

Wiking® 32 Micron

Wiking® 32 Micron is a monofilament fibre which is extruded into very fine fibres and especially effective in preventing cracks during the drying phase of the concrete. The fibre is used in every form of concrete, in which one would want to prevent cracking caused by plastic shrinkage.

Benefits and characteristics

- An alternative to a crack controlling reinforcement mesh
- Improves shock-resistance
- Improves resistance to bending
- Improves elasticity
- Reduces the bleed and shrinkage of the concrete
- Our fibres are not magnetic
- Improved adhesion for further bonding, coating etc.

General fields of application

- Indoor floors
- Terrain decks
- Concrete products
- Elements
- Paving stones

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 spread into the concrete matrix.
- The mixing time per mixing volume is 50-70 seconds; however, preliminary tests are always advised, due to slight variance between the different formulations.
- A manual installation, using an extractor and a plastering trowel, as well as the installation by a laser controlled screeding machine are possible.

The highest risk of crack formation in concrete is in the setting phase. Wiking® 32 Micron prevents crack formation extremely effectively during this phase so that you can counteract crack formation early on. Thus, the early tension caused by shrinkage is evenly distributed in the concrete, whereby crack formation and long-term weaknesses in the concrete are prevented.

Surface treatment

The fibres surface is treated in a special way with regard to a high dispersibility and adhesion ability of the concrete. This treatment simultaneously reduces the air inlet into the concrete to approximately 1-2,5 %, and air void inspections of the different concrete recipes are advised before every concreting.

Extent of Guarantee

Wiking® 32 Micron complies with EN-14.889-2, fibre class 1b, system 1 and is produced in an installation 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 you advice about the correct use of our products.

Specifications - Wiking® 32 Micron

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| Material: | polypropylene C 3 H 6 |
| Fibre length: | 6, 12 and 18 mm |
| Fibre cross section: | 32 µm |
| Density: | 0.91g/ cm ³ |
| Design: | monofilament |
| Diameter: | 32 µm |
| Tensile strength: | ≤ 204 MPa |
| Resistance against alkalis: | high |
| Water absorption: | zero |
| Softening temperature: | approx. 160°C |
| Dosage: | 0.9 - 2.0 kg/m ³ |

CE Declaration of Conformity No. 1077 - CPR -44304101 - E
 Declaration of Performance Annex III of the EU, No. Ü 443 042 2015 - E
 Requirements of EN 14.889-2, Fiber class 1a,
 System 1 Determination of design values,
 Austria Association for Concrete and Structural Engineering (ÖVBB)
 Guideline (RILI) Fiber concrete 2008 a. EN 1990
 Our static Fibres also ensure a high level of impact resistance and post-cracking tensile strength in concrete
 Approved for applications in contact with food in the EU, February 2016 / German Federal Law Gazette (BGBl.) I p.198

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Delivery program

Wiking® 32 Micron is available in 800 kg pallets, 32 x 25 kg carton, carton 25 x 1 kg packages. Minimum quantity is to be determined in a common agreement.

Specifications application

Wiking® 32 Micron is physically resistant against all the chemicals in concrete, and the appearance and durability of the concrete are not impaired.