

UltraFiber Technical Bulletin UFTB #2 Finishability

TESTING PURPOSE:

To observe finishability of fiber reinforced concrete (FRC) containing Solomon UltraFiber 500™ compared to FRC containing monofilament polypropylene fibers and fibrillated polypropylene fibers.

RESEARCH METHODOLOGY:

A professional concrete contractor was employed to place and finish six test slabs. The concrete was supplied by consecutive concrete trucks from the same ready mix plant. Each slab utilized the same identical mix design. The only variable was that two of the slabs used Solomon UltraFiber 500^{TM} , two of the slabs used the largest selling brand of monofilament polypropylene fibers, and two of the slabs used the largest selling brand of fibrillated polypropylene fibers. Each dose of any fiber was 1.5 lbs/yd^3 . Within each pair of slabs containing the same types of fiber, one slab received a standard broom finish and the other slab received an exposed aggregate finish. Visual observations were made throughout the entire placement and finishing process.

TESTING RESULTS:

Solomon UltraFiber 500™ provides overwhelmingly superior finishability versus both monofilament and fibrillated polypropylene fibers and requires no changes in standard finishing practices. The table below summarizes the finishing attribute observations for each fiber type:

Finishing Attribute	Fibers in Concrete		
	Solomon UltraFiber 500™	Monofilament Polypropylene	Fibrillated Polypropylene
Fiber Clumping	NO	YES	YES
Fiber Balling	NO	YES	YES
Fiber Build-Up on Finishing Tools	NO	YES	YES
Surface Fuzz	NO	YES	YES
Surface Blemishes	NO	YES	YES
Only Standard Finishing Practices Needed	YES	NO	NO
"Invisible" in Concrete	YES	NO	NO
Aesthetically Perfect Finish	YES	NO	NO







Solomon UltraFiber 500™ Provides A Smooth Broom Finish Without Surface Blemishes



Solomon UltraFiber 500™



Monofilament Polypropylene



Fibrillated Polypropylene

There is No Balling or Surface Fuzz with Solomon UltraFiber 500™



Solomon UltraFiber 500™



Monofilament Polypropylene



Fibrillated Polypropylene

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