



INNOVATIONS FOR LIVING™

## PRODUCT DATA SHEET



# Cem-MAT®

## Continuous Reinforcement

Cem-MAT® fibers are part of the Cem-FIL® product range

### PRODUCT DESCRIPTION

Cem-MAT® is an engineered Alkali Resistant system available in a standard nominal weight of 120 g/m<sup>2</sup> and different widths.

It is produced by chopping a Cem-FIL® AR-Roving and forming into a mat with a suitable binder, which dissolves with water and assists incorporation into a cement matrix. The mat has an open construction to allow penetration of cement mortar.



### PRODUCT APPLICATION

Cem-MAT® is designed for use in the reinforcement of very thin layers (5 to 25 mm), to reinforce precast elements or screeds and around posts where stress is concentrated. It may be used with regular self leveling mortars or with optimized mixes.

AR fibers have a high elastic modulus and tensile strength making them ideal as an effective reinforcement for cement matrices. It will not rot or corrode, and is unaffected by UV radiation, making it suitable for use with minimal cover.

### ADVANTAGES AND BENEFITS

- Alkali resistant glass\*
- Allows thinner layers of concrete (5 to 25) mm
- Control of short and long-term cracking in the concrete
- Fast use: one step placement
- Will not corrode
- Very easy incorporation into the matrix
- Very good impregnation in the mortar
- Safe and easy to handle



### FEATURES (nominal values)

Filament Diameter (ISO 1888:2006)	Nominal weight	Nominal roll width	Nominal roll length	Edge condition	Strand lengths
14 µm / 0.00055"	120 g/m <sup>2</sup> / 0.39 oz/ft <sup>2</sup>	900 mm / 35.4" 975 mm / 38.4" 1050 mm / 41.3"	100 m / 328 ft 100 m / 328 ft 76 m / 249 ft	1 cutted edge	~ 75 mm / ~ 2.95"

- Electrical Conductivity: Very low
- Specific Gravity: 2.68 g/cm<sup>3</sup>
- Material: Alkali Resistant Glass\*
- Softening point: 860°C • 1580°F

- Chemical Resistance: Very high
- Modulus of elasticity: 72 GPa • 10x10<sup>6</sup> psi
- Tensile Strength: 1,700 MPa • 250 x 10<sup>3</sup> psi

\* Our fibers are manufactured with high Zirconium content in compliance with ASTM C1666/C 1666/M-07 and EN 15422 and under the recommendations of PCI and GRCA

# Cem-MAT<sup>®</sup>

## Continuous Reinforcement

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### HOW TO USE – DOSAGES

Only one layer **Cem-MAT<sup>®</sup>** has to be placed on the floors before pouring the mortar. Overlapping of at least 5 cm is necessary. Use a roller to make the mat perfectly impregnated.

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### PACKAGING and STORAGE

**Cem-MAT<sup>®</sup>** rolls are supplied in a 109 mm (4.25 in.) diameter cardboard tube protected by a polyethylene bag.

A pallet is made up of 16 rolls placed vertically on a wooden base pallet with an external cardboard (1200 x 1200 x h mm).

**Cem-MAT<sup>®</sup>** rolls should be stored away from heat and moisture, and in their original packaging. The best conditions are:

- Temperature: 15°C – 35°C.
- Humidity: 35% – 65%.

If the product is stored at lower temperatures it is advisable to condition it in the workshop for at least 24 hours before use, to prevent condensation.

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### QUALITY STANDARDS – CERTIFICATION

- **Cem-FIL<sup>®</sup>** fibers are manufactured under a quality Management System approved to ISO 9001.
- **Cem-FIL<sup>®</sup>** fibers fulfil all the prescribed requirements described in the European Technical Approval ETA-11/0410, attested by the EC-Certificate of conformity 0672-CPD-I 13.15.5. So the CE marking is affixed on the packaging of **Cem-FIL<sup>®</sup>** fibers and on the accompanying commercial documents.
- **Cem-FIL<sup>®</sup>** fibers are not classified as dangerous by the Regulation 1272/2008/EC. For more information, please refer to our Safe Use Instructions Sheet.

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