

SikaFiber® T-60s

Synthetic macro-fibres with structural character for the reinforcement of concrete.

Usage

Description

SikaFiber® T-60s is a macro fibers made of polyolefin. The product has a very high capacity and it has been developed as an alternative to traditional construction reinforcement with a specific use in shotcrete and casted concrete.

CE-certification

Certified according to EN 14889-2:2008
CE certification number: 1035-CPD-ES024048-A

Technical data

Type	100% polyolefin
Colour / Appearance	Black fibre
Length of fibre	60 mm
Diameter	0,9 mm
Compact density	0,91 kg/dm ³
Tensile strenght	> 500 MPa
E-module	>20 GPa
Surface structure	Continuously embossed surface
Melting point	280°C
Conductivity	Low
Water absorption	None
Alkali resistance	High
Chemical resistance	High

Field of application

SikaFiber® T-60s can be used for all cement based material, for example:

- Concrete slabs (down to 10cm thickness)
- Shotcrete
- Concrete where there is requirement for stainless steel reinforcement when the concrete is exposed for chlorides, de-icing salts and/or other chemical stress.

SikaFiber® T-60s can be expected to give following properties for concrete applications:

- Improved flexural strenght and cracking behavior
- Improved cohesion and reduced risk for segregation
- Improved physical shock resistance
- Reduced wear of machinery as concrete mixers, -pumps and -pipes

Advantages compared to usage of steel fiber and traditional steel mesh:

- Low conductivity: well suited for concrete where there is need for low conductivity and/or magnetic interference
- Non corrosive: reduced problems for protruded fiber which can cause damages due to rust. Chemically inactive inert fiber, non-alkali containing material.

Light goods: easier handling compared to conventional steel reinforcement



Dosage

Actual dosage / m³ of concrete is added to the concrete mixer or truck mixing unit.

Normal level of dosage: 2-10 kg/m³ of concrete

Contact product manager or Sika Sweden for dosage level and execution.

General rule of thumb when dosing SikaFiber® T-60s over 4 kg / m³ of concrete is to reduce the amount of stones as follows:

The dosage of fiber (kg / m ³)	Recommended adjustments of the amount of stones *
≤ 4	ingen
4 - 5	reduce 1% / m ³ of concrete
5 - 6	reduce 2% / m ³ of concrete
6 - 7	reduce 3% / m ³ of concrete
7 - 8	reduce 4% / m ³ of concrete
8 - 9	reduce 5% / m ³ of concrete
9 -10	reduce 6% / m ³ of concrete

* Pre trials shall be performed according to required concrete standards with actual materials to clarify the right effect is achieved.

- SikaFiber® T-60s is added to the concrete or mortar mix as early in the mixing process as possible. This to secure as good distribution of the fibers as possible without prolonging the mixing time of the fresh concrete or mortar too much.
- For ready mix concrete production it's possible to add SikaFiber® T-60s directly to the truck mixing unit. In this case the fibers are first added into the truck and then the concrete is added, followed by a minimum 15 min mixing in order to distribute the fibers evenly in the concrete.
- Pre trials shall be performed according to required concrete standards with actual materials to clarify the right effect is achieved with SikaFiber® T-60s.

Packing & Storage

SikaFiber® T-60s is delivered in big bags (375kg) or bags (10kg/piece, 50 pieces / pallet). The fibers are packed as bundles wrapped in water soluble plastic tape which dissolves when mixed with the wet concrete.

SikaFiber® T-60s shall be stored dry and before usage keep a minimum temperature of +10°C. If the product freezes and is used at subzero temperature there is a risk that the water soluble plastic tape could break in the fiber dosing unit and create blockage (the water soluble tape gets fragile at subzero temperature but regain its elasticity at degree above zero). Avoid direct contact of sun light. Correctly stored product has more than 24 months package stability.

Health & Environment

See separate safety data sheet

Health & Environment

Legal notes

The information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of this parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request, or can be obtained at www.sika.se.



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