

CONCRETE SikaFiber® PRODUCT SELECTION GUIDE

ADVANCED SOLUTIONS FOR FIBER REINFORCED CONCRETE



BUILDING TRUST

REINFORCING THE CONCRETE THAT BUILDS THE FUTURE

SikaFib	er® PRO	DUCT OFFERING	KEY PERFORMANCE	BENEFITS OF FRC				
E	MICRO	Sika® Fibercast®	MACRO & STEEL FIBER	Fibers can eliminate the need for secondary reinforcement which results in:				
11	MILRU	Sika [®] Fibermesh [®]	Reduced incidence of plastic and drying shrinkage cracking		Cost savings by replacing			
ANT		Sika [®] Fibermesh [®]	Improved load capacity and ductility		expensive traditional slab			
REAL	MACRO	SikaFiber® Stealth SikaFiber® Enduro®	Properly positioned integral reinforcement		reinforcement			
AA		SikaFiber [®] Force	Improved cohesion in fresh concrete	A	Improved jobsite safety			
			Enhanced durability	¥				
and the	BLENDED	SikaFiber® Novomesh®	Increased flexural and shear strength	\varnothing	Lower eCO2/GWP of			
			Ability to extend joints	\sim	concrete mix			
	STEEL	SikaFiber® Novocon® SikaFiber® UHPC	3-dimensional corrosion resistant reinforcement	Ō	Improved construction schedule			

SikaFiber® SUPPORT



EXPERT Fiber Team - Reinforcing value, reliability, concrete performance and your reputation. Find out how our dedicated team of experts and SikaFiber[®] can improve your next project. Contact us today # 1.833.236.1255 or at usa.sika.com.



Online Tools - SikaFiber® software tool for calculating the amount of SikaFiber® reinforcement required for a slab on grade. The tool will determine the optimum dosage of fibers required to reinforce the slab for the specified loading, slab thickness and concrete grade.

FIBER SELECTION - QUICK GUIDE

STATE OF CONCRETE OR MORTAR	EFFECT / PROPERTY IMPROVEMENT	RECOMMENDED FIBER TYPE			
Fresh	Reduce Rebound of Shotcrete	Micro-PP Fibers			
Fresh	Homogeneity Improvement	Micro-PP Fibers			
O to 2 Days	Plastic Shrinkage Cracking	Micro and Macro-PP Fibers			
28 days hardening or more	Protection Against Explosive Spalling	Micro-PP Fibers			
1–28 days	Reduction of Cracks Induced by Restraint or Temperature	Macro-PP Fibers			
28 days hardening or more	Transfer of External Forces	Macro-PP & Steel Fibers			
, ,					

