

# Advantage Structural Fiber

## Fiber Reinforcement for Concrete

**Advantage Structural Fiber** is the alternative to welded wire fabric and light reinforcing bars in concrete.

**Advantage Structural Fiber** creates a reinforcement network that prevents shrinkage cracks from forming, and presents a superior alternative to mesh.

This network remains intact long after curing, so the slab requires less maintenance.

The end result is a fiber reinforced slab that is stronger, more durable, and more cost effective.

### PERFORMANCE

- Increased Toughness
- Higher residual strength concrete
- Good dispersion
- Tight crack control
- Increases cohesion of mixture
- Synthetic fibers not subject to corrosion
- Reduces bleeding of water to the surface
- Increased flexural strength

### ADVANTAGES

- Improved internal dimensional stability; reduced surface permeability
- Decreased risk of cracking over rebar
- Greater long-term durability
- Reduced settling and easier finishing
- Reduced inventory, storage and labor costs; allows for fast-track scheduling; provides easier positioning of joints

### APPLICABLE STANDARDS

**Advantage Structural Fiber** meets the material specifications described in ASTM C1116, Type III, Section 4.1.3 "Synthetic Fiber Reinforced Concrete". ASTM C1018-97 Level I, II, III. Performance characteristics are based on addition rates.

Contact a GRT technical representative for addition rate to comply with desired performance.

### ADDITION RATES

**Advantage Structural Fiber** addition rates are dependent on the specific application. Depending on desired performance, addition will vary between 3 and 10 lbs. per cubic yard.

### PHYSICAL PROPERTIES

Polypropylene blend length:	<b>1.25-1.75</b>
Specific Gravity:	<b>0.9-0.94</b>
Aspect Ratio:	<b>71</b>
Absorption:	<b>NONE</b>
Electrical Conductivity:	<b>LOW</b>
Thermal Conductivity:	<b>LOW</b>
Tensile Strength:	<b>88ksi</b>
Melting Point:	<b>320°F</b>
Flash Point:	<b>650°F</b>