

# SPECIALTY MAT

## METAFIL<sup>®</sup> MAT

### Electrically Conductive Mat For Composite Applications

**METAFIL<sup>®</sup> Mat** is comprised of aluminum coated glass fibers thermally bonded into a nonwoven mat of uniform density. The fibers are oriented to provide superior electrical and shielding performance. The structure of the material allows for conformability to irregular surfaces and compatibility with other base substrates or resin systems.

This material is manufactured in a well-controlled environment to assure product uniformity and performance.

#### Product Applications:

- Microwave antennas
- EMI/RFI shielding
- Lightning strike protection
- Electrostatic finishing
- Electrostatic dissipation
- Thermal dissipation
- Radar reflective composites

#### Physical Properties:

- Fibers: aluminum coated E-glass, polyester
- Fiber diameter: 18 microns
- Color: light gray
- Weight: 3 oz/yd<sup>2</sup> (102 g/m<sup>2</sup>)
- Thickness: 0.05 to 0.08 inches (1.3 to 2.0 mm)
- Fiber resistance: <4.2 Ω/cm

#### Roll Properties:

- Roll length: 300 ft (91.4 m)
- Roll width: 46 inches (122 cm)
- Roll weight: 25 lbs (11.3 kg)
- Core: 3 inch ID (76 mm)

#### Shielding Effectiveness:\*

- |                    |       |
|--------------------|-------|
| • 20-100 MHz       | 30 dB |
| • 100-1,000 MHz    | 50 dB |
| • 1,000-10,000 MHz | 60 dB |

#### Product Characteristics:

- Multi-resin compatibility
- Good drapeability, conforms to irregular surfaces
- Electrically and thermally conductive
- Moldable
- Moisture absorption negligible

\*Test data provided courtesy of Microwave Specialty Corp.

**For more information and product samples,  
contact the BGF Sales Department at  
1-800-476-4845.**

**BGF Industries, Inc.**

3802 Robert Porcher Way • Greensboro, NC 27410  
Phone: 336 545 0011 • Fax: 336 545 0233  
[www.bgf.com](http://www.bgf.com)

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