PSI FIBERSTRAND 100



POLYPROPYLENE MICRO-FIBER

DESCRIPTION

PSI FIBERSTRAND 100 is a monofilament polypropylene micro-fiber for concrete reinforcement that complies with ASTM C 1116, Standard Specification for Fiber Reinforced Concrete and Shotcrete, and is specifically designed to help mitigate the formation of plastic shrinkage cracking in concrete. Typically used at a dosage rate of 1.0 lb/yd³ (0.6 kg/m³), PSI FIBERSTRAND 100 micro-fibers have been shown to greatly reduce plastic shrinkage cracking when compared to plain concrete. PSI FIBERSTRAND 100 micro-fibers also comply with applicable portions of the International Code Council (ICC) Acceptance Criteria AC32 for synthetic fibers.

PRIMARY APPLICATIONS

- Slabs on grade, sidewalks, driveways, curb work, overlays and toppings
- · Footings, foundations, walls and tank applications
- Stucco applications, pre-cast concrete and pre-stressed beams
- Shotcrete, slope paving and composite steel deck construction

FEATURES/BENEFITS

- · Controls and mitigates plastic shrinkage cracking
- · Reduces segregation, plastic settlement and bleed-water
- · Provides three-dimensional reinforcement against micro-cracking
- Increases surface durability, impact and abrasion resistance
- Reduction of in-place cost versus wire mesh for non-structural temperature / shrinkage crack control
- Easily added to concrete mixture at any time prior to placement
- UL certified for series D700 and D800 metal deck assemblies as alternate to WWF CBXQ.R13773

TECHNICAL INFORMATION

Typical Engineering Data

100% virgin monofilament polypropylene Material..... Specific Gravity Typical dosage rate..... 1.0 lb/yd3 (0.6 kg/m3) Available lengths: 1/4" (6 mm), 1/2" (13 mm), 3/4" (19 mm), and multi-length blend (ML) Melt point..... 320°F (160°C) Electrical and Thermal Conductivity..... low Water Absorption negligible Acid and Alkali Resistance..... excellent

PACKAGING

PSI FIBERSTRAND 100 micro-fibers are packaged in 1.0 lb (0.45 kg), 1.5 lb (0.68 kg), 5.0 lb (2.27 kg) and 7.5 lb (3.4 kg) water soluble bags. Additional and special packaging configurations, including bulk, are also available upon request.

SHELF LIFE

3 years in original, unopened package.

DIRECTIONS FOR USE

PSI FIBERSTRAND 100 micro-fibers can be added to the concrete mixture at any time prior to placement of the concrete. It is generally recommended to add any fiber material to the concrete mixer during batching. Fibers must be mixed with concrete for a minimum of three to five (3-5) minutes at maximum mixing speed, depending upon the mixer type, to ensure complete dispersion and uniformity.

CLEAN-UP

Loose fiber material may be disposed in proper receptacles for refuse. Finishing equipment with fibers embedded in concrete should be thoroughly cleaned.

PRECAUTIONS/LIMITATIONS

- Use of fibers may cause an apparent loss in measured slump of concrete. This may be offset with the use of a water reducing admixture if necessary.
- Fibers should never be added to a "zero-slump" concrete. Ensure a minimum concrete slump of 3" (80 mm) prior to addition of any fiber material. Fibers may also be added in loose form to aggregate charging devices.
- In all cases, consult the Safety Data Sheet before use.