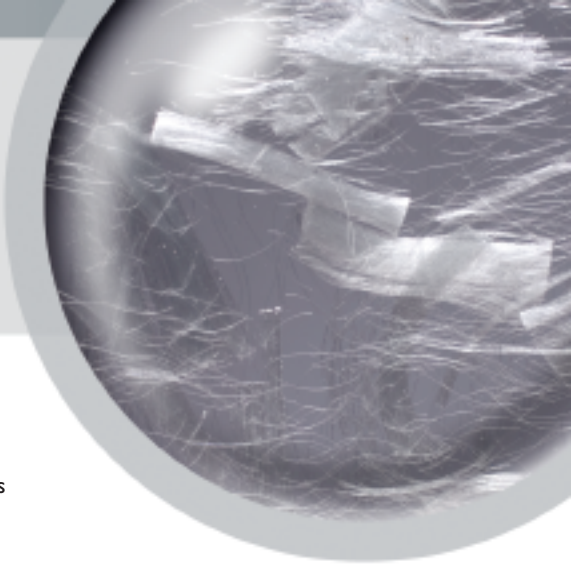
FIBERMESH® 150

PRODUCT DATA SHEET



FIBERMESH® 150 SYNTHETIC FIBER

Fibermesh 150, formerly Stealth® e3,® micro-reinforcement system for concrete—100 percent virgin homopolymer polypropylene multifilament fibers with patented e3 technology containing no reprocessed olefin materials. Specifically engineered and manufactured in an ISO 9001-2000 certified facility for use as concrete reinforcement at a standard application rate of 1.5 pounds per cubic yard (.90 kg per cubic meter).** UL Classified. Complies with National Building Codes and ASTM C 1116 Type III 4.1.3.

ADVANTAGES

Non-magnetic • Rustproof • Alkali proof • Requires no minimum amount of concrete cover • Is always positioned in compliance with codes • Safe and easy to use • Saves time and hassle

FEATURES & BENEFITS

- Inhibits and controls the formation of intrinsic cracking in concrete
- Reinforces against impact forces
- Reinforces against abrasion
- Reinforces against the effect of shattering forces
- Reinforces against water migration
- Provides improved durability
- Reduces plastic shrinkage and settlement cracking
- Alternate system to traditional reinforcement when used for secondary (crack control) reinforcing in concrete

PRIMARY APPLICATIONS

Applicable to all types of concrete which demonstrate a need for resistance to intrinsic cracking and improved water tightness and an aesthetic finish.

- Slab-on-grade
- Sidewalks
- Driveways
- Stucco
- Curbs
- Overlays/Toppings
- Slope paving
- Exposed aggregate
- Protection against fire spalling

CHEMICAL AND PHYSICAL PROPERTIES

Absorption	Nil	Melt Point	324°F (162°C)
Specific Gravity	0.91	Ignition Point	1100°F (593°C)
Fiber Length*	Graded	Thermal Conductivity	Low
Electrical Conductivity	Low	Alkali Resistance	Alkali Proof
Acid & Salt Resistance	High		

*Also available in single cut lengths

**Note: Lower addition rates may be acceptable depending upon local building codes

DO SPECIFY FIBERMESH 150 FIBERS:

- Reduced plastic shrinkage cracking
- Improved impact, shatter and abrasion resistance
- Reduced water migration and damage from freeze/thaw
- Improved durability
- Areas requiring non-metallic materials
- Concrete that needs an architectural finish

DO NOT SPECIFY FIBERMESH 150 FIBERS:

- Crack control from external stresses
- Increasing joint spacing beyond ACI and PCA guidelines
- Decreasing thickness of slabs
- Replacing any moment or structural steel

SI® Concrete Systems

For those who prefer performance to tradition.

FIBERMESH® 150

PRODUCT USE

MIXING DESIGNS AND PROCEDURES: Fibermesh® 150 micro reinforcing is a mechanical, not chemical, process. The addition of Fibermesh 150 multifilament fibers do not require any additional water nor other mix design changes at normal rates. Fibermesh 150 fibers are added to the mixer before, during or after batching the other concrete materials. Mixing time and speed are specified in ASTM C 94.

FINISHING: Fibermesh 150 micro-reinforced concrete can be finished by any finishing technique. Exposed aggregate, broomed and tined surfaces are no problem.

APPLICATION RATE: The standard application rate for Fibermesh 150 for use as concrete reinforcement is typically 1.5 pounds per cubic yard (0.90 kg per cubic meter).**

GUIDELINES

Fibermesh 150 fibers should not be used to replace structural, load bearing reinforcement. Fibermesh 150 fibers should not be used as a means of using thinner concrete sections than original design. Fibermesh 150 fibers should not be used to increase joint spacing past those dimensions suggested by PCA and ACI industry standard guidelines.

COMPATIBILITY

Fibermesh 150 fibers are compatible with all concrete admixtures and performance enhancing chemicals, but require no admixtures to work.

PACKAGING

Fibermesh 150 fibers are available in a variety of packaging options. Special packaging is available for full truckload addition. Fibermesh 150 fibers are packaged, packed into cartons, shrink wrapped and palletized for protection during shipping.

**Note: Lower addition rates may be acceptable depending upon local building codes

TECHNICAL SERVICES

Trained SI® Concrete Systems specialists are available worldwide to assist and advise in specifications and field service. SI Concrete Systems representatives do not engage in the practice of engineering or supervision of projects and are available solely for service and support of our customers.

REFERENCES

- ASTM C94 Standard Specification for Ready-Mixed Concrete Uniformity Requirements.
- ASTM C1399 Average Residual Strength of Fiber Reinforced Concrete.
- ASTM C1436 Standard Specification for Materials for Shotcrete.
- ASTM C1018 Standard Test Method for Flexural Toughness and First-Crack Strength of Fiber-Reinforced Concrete.
- ASTM CI116 Standard Specification for Fiber-Reinforced Concrete And Shotcrete.
- ACI 304 Guide for Measuring, Mixing, Transporting and Placing Concrete.
- ACI 506 Guide for Shotcrete.
- UL Approvals for use as an alternate or in addition to welded wire fabric used in floor-ceiling D700, D800 and D900 series designs.
- International Code Council (ICC) NER-414 Evaluation Report.

SPECIFICATION CLAUSE

Use Fibermesh 150 only 100 percent virgin polypropylene fibers containing no reprocessed olefin materials and specifically engineered and manufactured in an ISO 9001-2000 certified facility for use as concrete secondary reinforcement. Application per cubic yard shall equal 1.5 pounds per cubic yard (0.90 kg per cubic meter).** Fibers are for the control of cracking due to plastic shrinkage, plastic settlement and thermal expansion/ contraction, lowered permeability, increased impact, abrasion and shatter resistance. Fiber manufacturer must document evidence of satisfactory performance history, compliance with applicable building codes and ASTM C 1116 Type III, 4.1.3. Fibrous concrete reinforcement shall be manufactured by SI Concrete Systems, 4019 Industry Drive, Chattanooga, Tennessee, USA, 37416. Phone: (423) 892-8080, Fax: (423) 892-0157, e-mail: fibermesh@sind.com.

SI® Concrete Systems

For those who prefer performance to tradition.

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