

SikaFiber® PPF

Fibrillated Polypropylene Micro-Synthetic Fiber

Concrete

Description	<p>SikaFiber® PPF is a fibrillated polypropylene fiber for use in fiber reinforced concrete. SikaFiber® PPF is primarily used for the purpose of providing secondary/temperature-shrinkage reinforcement in concrete. The fibrillated pattern of SikaFiber® PPF optimizes the mechanical bond between the mortar matrix and fiber networks. This provides better control of plastic shrinkage cracking and plastic settlement cracking. SikaFiber® PPF provides a good alternative to welded wire fabric in light commercial and residential slab-on-grade applications. SikaFiber® PPF meets the requirements of ASTM C-1116, Type III fiber and ICC ES AC32 sections 3.1.1 (plastic shrinkage reinforcement) and 3.1.2 (temperature-shrinkage reinforcement).</p>													
Applications	<p>SikaFiber® PPF acts mechanically by reinforcing the concrete with multi-dimensional fiber network coated with mortar.</p> <p>SikaFiber® PPF can be used in all types of concrete. Typical applications include - Residential and commercial slab-on-grade, decks, precast elements etc.</p> <p>SikaFiber® PPF can decrease plastic and drying shrinkage cracking and increase impact resistance in young concrete. In case concrete is exposed to fire, the presence of SikaFiber® PPF in concrete prevents explosive spalling of the concrete. SikaFiber® PPF can be used in shotcrete to reduce rebound and allow for building higher thickness in one pass.</p> <p>SikaFiber® PPF does not affect the concrete curing process and does not absorb mix water.</p>													
Benefits	<ul style="list-style-type: none">■ Provides temperature-shrinkage reinforcement.■ Reduces plastic shrinkage and plastic settlement cracking.■ Provides multi-dimensional reinforcement.■ Improves impact, shatter and abrasion resistance of concrete.■ Enhances durability and toughness of concrete.■ Reduces bleeding.■ Excellent finishability.													
Typical Data	<table><tr><td>Fiber Type</td><td>Fibrillated polypropylene</td></tr><tr><td>Fiber length</td><td>0.75" (19 mm), 1.5" (38 mm) or 2" (51 mm)</td></tr><tr><td>Specific gravity</td><td>0.91</td></tr><tr><td>E - modulus</td><td>800 ksi (5516 MPa)</td></tr><tr><td>Alkali resistance</td><td>Excellent Alkali resistance</td></tr><tr><td>Melting point</td><td>320°F (160°C)</td></tr></table>	Fiber Type	Fibrillated polypropylene	Fiber length	0.75" (19 mm), 1.5" (38 mm) or 2" (51 mm)	Specific gravity	0.91	E - modulus	800 ksi (5516 MPa)	Alkali resistance	Excellent Alkali resistance	Melting point	320°F (160°C)	<p>RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.</p>
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How to Use

Dosage	Typical standard dosage rate of SikaFiber® PPF in concrete is 1.5 lb/cu.yd (0.9 kg/m ³) or as required by specific mix design.
Mixing	SikaFiber® PPF is packaged in degradable bags which readily break up during the mixing of concrete. SikaFiber® PPF 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® PPF. The addition of SikaFiber® PPF at the recommended dosage rates to a given mix may decrease the workability, which should be adjusted by use of an appropriate water reducing admixture. The addition of SikaFiber® PPF at the normal recommended dosage rate does not require any mix design or application changes.
Tooling & Finishing	Fiber reinforced concrete can be finished by most finishing techniques. SikaFiber® PPF does not affect the finishing characteristics of concrete. SikaFiber® PPF can be used in power/hand troweled concrete, colored and broom finished concrete. Compatibility: SikaFiber® PPF is compatible with all types of cements, supplementary cementitious materials and Sika admixtures.
Packaging	SikaFiber® PPF is available in 0.75" (19 mm), 1.5" (38 mm) or 2" (51 mm) length in various pack sizes in degradable bags.
Storage and Shelf Life	SikaFiber® PPF 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 Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Phone: (201) 933-8800
Fax: (201) 933-6225
usa.sika.com

Sika Canada Inc.
601, Delmar Avenue
Pointe-Claire, QC H9R 4A9
Phone: (514) 697-2610
Fax: (514) 697-3087
can.sika.com

Regional Information and Sales Centers. For the location of your nearest Sika representative, contact your regional center.

U.S. :
Northeast: Fairless Hills, PA, Phone: (215) 295-6600
South East: Conyers, GA, Phone: (770) 760-1300
Western Region: Santa Fe Springs, CA, Phone: (972) 289-6480

North Central: Ottawa, IL 61350, Phone: (815) 431-1080
South Central: Mesquite, TX, Phone: (972) 289-6480

Canada: **Ontario:** Mississauga, ON, Phone: (905) 795-3177

Alberta: Edmonton, AB, Phone: (780) 486-6111

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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