

Wiking® 4000 m

Wiking® 4000 m, is a multifilament special fibre. These ensure that tensile strength develops early in the hardening phase and form a 3D reinforcement system. The result is a very durable, long-term concrete surface with or without surface coating.

Benefits and characteristics

- An alternative to crack controlling reinforcement meshes
- Improves resistance to bending
- Our fibres are not magnetic
- Improves shock resistance
- Reduces the bleed and shrinkage of the concrete
- Increases the joint distance in floor elements

General fields of application

- Screed
- Upper concrete layer - parking decks etc.
- Concrete products
- Hall floors
- Agricultural construction
- Operating space

Mixing instructions

When preparing wet cement mixtures, the fibre should be added to the concrete mixer together with all the other ingredients.

The fibres spread very well within the mixed batch and increase its rigidity.

Balance out the consistency by using super plasticizer.

The fibre guarantees a quick and even 3D spread into the concrete matrix.

The mixing time per mixing volume is approx. 60-90 seconds; execute preliminary tests in the truck addition, at highest rotation for approx. 10 min.

A manual installation, using an extractor and a plastering trowel, as well as the installation by a laser controlled screeding machine are possible.

Delivery program

Wiking® 4000 m, is available in 480 kg pallets, 24 x 20 kg carton, carton 20 x 1 kg packages. Minimum quantity is to be determined in a common agreement.

Specifications

Wiking® 4000 m, is physically resistant against all the chemicals in concrete. The structure and surface ensure, that the concrete can have maximum torque strength. In this way the early tension caused by shrinkage can be evenly distributed in the concrete.

Surface treatment

The fibre surface is treated in a special way with regard to high dispersibility and adhesion ability in the concrete. This treatment simultaneously reduces the air inlet into the concrete to approximately 1-3.0 %, and air void inspections of the different concrete recipes are hereby advised before every concreting.

Extent of Guarantee

Wiking® 4000 m, complies with EN-14.889-2, fibre class 1a, system 1 and is produced in a facility that is certified with ISO 9001-2004. Danish Fibres does not have control over the installation of their products and their processing, and therefore cannot take responsibility for the final products.

Health and safety

Please read the specific safety data sheets or contact the technicians at Danish Fibres.

Technical consultation

The technical department at Danish Fibres is available to you and can give advice about the correct use of our products.

Specifications - Wiking® 4000 m

Material:	polypropylene C3 H6
Fibre length:	12, 18, 24 and 36 mm
Density:	≤ 0.91 g/cm ³
Design:	monofilament
Diameter:	50 µm
Tensile strength:	361 MPa
Resistance against alkalis:	high
Water absorption:	zero
Softening temperature:	approx. 160°C
Dosage:	1-3 kg/m ³ concrete

CE Declaration of Conformity No. 1077 - CPR-443019101e

For static design according to Eurocode 1 - 8

Requirements of EN 14.889-2, Fiber class 1a, System 1 Determination of design values,

Austria Association for Concrete and Structural Engineering (ÖVBB) Guideline (RIL) Fiber concrete 2008 a. EN 1990

Bending beam tests according to EN 14.651

Declaration of Performance Annex III of the EU, No. Ü 4430191-2019 - E

Our static Fibres also ensure a high level of impact resistance and post-cracking tensile strength in concrete

Crack opening area (-88%), average crack width (0.31 mm), shrinkage reduction (-79%) according to DIN EN 206 -1 and DIN 1045-2: 2013, with proven effectiveness

Approved for applications in contact with food in the EU, February 2016 / German Federal Law Gazette (BGBl.) I p.198

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