PP = Polypropylene Synthetic Fibers

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CHARACTERISTICS, BENEFITS & APPLICATION GUIDES

SikaFiber[®] CHARACTERISTICS GUIDE

Туре	Products	Length, Inches	Dosage, lbs/ cu.yd	Standards	Description	Sustainability
NYLON	Sika® Fibermesh® FN	0.25, 0.75	1	ASTM C1116 - Type III	Micro Monofilament Nylon Fiber, Degradable Bags	
	Sika® Fibercast®-500	Graded**	1.5	ASTM D7508	Polypropylene Monofilament or Fibrillated Degradable Bags	EPD & MIR
	Sika® Fibermesh® HP	Graded	0.5	ASTM D7508	Polypropylene Monofilament, Fine Denier, Degradable Bags	EPD & MIR
MICRO	Sika® Fibermesh®-150	Graded**	1	ASTM D7508	Polypropylene Monofilament, Degradable Bags	EPD & MIR
	Sika® Fibermesh®-300	Graded**	1.5	ASTM D7508	Polypropylene Fibrillated, Degradable Bags	EPD & MIR
	Sika® Fibermesh®-150F	0.25 or 0.5	1 - 3.4	ASTM D7508	Polypropylene Monofilament, Degradable Bags	EPD & MIR
	Sika® Fibermesh®-650	Graded**	3 - 11	ASTM D7508	Structural Polypropylene, In Pucks or Loose	EPD & MIR
	SikaFiber®-800 Stealth	1.5	3 - 9	ASTM D7508	Structural, Crimped, Polypropylene, In Pucks	EPD & MIR
MACRO	SikaFiber® Enduro® Prime	2.2, 2.4	3 - 7	ASTM D7508	Structural, Crimped, Polypropylene, In Pucks	EPD & MIR
	SikaFiber® Force-48 or 54	1.9, 2.1	5 - 13	ASTM D7508	Structural Embossed Polypropylene, In Pucks	EPD & MIR
	Sika® Fibermesh®-650S	Graded**	8 - 15	ASTM D7508	Structural, Polypropylene, In Pucks	EPD & MIR
	SikaFiber® Novocon® XR	1.5, 2	25 - 66	ASTM A820 - Type V	Steel, Crimped, 25 lb Repulpable Bags	
	SikaFiber® Novocon® CS-1000	1	25 - 75	ASTM A820 - Type II	Steel Fiber, 55 lbs Boxes	
	SikaFiber® Novocon® HE-4550	2	25 - 67	ASTM A820 - Type I	Steel, Hooked End, 44 lb Paper Bags	
STEEL	SikaFiber® Novocon® CHE-6560	2.4	15 - 67	ASTM A820 - Type I	Steel, Collated Hooked End, 44 lb Paper Bags	
JIEEL	SikaFiber® Novocon® CHE-8060	2.4	25 - 67	ASTM A820 - Type I	Steel, Collated Hooked End, 44 lb Paper Bags	
	SikaFiber® Novocon® CHE-6535	1.4	35 - 80	ASTM A820 - Type I	Steel, Collated Hooked End, 44 lb Paper Bags	
	SikaFiber®-7020 UHPC	3/4	*	ASTM A820 - Type I	UHPC Steel Fiber, 44 lb Paper Bags	
	SikaFiber®-6513 UHPC	1/2	*	ASTM A820 - Type I	UHPC Steel Fiber, 44 lb Paper Bags	
BLEND	SikaFiber [®] Novomesh [®] -850	1.5	24-48	A820 Type V & C1116 Type III	Steel-Synthetic Blend, 24 lb Degradable Bags	
DELIND	SikaFiber [®] Novomesh [®] -950 (Cal 51)	1.9	5 - 10	ASTM D7508	Macro-Micro Synthetic Blend	EPD & MIR

* Dosage based on application

** Single lengths also available, please ask your SikaFiber® representative

EPD - Environmental Product Declaration / MIR - Material Ingredient Report

CHARACTERISTICS, BENEFITS & APPLICATION GUIDES

SikaFiber[®] PERFORMANCE BENEFITS GUIDE

Туре	Products	Early Age Benefits			Long Term Benefits									
		Reduces Plastic Shrinkage Cracking	Reduces Plastic Settlement Cracking	Improves Cohesion	Reduces Explosive Spalling During Fire	Provides Post First Crack Reinforcement	Provides Shatter & Impact Resistance	Provides Restrained Shrinkage Crack Control	Flexural Toughness for Shotcrete	Greater Fatigue Resistance	Greater Ductility	Reduces Water Penetration	Strain Hardening	
NYLON	Sika® Fibermesh® FN	•	•	•			•					•		
	Sika® Fibermesh® HP	•	•	•			•					•		
	Sika® Fibercast®-500	•	•	•			•					•		
MICRO	Sika Fibermesh®-150	•	•	•			•					•		
	Sika® Fibermesh®-300	•	•	•		•	•			•		•		
	Sika® Fibermesh®-150F	•	•	•	•		•					•		
	Sika® Fibermesh®-650	•	•	•		•	•	•		•	•	•		
	SikaFiber®-800 Stealth	•	•	•		•	•	•		•	٠	•		
MACRO	SikaFiber® Enduro® Prime	•	•	•		•	•	•		•	•	•		
	SikaFiber [®] Force-48 or 54	•	•	•		•	•	•	•	•	•	•		
	Sika® Fibermesh®-650S	•	•	•		•	•	•	•	•	•	•		
	SikaFiber® Novocon® XR					•	•	•	•	•	•			
	SikaFiber [®] Novocon [®] CS-1000			•		•	•	•		•	•			
	SikaFiber® Novocon® HE-4550					•	•	•		•	•			
STEEL	SikaFiber [®] Novocon [®] CHE-6560					•	•	•		•	•			
	SikaFiber® Novocon® CHE-8060					•	•	•		•	•			
	SikaFiber® Novocon® CHE-6535					•	•	•	•	•	•			
	SikaFiber [®] -7020 UHPC			•		•	•	•		•	•		•	
	SikaFiber®-6513 UHPC			•		•	•	•		•	•		•	
BLEND	SikaFiber [®] Novomesh [®] -850	•	•	•		•	•	•		•	•	•		
DLENU	SikaFiber [®] Novomesh [®] -950	•	•	٠		•	•	٠		•	•	•		

