

# Durability and Enhanced Crack Control

One of the main challenges of concrete construction is controlling shrinkage cracking both at the early stage (plastic shrinkage) as well as during the settlement stage (drying and temperature shrinkage.) Steel reinforcement in the form of welded wire mesh and rebar does not prevent or minimize cracking—it simply works along a two-dimensional plane to hold together cracks that have already occurred. Reinforcing fibers are distributed in three dimensions throughout the mix offering support for the coarse aggregates. This minimizes segregation that can lead to excessive bleeding, surface defects and curling.



FiberMaxFI fibers can be an alternative to wire mesh for many flatwork projects.

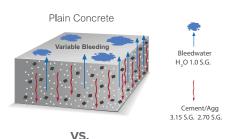


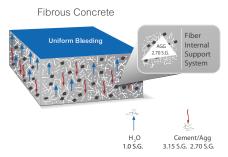




## FiberMax<sup>FI™</sup>

The FiberMax line of fiber reinforcement products includes four types of fibers for a range of applications. All FiberMax reinforced concrete improves permeability and abrasion resistance while eliminating more than 85% of the plastic shrinkage cracking potential and providing excellent finishing characteristics.





Depending on the project, the proper fibers provide an alternative system for a multitude of traditional steel reinforcement configurations, from light gauge welded wire fabric to various uses of rebar, reducing costs and production time while increasing crew safety.

## FIBERMAX FIBRILLATED

polypropylene fibers employ a unique technology that creates additional micro fibrils attached to the primary fibrillated network. These offer more adhesion points that increase bonding between the mortar matrix and the fiber network. The resulting network increases concrete compressive and tensile strength providing shrinkage and temperature (secondary) reinforcement. Additionally, FiberMax Fibrillated has excellent finishing properties.

FiberMax Fibrillated fibers are a cost-effective alternative to light gauge welded wire fabric (WWF). The fibrillated strands prevent 80-100% of all cracks in the plastic state–precisely when most cracks occur. Fibrillated complies with ASTM C 1116/C 1116M Section 4.1.3, Type III, Note 2.

### **BENEFITS**

- Saves construction and placement time, especially for laser screed operations.
- Increases crew safety by eliminating wire mesh handling
- · Reduces long term cracking
- · Improves residual strength
- Improves green strength

## **APPLICATIONS**

Can be used for all residential flatwork as well as light duty commercial floors including:

- Slabs on grade (driveways, patios, walkway)
- Standard commercial floor traffic such as stores, hospitals, offices
- Concrete toppings of precast panels
- Stair pans and basement floors

A good alternative for WWF 6 x 6-W1.4 x W1.4 (152 x 152-MW9.1 x MW9.1)



National Headquarters 7601 W. 79th Street PO BOX 1123 Bridgeview, IL 60455 Phone 708-458-0400 prairie.com

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