FIBERFORCE

abcpolymer concrete fibers

FiberForce 1000 HP

Technical Data Sheet

DESCRIPTION

FiberForce 1000 HP is a macro synthetic concrete fiber developed from a specific blend of polypropylene and polyethylene resins that are continuously embossed for enhanced bond. FiberForce 1000 HP has an optimized embossment pattern and is drawned to increase tensile capacity.

FEATURES & BENEFITS

- Crack-width control for concrete due to shrinkage and temperature restraint
- Redistributes shrinkage-stresses in concrete
- Increases concrete durability - including impact and abrasion resistance, fatigue strength, and DUCTILITY
- Provides concrete post-first crack residual strength, reduces plastic shrinkage and settlement cracking
- Uniformly distributed 3-dimensional reinforcement throughout the concrete
- Fast-Track Construction Schedules

PHYSICAL PROPERTIES

Material	Polyolefin (Polypropylene/Polyethelene)
Absorption	None
Specific Gravity	0.91
Alkali, Salt, and Acid Resistance	High
Electrical Conductivity	Low
Tensile Strength	85.5 ksi (590 MPa)
Aspect Ratio	100
Standard Length	2.0 in (50 mm)
Other Available Length	1.5 in (38mm)

GENERAL SPECIFICATIONS

The dosage rate for FiberForce 1000 HP is typically between 3 to 11 lb/yd^3. However, a specific dosage rate should be established by the project engineer or government agency for a given application based on project conditions and requirements. FiberForce 1000 HP should be added per project specifications or engineer's instructions. For Slabs on Composite Metal Deck, the Steel Deck Institute's provision recommends a minimum of 4 lb/yd^3.

PRODUCT APPROVALS & COMPLIANCE WITH INDUSTRY STANDARDS

- ASTM C1116: Section 4.1.3 Type III and Note 2
- ASTM D7508
- FiberForce 1000 HP is listed by UL in CBXQ.R19202 (Fiber Reinforcement and Concrete Additives)
  For use as an alternate or in additionto the welded wire fabric used in Floor-Ceiling Design No. D700, D800, and D900
- ANSI/SDI C-2017 - Shrinkage and temperature reinforcement alternative to welded wire reinforcing
- ICC ESR-4335

APPLICATIONS

- Slabs-on-ground (Industrial) warehouse/distribution centers
- Slabs on metal deck (Composite Metal Deck)
- Topping slabs
- Paving/overlays
- Bridge decks
- Shotcrete
- Precast

MIXING INSTRUCTIONS

FiberForce 1000 HP is packed in pre-weighed degradable bags. FiberForce 1000 should be added to the mixer during the concrete batching cycle. Alternative batch methods can be implemented. Mix for 5 minutes at full charging speed (75-100 revolutions) to ensure complete dispersion of fibers. FiberForce recommends the utilization of the appropriate water reducing chemical admixture for any slump or workability modification that may be required with this technology.

PACKING & SHIPPING

FiberForce 1000 is packaged in 3 lb, 4 lb and 5 lb bags then palletized for shipment. Pallets and boxes are labeled with the fiber technology and bag weight.

Store material in a dry environment. Avoid storing in direct sunlight.

In-House Professional Engineers are available for product specification guidance and design support. FiberForce Territory Managers are available for on-site support and guidance related to any FiberForce technologies.