



CEM-FIL® 54

PERFORMANCE WITH PRECISION

Cem-FIL® 54 is an alkali-resistant glass fiber assembled roving specifically designed for use in the manufacture of glass fiber reinforced concrete (GRC) composites using the simultaneous spray method.

- Incorporates easily and provides uniform performance for excellent finish and quality reproduction of detail throughout the form.
- Excellent durability with good mechanical properties.
- Tested and approved for use with commonly used spray equipment.

FOR GRC SPRAY-UP APPLICATIONS

Product Benefits



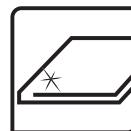
Performance

- Alkali-resistant glass used globally for more than 50 years
- Excellent mechanical performance
- Makes highly durable GRC elements



Processing

- Good unwinding
- Easy chopping
- High split-efficiency
- Safe and easy to handle
- Very easy incorporation into the matrix



Aesthetics

- Ideal for use with complicated profiles
- Excellent reproduction of detail

Applications

Cem-FIL® 54 is used in a variety of GRC spray roving applications where durability, reproduction of detail, and complicated profiles are used, including architectural facades and decorative features.



Technical Characteristics

LINEAR DENSITY OF ROVING (TEX) (ISO 1889:2009)	LINEAR DENSITY OF STRAND (TEX) (ISO 1889:2009)	LOSS ON IGNITION (%) (ISO 1889:1995)	MOISTURE (%) (ISO 3344:1997)
2,450	76	2.00	0.50 max
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- **Electrical Conductivity:** Very low
- **Specific Gravity:** 2.68 g/cm³
- **Material:** Alkali-resistant glass*
- **Softening Point:** 860°C–1,580°F
- **Chemical-Resistance:** Very high
- **Modulus of Elasticity:** 72 GPa–10x10⁶ psi
- **Tensile Strength of Input:** >1,000 MPa–>145 x 10³ psi

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

Dosage

Cem-FIL® 54 rovings are used for spraying with purpose-made GRC spray equipment. The recommended dosage is 5% by weight.

Packaging and Storage

Cem-FIL® 54 rovings are protected by a shrink-wrap polythene film, open at the top, which should not be removed when the product is in use. Rovings are packed on pallets either with or without carton boxes. Cem-FIL® 54 rovings should be stored away from heat and moisture, and in their original packaging. Optimum conditions are temperature between 15°C and 35°C (59°F and 95°F) and humidity between 35% and 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.

Quality Standards

- Cem-FIL® 54 is manufactured under a quality management system approved to ISO 9001.
- Cem-FIL® fibers are not classified as dangerous by the Regulation 1272/2008/EC. For more information, please refer to our Safe Use Instruction Sheet.
- CE-marking and Declaration of Performance as fibers for use in concrete and mortar through European Technical Assessment ETA 17/0169.
- Verified Environmental Product Declaration according to ISO 14025 and EN 15804:2019 available upon request.



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Pub no. 10024671. Cem-FIL 54_product data sheet. March 2021. English.
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