



ADVANTAGES OF FIBERMESH 300e3 MICRO FIBRES:

- Non-magnetic
- Rustproof
- Alkali proof
- Requires no minimum amount of concrete cover
- Always positioned in compliance with codes
- Safe and easier to use than traditional reinforcement
- Saves time & hassle

e3® Technology

e3 technology is another innovative development pioneered by Fibermesh.

Just as graded aggregates enhance concrete, Fibermesh® 300 with e3 technology is a blend of graded fibres designed to enhance the distribution and performance of fibre reinforcement. Each package of Fibermesh® 300-e3 fibres is engineered in three ways - by length, thickness and mix ratio. The result is superior combinations of crack control and overall concrete performance.

FIBERMESH 300e3 MICRO-SYNTHETIC FIBRE

Fibermesh 300e3, micro-reinforcement fibres for concrete are 100 percent virgin homopolymer polypropylene graded fibrillated fibres containing no reprocessed olefin materials. Fibermesh 300e3 micro-synthetic fibres are European Standard EN 14889-2:2006 compliant and have been specifically engineered and manufactured in an ISO 9001:2008 certified facility for use as concrete reinforcement at the recommended dosage rate of 0.9 kg per cubic metre (0.1% by volume) for effective performance.

FEATURES & BENEFITS

- Inhibits and controls the formation of intrinsic cracking in concrete
- Increases cohesion and reduces segregation
- Reduces settlement and bleeding
- Reduces plastic shrinkage and settlement cracking
- Increases impact and shatter resistance
- Improves abrasion resistance
- Provides improved toughness/ durability
- Alternative system to traditional reinforcement when used for the secondary (Crack control) reinforcing of concrete.

PRIMARY APPLICATIONS

- Ground Supported Slabs
- External Roads & Pavements
- Driveways
- Sprayed Concrete
- Precast
- Overlays & toppings
- Tanks & Pools
- Walls

COMPLIANCE

- Complies with European Standard EN 14889-2:2006 Fibres for Concrete Part 2: Class 1b and carries CE marking
- ISO 9001:2008 Quality Assured
- Complies with ASTM C 1116 Type III 4.1.3

CHEMICAL & PHYSICAL PROPERTIES

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

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PRODUCT USE

MIXING: Fibermesh 300e3 micro-reinforcement is a mechanical, not chemical, process. The addition of Fibermesh 300e3 graded fibrillated fibres do not require any additional water nor other mix design changes at normal rates. Fibermesh 300e3 fibres can be added to the mixer before, during or after batching the other constituents of the concrete. After the addition of the fibres, the concrete should be mixed for sufficient time (minimum 5 minutes at full mixing speed) to ensure uniform distribution of fibres throughout the concrete.

PLACING: Fibermesh 300e3 micro-reinforced concrete can be pumped, sprayed or placed using conventional equipment. Hand or vibratory screeds and laser screeds can be used with Fibermesh 300e3mm micro-reinforced concrete.

FINISHING: Fibermesh 300e3 micro-fibre reinforced concrete can be finished by any finishing technique. Trowelled, Exposed aggregate, broomed and tined surfaces are no problem.

DOSAGE: The recommended dosage rate for Fibermesh 300e3, fibers, to achieve effective performance, is 0.9 kg per cubic metre. For speciality performance please contact your local Fibermesh representative for recommendations regarding increased application rates.

GUIDELINES

Fibermesh 300e3 fibres should not be used to replace structural, load bearing reinforcement. Fibermesh 300e3 fibres should not be used as a means of using thinner concrete sections than original design. Fibermesh 300e3 fibres should not be used to increase joint spacing beyond those dimensions suggested for unreinforced concrete.

COMPATIBILITY

Fibermesh 300e3 fibres are compatible with all concrete admixtures and performance enhancing chemicals, but require no admixtures to work effectively.

SAFETY

No special handling is required with Fibermesh 300e3 fibres. Full Safety Data Sheets are available on request.

PACKAGING

Fibermesh 300e3 fibres are available in standard 0.9 kg degradable paper bags, which are designed to be placed directly into the concrete mixer without opening. The degradable bags are packed into cartons, shrink wrapped and palletized for protection

during shipping. Fibermesh 300e3 fibres are also available in a variety of packaging options to suit application on request.

TECHNICAL SERVICES

Fibermesh has a team of reinforced concrete specialists who can carefully analyze each project and provide fibre reinforced concrete design solutions to ensure maximum project performance and cost efficiency.

REFERENCE DOCUMENTS

- European Standard EN 14889-2: 2006 Fibres for Concrete
- Concrete Society (UK) Technical Report 34 Concrete Industrial Floors
- Concrete Society (UK) Technical Report 22 Non-Structural cracks in concrete.
- ASTM C 1399 Standard Test method for Obtaining Average residual-Strength of Fiber Reinforced Concrete

SPECIFICATION CLAUSE

Fibres for concrete shall be Fibermesh 300-e3 micro-synthetic graded fibrillated fibres (100 percent virgin polypropylene fibres produced to ISO 1873-PP-H classification code FN 28-02-045 and containing no reprocessed olefin materials) conforming to EN 14889-Part 2: Class Ib and specifically engineered & manufactured in an ISO 9001 certified facility for use as concrete secondary reinforcement. The fibre manufacturer must document evidence of a minimum of 5 years satisfactory performance history and certify a minimum Average residual Strength (ARS) of 0.35MPa according to ASTM C1399.

Fibermesh 300-e3 fibres shall be added to the concrete at the batching plant at the recommended dosage rate of 0.9 kg per cubic metre and mixed for sufficient time (minimum 5 minutes at full mixing speed) to ensure uniform distribution of the fibres throughout the concrete.

Fibrous concrete reinforcement shall be supplied by:

FIBERMESH AUSTRIA:

Rindler
GmbH Concrete casted quality

Rindler GmbH	www: rindler-gmbh.at
Grossenschwandt 76,	tel. +43 (0)6245 84009
4882 Oberwang,	email: office@rindler-gmbh.at
AUSTRIA	mobile: +43 (0)664 4252074