



# 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



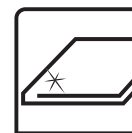
##### Performance

- 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
	38		

- **Electrical Conductivity:** Very low
- **Specific Gravity:** 2.68 g/cm<sup>3</sup>
- **Material:** Alkali-resistant glass\*
- **Softening Point:** 860°C–1,580°F
- **Chemical-Resistance:** Very high
- **Modulus of Elasticity:** 72 GPa–10x10<sup>6</sup> psi
- **Tensile Strength of Input:** >1,000 MPa–>145 x 10<sup>3</sup> 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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