

AC50



FEATURES	<ul style="list-style-type: none"> Enhances performance & durability Provides secondary reinforcement Eliminates plastic shrinkage cracking up to 100% Alkali resistant & non-corrosive Insoluble in water No fiber protrusion for easy finishing High impact resistance Excellent bond with concrete paste 	
BENEFITS	<p>AC50 staple fiber added to concrete mechanically locks in the fresh concrete matrix, controlling plastic shrinkage. AC50 helps with secondary reinforcement which helps eliminate crack formation that causes permanent weakening of the resultant concrete. With AC50, concrete is less permeable, has a smooth surface, is highly impact resistant and improves your Bottom Line.</p>	
APPLICATIONS	<p>ICF's AC50's characteristics lend itself to a variety of concrete applications including: slab-on-grade, precast concrete, shot-crete, stucco, decorative and other specialty concrete applications.</p>	
DOSAGE RATES	<p>For general applications such as slab-on-grade, a standard dosage of (1) bag/yd³ is recommended. Other fibers require higher dosage rates to achieve similar performance. For other applications, consult with your ICF representative for recommended dosages.</p>	
MIXING	<p>Follow ASTM C-94 guidelines. AC 50 can be added directly to the mix at the jobsite or during batching of ingredients, but not as the first ingredient and should be mixed for a minimum of 5 minutes at full mixing speed.</p>	
PACKAGING	<p>1 Carton/50 Bags; 36 Cartons/Pallet; Truckloads available. Gaylords are available upon request.</p>	
FINISHING	<p>There is NO surface protrusion when using AC50. AC50 can be pumped or placed using conventional equipment and AC50 can be used with all finishing techniques including power and hand troweling, broom finished and colored concrete.</p>	
PHYSICAL PROPERTIES	<p>Material Specific Gravity (g/m³) Elastic Modulus (GPa) Tenacity (MPa) Decomposition Temperature Acid & Alkali Resistance Color Dispersity Rate Filament Diameter (μ) Fiber Count (fiber/kg) approx. Fiber Length inch(mm)</p>	<p>Modified Acrylic 1.17 >5.5 >500 330° C/ 626° F (AC50 does not melt) Excellent White Excellent 12-15 680,000,000 1/4" (6mm) (other lengths available)</p>

AC50



**Innovative
Concrete
Fiber**

TESTING

Introduction: This document presents the summary of the laboratory testing performed by an Independent Third Party DOT Certified Lab on samples of concrete containing AC50 fiber at an application rate of 0.5 lb/cy. The scope of the testing was as follows:

Perform laboratory batching of concrete with and without fibers according to Section 4.0 of ICC-ES Acceptance Criteria for Concrete with Synthetic Fibers (AC32-2002) for:

A. Plastic Shrinkage Cracking Annex A (ICC-ES AC32, Annex A)



Summary of Test Results:

The following is a summary of the tests results:

<u>Test</u>	<u>Control</u>	<u>Test-Fibers</u>	<u>% of Control</u>
Plastic Shrinkage Cracking	<u>Crack Area</u> 0.0775	<u>Crack Area</u> 0.01175	84.84%
Bond Strength	N/A	N/A	N/A
Impact Resistance			
7 days	N/A	N/A	N/A
28 days	N/A	N/A	N/A

(1) 40% difference from the control sample to test sample is the minimum ICC-ES AC32 requirement for reduction of plastic shrinkage.

Conclusion:

Based on the test results, AC50 fiber, used at a dosage rate of 0.5 lb/yd³ exceeded the test parameters required by ICC-ES AC32.

All information, recommendations and advice provided by ICF Concrete regarding fiber products and their use and application is based on ICF Concrete's experience with such products when properly stored, handled and applied under normal conditions.

ICF Concrete reserve the right to change the properties of fiber products without prior notice.

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