

# SikaFiber® Force 50

## Macro synthetic fibres for concrete

### Product Description

SikaFiber® Force 50 is a range of macro synthetic fibres that are extruded, embossed and then specifically cut into the required lengths for a wide range of concreting applications. It can be used in ready mixed concrete, precast and sprayed concrete applications both above and in underground situations. The embossment improves the bond within the concrete and so reduces pull-out and enhances the concrete's performance.

The macro synthetic fibre has been designed to replace traditional steel reinforcement with the benefits of increased performance, reduced costs and health and safety advantages.

### Uses

SikaFiber® Force 50 can be used in many construction applications. They include:

- Internal floor slabs
- External hardstandings and pavements
- Precast concrete elements
- Agricultural areas
- Marine / Coastal defence concrete
- Shotcreting applications

### Characteristics / Advantages

SikaFiber® Force 50 will enhance the toughness of the concrete and alleviate the need for steel mesh when used with the appropriate design and at the recommended dosage.

- Can be used as an alternative to steel reinforcement
- Easier and safer to handle than steel
- Construction time is decreased
- Ready mixed concrete trucks can discharge at the 'live' edge of the concrete
- SikaFiber® Force 50 (UK) cannot be misplaced
- No need for cutting, fixing and placing of steel mesh
- Reduced wear on concrete pumps
- Reduce carbon footprint
- Does not rust or corrode
- Offers a 3-dimensional reinforcement system

### Tests

#### Approval / Standards

Standard EN 14889-2:2006 and issued Certificate No; 533591



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## Product Data

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### Form

**Appearance / Colour** Natural

**Packaging** 4 kg bags

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### Storage

**Storage Conditions / Shelf Life** SikaFiber® Force 50 must be stored on a clean surface, in dry conditions, under cover and away from the possibility of damage.

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### Technical Data

**Fibre Type** Macro Monofilament

**Length** 50 mm

**Absorption** Nil

**Specific Gravity** 0.91

**Electrical Conductivity** Low

**Akali, Acid and Salt Resistance** High

**Softening Point (Melt point)** 164 Deg C

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### Application Instructions

**Mixing** SikaFiber® Force 50 is best dispersed when added to a forced action pan mixer or equivalent, prior to discharging the concrete into a truck.  
It is suggested that you contact your Sika representative before using the fibre so that we can discuss together the preferred mixing method.

**Notes on Application / Limitations** When using SikaFiber® Force 50 a suitable mix design has to be taken into account and local material sources shall be trialled.

Support from our Technical Service Department is recommended.

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### Value Base

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

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### Local Restrictions

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

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### Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

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## 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 accordance with Sika's recommendations. 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 user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.



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