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CHARACTERISTICS, BENEFITS & APPLICATION GUIDES

SikaFiber[®] APPLICATION GUIDE

		Slabs						Pavements				Precast			Shotcrete & Underground			
		Residential	Commercial	Industrial	Heavy Industrial	Extended Joint	Overlays	Parking Areas & Roadways	Overlays	Sidewalks	Composite Metal Deck	Tunnel Segments	Vaults, Tanks & Containers	Manhole	Wall & Tilt-Up	Tunneling & Mining	Slope Stabilization	UHPC
NYLON	Sika® Fibermesh® FN	•		•	•				•									
	Sika® Fibercast®-500												•	•		•	•	
	Sika® Fibermesh® HP	•	•	•	•			•					•	•	•			
MICRO	Sika® Fibermesh®-150	•	•	•	•			•		•				•	•	•	•	
	Sika® Fibermesh®-300	•					•	•	•	•								
	Sika® Fibermesh®-150F											•				•		
	Sika® Fibermesh®-650	•	•	•		•	•		•	•	•		•	•	•			
	SikaFiber®-800 Stealth	٠	•	•	•	•	•	•	•	•	•		•	•	•			
MACRO	SikaFiber [®] Enduro [®] Prime			•	•	•	٠	•	•		•	•	•	•				
	SikaFiber [®] Force-48 or 54															•	•	_
	Sika® Fibermesh®-650S													•			•	
	SikaFiber® Novocon® XR		•					•			•						٠	
	SikaFiber [®] Novocon CS-1000		•	•		•	•								•			
	SikaFiber® Novocon® HE-4550		•	•														
STEEL	SikaFiber® Novocon® CHE-6560			•	•	•							•		•			
	SikaFiber [®] Novocon [®] CHE-8060				•							•						
	SikaFiber® Novocon® CHE-6535					•							•		•	•	•	
	SikaFiber®-7020 UHPC																	•
	SikaFiber®-6513 UHPC																	•
BLEND	SikaFiber [®] Novomesh [®] -850	•	•	•			•	•									•	
	SikaFiber [®] Novomesh [®] -950	•	•	•			•		•	•								

CONSTRUCTION BENEFITS

Concrete fibers have an innumerable amount of applications in concrete construction. By reducing or replacing traditional mesh and steel reinforcement, labor costs will be reduced and construction schedules can be accelerated. Safety is increased by reducing the chances of tripping or impalement by traditional steel reinforcement. With concrete fiber being integral throughout the concrete, there is no opportunity for reinforcement to end up in the incorrect location.

KEY APPLICATION BENEFITS:

- Integral reinforcement, always the correct location
- Increased safety

- Less opportunities for callbacks
- Increased long term durability
- Reduction in labor
- Faster placement schedule





SIKA FULL RANGE SOLUTIONS FOR CONSTRUCTION:













WATERPROOFING

CONCRETE

REFURBISHMENT

SEALING AND BONDING

BUILDING TRUS

ROOFING

All sales of Sika products are subject to Sika's current Terms and Conditions of Sale available at usa.sika.com or by calling 800-325-9504. 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 at usa.sika.com or by calling Technical Services at 800-325-9504. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instructions for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

The sale of all Sika products are subject to the following Limited Warranty:

LIMITED MATERIAL WARRANTY

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.

NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

Our most current General Sales Conditions shall apply. Please consult the Product Data Sheets prior to any use and processing.

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