

SikaFiber® AC 100

Monofilament Acrylic Concrete Fiber

Description SikaFiber® AC 100 is a new generation of micro monofilament acrylic fiber for use in concrete. SikaFiber® AC 100 is specifically designed for the purpose of controlling plastic shrinkage and settlement cracking. SikaFiber® AC 100 meets the requirements of ASTM C-1116, Type III.

Applications SikaFiber® AC 100 creates, due its ultra thin diameter and ultra high strength, an extremely dense three dimensional network of reinforcing fibers in the concrete. SikaFiber® AC 100 acts mechanically by reinforcing the concrete with fiber network coated with mortar.

SikaFiber® AC 100 does not affect curing process chemically. The SikaFiber® AC 100 can be used in all types of concrete such as residential or commercial slabs on ground (SOG), concrete overlays, precast applications, stucco, shotcrete and architectural concrete.

Synthetic fibers help the concrete at early ages, which is especially beneficial to precasters where stripping time and handling is important. The SikaFiber® AC 100 can decrease plastic and drying shrinkage cracking and increase impact resistance in young concrete.

- Benefits**
- Higher fiber count per pound than standard monofilament fibers.
 - Virtually invisible in concrete.
 - Allows for lower dosage compared to other monofilament types of fiber.
 - Reduces the formation of plastic shrinkage cracking in concrete.
 - Provides multi-dimensional reinforcement.
 - Improves impact, shatter and abrasion resistance.
 - Enhances durability and toughness of concrete.
 - Reduces bleeding.
 - Excellent finishability.

Typical Data

Fiber Type:	Monofilament acrylic micro fiber
Fiber length:	Multi-length 0.25" and 0.5"
Specific gravity:	1.16
E-modulus:	500 ksi
Tensile Strength:	40-60 ksi
Chemical resistance:	Excellent

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Concrete



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800-933-7452. NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTION FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

How to Use**Dosage**

Standard recommended dosage rate of SikaFiber® AC 100 is 0.5 up to 1 lb/cu.yd. of concrete or as required by specific mix design. Dosages outside the recommended range may be used for special requirements and applications, for further detail please contact your local regional office or the Technical Service Department at 1-800-933-7452.

Mixing

SikaFiber® AC 100 can be added directly to the concrete mixing system during or after the batching of the ingredients and mixed at high speed for four to five minutes. Additional mixing does not adversely affect the distribution or overall performance of SikaFiber® AC 100. The addition of SikaFiber® AC 100 at the recommended dosage rates to a given mix may decrease the slump; however, additional water should not be added. Only a water reducing or high range water reducing admixture should be used to adjust concrete to the desired workability required for placement.

Application

The addition of SikaFiber® AC 100 at the normal recommended dosage rate does not require any mix design or application changes. A water reducer or high range water reducer is recommended in concrete placements where improved workability and finishability are desired.

Tooling & Finishing

Fiber reinforced concrete can be finished by most finishing techniques: brush, roller, float, etc. SikaFiber® AC 100 does not affect the finishing characteristics of concrete. SikaFiber® AC 100 can be used in power/hand troweled concrete, colored and broom finished concrete.

Limitations

Use of SikaFiber® AC 100 with some polycarboxylate based admixtures may cause an increase in air content within the concrete. Trial mixes must be conducted to verify the affect of using SikaFiber® AC 100 along with these admixtures on the air content of concrete.

Packaging

SikaFiber® AC 100 is available in multi-length, 0.25" and 0.5" length in various pack sizes in degradable bags.

Storage and Shelf Life

SikaFiber® AC 100 should be stored in dry warehouse. Protect product from the rain. If stored in dry conditions shelf life is 5 years.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY • FOR PROFESSIONAL USE ONLY

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Sika warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor.

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Quality Certification Numbers: Lyndhurst: FM 69711 (ISO 9000), FM 70421 (QS 9000), Marion: FM 69715, Kansas City: FM 69107, Santa Fe Springs: FM 69408



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