

UltraFiber 500® Natural Cellulose Fiber blend with CFS Cold Drawn Steel Fibers

Advantages of UltraFiber 302 Fiber Blend

ACI 302 recognizes the benefits of using a natural cellulose micro fiber and steel fiber blend to reduce early age plastic shrinkage and provide long term crack control. Additionally, this fiber blend improves the tensile strength/capacity of the concrete. The UltraFiber 302 Blend can replace traditional continuous steel for temperature and shrinkage reinforcement. UltraFiber 500® is the fiber of choice for decorative concrete and a proven performer reducing plastic drying shrinkage in residential, light commercial, overlays and structurally reinforced concrete. CFS 150-5 steel fibers have long been a solution for longer term concrete crack control and added tensile capacity in the same applications. Combining these two fibers creates “peace of mind” in overlays and traditional 4” to 6” building slabs and pavement designs within ACI joint guidelines.

- Easy to Use 16.5 lbs. (7.48 kg) Water Soluble Bags
- One Bag Per Cubic Yard
- “Concrete Finishers First Choice”
- Renewable Materials & Environmentally Friendly

ACI 302-15 will be adopted by the building codes. New requirements of ACI 302-15 will include: all concrete building slab on grade construction to be placed on a vapor barrier, 4x4 – 4.0 – 4.0 properly supported welded wire fabric or steel fiber / micro fiber blends. UltraFiber 302 Blend is a cost effective alternative to WWF and light rebar installations.

Applications

- Slabs on Grade
- Office and Retail
- Schools Churches
- Parking Lots
- Selected Pavements & Overlays
- Concrete Overlays



UltraFiber 302 Blend

UltraFiber 500 and Type V Steel Fibers

Product Use

Sidewalks, drives, pavements, pervious, overlays and industrial slabs. Ideal for colored concrete, stamping and textures.

Mix Considerations and Addition: The UltraFiber 302 Blend requires mechanical mixing generally accomplished by incorporating into the mixer truck drum. UltraFiber 302 Blend generally does not require any special admixtures or additional water. UltraFiber 302 Blend comes in degradable bags that can be added prior to, during or after the batching of the concrete. Mixing time is suggested to be at least 5 minutes at a mixing speed as specified in ASTM C 94. Personnel handling the bags should wear gloves and eye protection.

Compatibility: UltraFiber 302 Blend is compatible with all commonly used concrete admixtures and traditional mix designs. No additional admixtures are required for workability.

Dosage: The standard dosage of the UltraFiber 302 Blend is one 16.5 lbs. (7.48 kg) bag per cubic yard of concrete.

Finishing: UltraFiber 302 Blend can be placed and finished using traditional tools, equipment and techniques. Ideal with pumping, vibrating screeds, laser screeds, troweling equipment and hand tools.

Guidelines

UltraFiber 302 Blend is considered a secondary reinforcement to reduce temperature and plastic shrinkage, reduction of drying shrinkage and crack retention. Will not replace structural or load bearing reinforcement. UltraFiber 302 Blend is not intended to be used to thin slab sections or extend joint spacing past that which is recommended by ACI industry standards.

Packaging

UltraFiber 302 Blend is available in 16.5 lbs. (7.48 kg) water soluble – degradable bags. The UltraFiber 302 Blend bags are palletized and shrink-wrapped for protection in shipping.

Technical Services

Solomon Colors, Inc. has a technical service staff available for guidance and application support. Solomon Colors, Inc. does not engage in the practice of engineering or supervision.

Reference Documents

ASTM A 820 Standard Specification for Steel Fibers for Reinforcing Concrete.

ACI 544 Fiber Reinforced Concrete

ACI 544-3R Guide for Specifying, proportioning, Mixing, Placing and Finishing Steel Fiber Concrete

ACI 302-15 Guide for Concrete Floor and Slab Construction

ACI 304 Guide for Measuring, Mixing, transporting and

Placing Concrete

ICC- ESR 1032

ASTM C 94/C 94M Standard Specification for Ready-Mixed Concrete.

ASTM C1116/C 1116M Standard Specification for Fiber

Reinforced Concrete

UL Test UltraFiber 500 for use as an alternate to the welded-wire fabric used in Floor-Ceiling D700, D800 and D900 series designs G256 & G514

UltraFiber 302 Blend incorporates a blend of the UltraFiber 500 natural cellulose fibers and ASTM C 820 cold drawn steel wire fibers. Intended use to address temperature and shrinkage protection of the concrete. Application dosage of the UltraFiber 302 Blend shall be a minimum of one 16.5 lbs. (7.48 kg) bag per cubic yard of concrete. Manufacture shall provide documentation as to history and compliance.



This publication should not be construed as engineering advice. The information included in this publication is accurate to the best knowledge of Solomon Colors, Inc. but Solomon Colors Inc. does not warrant its accuracy or completeness. The ultimate customer, designer and user of the UltraFiber 302 Blend and UltraFiber Deck Blend products assume full responsibility for final determination for its use and suitability for the intended application. The only warrantee made by Solomon Colors, Inc for its products is set forth in the product data sheets for the product itself. Solomon Colors, Inc specifically disclaims all other warranties, expressed or implied including without limitation, warranties of merchantability or fitness for the particular purpose, or arising from provision of samples, a course of dealing or usage of trade.