

FABPRO POLYMERS' OMEGA™ Blend V Steel & Polypropylene Blend

DESCRIPTION

The carbon steel fibers in OMEGA™ Blend V meet the requirements of ASTM A820/A820M, Type V "Standard Specification for Steel Fibers for Fiber-Reinforced Concrete" and SPECTER™ meets the requirements of ASTM C1116/C1116M "Standard Specification for Fiber-Reinforced Concrete" and ICC ES AC32 Section 3.1.1 for plastic shrinkage reinforcement.

APPLICATIONS

Recommended for use in:

- Any SOG application to increase impact and shatter resistance
- Composite metal deck systems
- Driveways & loading areas to increase fatigue strength
- Pavement, parking lots and overlays
- Applications where reducing plastic shrinkage & settlement cracks are important
- Applications where controlling drying shrinkage & temperature cracks are important

FEATURES

FABPRO POLYMERS' OMEGA[™] Blend V is an industry-proven combination of two unique fiber types, that when united, provide a secondary reinforcement structure that is an excellent alternative or replacement for welded wire mesh or light rebar. The engineered blend of carbon steel and FABPRO's *Best-in-Class* SPECTER[™] polypropylene microfiber delivers tight temperature-shrinkage crack control, excellent plastic shrinkage crack prevention and settlement protection by approximately 70%. OMEGA[™] Blend V is also approved for use in composite metal deck systems by the Steel Deck Institute.

The OMEGA[™] Blend V fibers are placed into pre-measured water dispersible bags that are uniformly distributed throughout the concrete to assure the owner, contractor and design professional an exceptional crack management system.

BENEFITS

An excellent alternative / replacement for WWM & light rebar without all the hassles:

- No minimum coverage concerns, as fiber is always positioned properly.
- No cutting, bending or clean-up.
- No special equipment for lifting, placing or handling.
- Eliminates on site accidents from placing rebar and welded wire.
- Less expensive than placing rebar and welded wire.

PERFORMANCE CHARACTERISTICS

	Type V Carbon Steel	SPECTER™
Specific Gravity	7.86	0.91
Melting Point	2760°F (1516°C)	320°F (160°C)
Ignition Point	1500°F (816°C)	1,094°F (590°C)
Absorption	Nil	Nil
Alkali Resistance	Very Good	Excellent
Tensile Strength	140-180 ksi (966-1242 MPa)	25,000 psi (170 MPa)
Fiber Length	1.5" (38 mm)	0.75" (19 mm)
Aspect Ratio/Denier	38 Aspect Ratio	7.0 Denier
Chemical Resistance	Very Good	Excellent
Fiber Count	2000 fibers/lb (0.45 kg)	30 million/lb (0.45 kg)







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GUIDELINES FOR USE

Dosage: OMEGATM BLEND V Fibers are typically added at a dosage rate of one 24 lb/yd^3 (14.2 kg/m³) bag per cubic yard. Other dosages may be acceptable depending on the application, local specifications, and practices.

Mixing, Placing, and Finishing: OMEGA[™] BLEND V Fibers are packaged in pre-measured ready-for-use degradable bags, designed to be introduced into the mix at any time before or after batching. Please follow proper mixing procedures as specified in ASTM C94/C94M.

OMEGA[™] BLEND V Fibers can be pumped and placed using conventional equipment. Hand screeds can be used, but vibratory and laser screeds are recommended to provide added compaction and bury surface fibers.

Normal finishing equipment and techniques can be used when finishing. Troweling blades should be kept at an angle for as long as possible to insure a fiber free surface.

Standard practices detailed in ACI 302 for placing, finishing and curing concrete should be followed when using OMEGA[™] BLEND V Fibers.

ENGINEERING SPECIFICATIONS

Use only OMEGA[™] BLEND V Fibers specifically engineered and manufactured for use in concrete as secondary reinforcement. OMEGA[™] BLEND V Fibers are for the control of cracking due to drying shrinkage, thermal expansion and contraction, lowered permeability, and increased impact, abrasion and shatter resistance. OMEGA[™] BLEND V Fibers from FABPRO POLYMERS comply with applicable building codes and ASTM C1116/C1116M Section 4.1.3, Type I and Type III, and are approved for use in composite metal deck systems by the Steel Deck Institute.

 $\mathsf{OMEGA}^{\texttt{M}}$ BLEND V should be specified for use in concrete slabs:

- To control bleed water
- To reduce plastic shrinkage cracking
- To increase abrasion resistance
- **D** To improve impact resistance
- To reduce permeability
- To control drying shrinkage cracking and temperature cracking

FABPRO's OMEGA[™] BLEND V Fibers should not be used to replace structural, load-bearing reinforcement. OMEGA[™] BLEND V Fibers should not be used as a means of reducing thickness of concrete sections below original design, nor to increase joint spacing past those dimensions suggested by PCA and ACI industry standard guidelines.

STORAGE AND HANDLING

Storage Temperature: OMEGA[™] BLEND V Fibers should be stored at temperatures below 140°F (60°C). Avoid storing near strong oxidizers and avoid sources of ignition. Use caution when stacking to avoid unstable conditions. Store in a sprinkled warehouse.

PACKAGING

 $OMEGA^{M}$ BLEND V Fibers are available in 24 lb (10.9 kg) degradable bags. The bags are palletized and stretch-wrapped to prevent damage from shipping and handling.

RELATED DOCUMENTS

Safety Data Sheets: OMEGA™ BLEND V Fiber

ADDITIONAL INFORMATION

For additional information on OMEGA[™] BLEND V Fibers, contact your local sales representative or Customer Service at (800) 821-4391.

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