

FiberWorx 300 DOT

Synthetic Macro-Fiber Reinforcement



The Product

FiberWorx 300 DOT is a macrosynthetic fiber created from a blend of polyolefin resins, complying with ASTM C 1116 Type III fibers. This fiber, characterized by its fibrillated tape form, is specially designed and produced to minimize shrinkage in both plastic and hardened concrete, to enhance fatigue resistance and concrete toughness, and to boost impact resistance. The specific dimensions of FiberWorx 300 DOT are essential to its performance, as validated by ASTM C1609 standards, while exhibiting superior distribution and finishing properties. Independent testing confirms that FiberWorx 300 DOT can substitute for the use of wire mesh and rebar in non-structural applications.

The Benefits

- 3-Dimensional Reinforcement
- Reduces Bleed Water
- Reduces Plastic Settlement
- Reduces Plastic Concrete Shrinkage
- Excellent Temperature Shrinkage Reinforcement
- Reduces Hardened Concrete Shrinkage
- Reduces Fatigue Due to Multiple Axle Loadings
- Reduces Permeability
- Increases Impact Resistance
- Increases Surface Abrasion Resistance
- Increases Post-First Crack Load Carrying Capacity
- Increases Ductility/Modulus of Elasticity
- **Reduced Labor Costs**
- **Eliminates Shipping, Receiving, Offloading, Placement of Wire Mesh and Rebar**

The Applications

- Slabs-on-Ground
- Slabs-on-Metal Deck
- Topping Slabs on both Concrete and Asphalt
- Bridge Decks
- Shotcrete
- Precast
- Septic Tanks (Precast)
- Burial Vaults (Precast)

General Instructions for Dosing and Use of Product

As a Macro Synthetic Fiber, standard dosage rates for FiberWorx 300 DOT are 3.0 lbs. per cubic yard to 7.5 lbs per cubic yard - for typical cast in place concrete as well as precast. In some cases the dosage may be higher, such as in shot crete applications. For composite metal decks the **Steel Deck Institute** recommends a minimum dosage of 4.0 lbs. per cubic yard. The project Engineer helps establish the final dosage rate and mix design.

The use of water reducing and or superplasticizer chemical admixtures may be necessary to maintain the workability of the mix. It is recommended that a vibrating screed or lazer screed be used for the final finish. When a broomed finish is necessary, it is crucial to pull the broom in only one direction.

The Mixing Instructions

Loading and Mixing of the FiberWorx 300 DOT include:

- Adding the fiber prior to introducing the conventional materials. Make sure the drum is rotating at mixing speed prior to introducing the conventional concrete materials.
- Adding the fibers in the pre-weighed degradable bags after all conventional materials have been added and thoroughly mixed is the standard. Bags may be added manually at the throat of the drum or with the use of a conveyor belt.

Mixing time is 70 mixing revolutions or approximately 5 minutes.

- Central Mixers require the pre-weighed bags be added with the conventional materials. Mixing times needs to be increased to insure thorough distribution of the fibers.

Physical Properties

Material	Virgin Polypropylene
Length	1.5 & 2.0 inch
Specific Gravity	.91
Alkaline Resistance	Excellent
Melting Point	160c / 320f
Electrical Conductivity	NA
Water Absorption	NA
Color	Natural/White

Packaging Information

FiberWorx 300 DOT is packed in water soluble paper bags packed in cartons and gaylord boxes.

Options:

Length 1.5" (38mm), 3.0 lb. bags

Length 2" (50 mm), 3.0 lb. bags

Disclaimer of Warranties & Limitation of Liability

Seller and Manufacturer do not make any warranty of any kind regarding this product, either express or implied, including without limitation, any implied warranty of merchantability, fitness for a particular purpose, condition, design, or quality. Buyer's exclusive remedy, and the seller's and the manufacturer's exclusive liability for any claims, losses, damages, or injuries resulting from the use of this product, shall be limited to the replacement of the product with respect to which damages are claimed. In no case shall the seller or the manufacturer be liable for direct, consequential, special, incidental, punitive, or indirect damages resulting for the purchase or use of this product. Buyer accepts this product subject to this foregoing disclaimer, and purchases and uses this product at buyer's own risk. No employee, or agent of seller, or the manufacturer is authorized to vary the terms of this disclaimer in any manner.

FiberWorx hopes the information given herein is helpful. All information is based on test data and knowledge considered to be true and accurate, and is offered for the user's consideration, investigation and verification.



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