



## PRODUCT DATA SHEET

# SikaFiber® Novocon® HE-4550

### Steel Fiber - Type I

#### PRODUCT DESCRIPTION

SikaFiber® Novocon® HE-4550 steel fibers are designed specifically for the reinforcement of concrete. SikaFiber® Novocon® HE-4550 is a cold drawn hooked end (HE) steel fiber, to provide optimum anchorage within the concrete. SikaFiber® Novocon® HE-4550 steel fibers are specifically designed to meet or exceed the defined performance requirements. Previously SikaFiber Force 1050 and Novocon HE1050.

#### WHERE TO USE

- Industrial slabs-on-ground
- Airport pavements
- Blast resistant concrete
- Equipment foundations

#### CHARACTERISTICS / ADVANTAGES

- Provides uniform multi-directional concrete reinforcement
- Increases crack resistance, ductility, energy absorption or toughness of concrete
- Improves impact resistance, fatigue endurance and shear strength of concrete
- High tensile strength fiber bridging joints and cracks to provide tighter aggregate interlock resulting in increased load-carrying capacity
- Provides increased ultimate load-bearing capacity which allows possible reduction of concrete section
- Requires less labor to incorporate into concrete than conventional reinforcement
- Offers economical concrete reinforcement solutions with greater project scheduling accuracy
- Ideally suited for hand or vibratory screeds, laser screeds and all conventional finishing equipment

#### APPROVALS / CERTIFICATES

- Conforms to ASTM A820 /A 820M - 04, Type I cold drawn wire
- Conforms to ASTM C 1116/C 1116M, Type I fiber reinforced concrete

#### PRODUCT INFORMATION

<b>Packaging</b>	SikaFiber® Novocon® HE-4550 fibers are available in 20 kg (44 lb) paper bags. There are 50 bags or 1,000 kg (2,204 lb) on a pallet.
<b>Shelf Life</b>	If stored in dry conditions shelf life is 5 years.
<b>Storage Conditions</b>	The pallets should be protected against rain and snow. Do NOT stack pallets on top of each other.
<b>Appearance / Colour</b>	<ul style="list-style-type: none"><li>▪ <b>Fiber Type:</b> Hooked End Steel Fiber Type 1</li><li>▪ <b>Fiber Network:</b> 2,900 fibers/kg, (1,300 fibers/lb)</li></ul>

<b>Dimensions</b>	<b>Length:</b> 50 mm, (2 inches)
	<b>Diameter:</b> 1.03 mm,(0.041 inches)
	<b>Aspect Ratio:</b> 50

<b>Density</b>	7.85
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## TECHNICAL INFORMATION

<b>Tensile Strength</b>	1,100 MPa, (159.5 ksi)
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## APPLICATION INFORMATION

<b>Recommended Dosage</b>	The dosage of the SikaFiber® Novocon® HE-4550 will vary according to the type of application and the performance requirements of the project. Standard recommended dosage rate of SikaFiber® Novocon® HE-4550 is between 15–40 kg/m <sup>3</sup> , (25 - 67 lbs/cu. yd.) of concrete. Dosages outside the recommended dosage range can be used to meet project specific requirements. If this is the case please contact your Sika representative for technical support.
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## BASIS OF PRODUCT DATA

Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.

## ENVIRONMENT, HEALTH & SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

## 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 recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. 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 or may be downloaded from our website at: [www.sika.ca](http://www.sika.ca)

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 Edmonton (Alberta)  
 Surrey (British Columbia)

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