of the mix.

STORAGE

Should be stored in dry conditions.

NOTE

Field service, where provided, does not constitute Supervisory responsibility. For additional information, contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY STATEMENT

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies worldwide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

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