

Strufiber FP

Strufiber® FP

High performance micro polypropylene fibre

Uses

Strufiber FP is primarily used as a crack controlling additive for cementitious materials. Typical applications are:

- Crack control in readymix concrete, precast concrete, conventional shotcrete, screeds, rendering mortars, microsilica concrete
- Concrete slabs, pavements, driveways, imprinted concrete
- Water retaining structures, marine concrete etc.
- Patch repair, thin section walling etc.

Advantages

- Cost effective - replaces anti crack wire mesh
- User friendly - decreases construction time and labour
- Versatile - Inhibits intrinsic cracking in concrete, improves finishing characteristics, concrete durability and acts as a rust proofer.
- Disperses uniformly throughout the mix & does not rust.

Standards compliance

Strufiber FP complies with requirements of ASTM C111.6

Description

Strufiber FP, is a high performance micro polypropylene fibre, developed as a crack controlling additive for cementitious materials. It is available as monofilament 12mm in length for concrete and 6mm in length for plaster and mortar. It is used to inhibit the formation of small cracks which can occur through plastic shrinkage, premature drying and early thermal changes, in order to provide utilization of the intrinsic properties of the hardened cementitious material.

Strufiber FP is based on selected raw materials and manufactured under controlled conditions to give a consistent product. Strufiber FP is supplied in two sizes:

- 12 mm fibre length is designed for concrete mixes, with aggregate size greater than 5mm

- 6 mm fibre length is designed for mortar mixes.

Properties

Form	Virgin polypropylene fibre
Specific Gravity	Approx. 0.91 gr/cm ³ @ 20°C
Alkali content	Nil
Sulphate content	Nil
Air entrainment	Air content of concrete will not be significantly increased
Chloride content	Nil
Fibre thickness	18 and 30 microns
Youngs modulus	5500 – 7000 MPa
Tensile strength	350 N/mm ²
Melting point	160°C

Dosage

The optimum dosage of Strufiber FP to meet specific requirements should always be determined by trial mixes using the materials and conditions that will be experienced in use. As a guide to trials, the following dosage levels of Strufiber FP are recommended.

Fibre length	:	12 mm & 6 mm
Maximum aggregate size	:	32 mm
Dosage	:	
12 mm fibres	:	1 kg/m ³
6 mm fibres	:	1 kg/m ³
Typical areas of application	:	Ready mix concrete

Use at other dosages

Dosages outside the typical ranges quoted above

can be used to meet particular requirements, Contact STRUMIX for advice.

Effects of overdosing

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

Packaging

Strufiber FP is available in 5 and 20 kg bags.

Storage

When stored in the original unopened container in cool, dry conditions away from sources of heat and naked flames, Strufiber FP will have a shelf life of 36 months.

