

# WHAT ARE THE DIFFERENCES BETWEEN **MICRO & MACRO** SYNTHETIC FIBERS?

Microsynthetic fibers are the original generation of synthetic fiber and are comprised of polypropylene monofilament and fibrillated fibers and nylon monofilament fibers. Whereas, macrosynthetic fibers are the new generation of synthetic fibers. Currently, all of the macrosynthetic fibers being marketed are classified as polyolefins. Polyolefin is an umbrella term that includes a number of 'polys' such as polypropylene and polyethylene.

PURPOSE	DOSAGE
<p><b>MICRO</b></p> <p>Reduce surface cracking while concrete is still wet, increase concrete toughness, replace light steel reinforcement.</p> <p><b>MACRO</b></p> <p>Replace steel shrinkage and temperature reinforcement, increase concrete toughness, reduce cracking, reduce crack widths, provide flexural and tensile strength across cracks.</p>	<p><b>MICRO</b></p> <p>0.5 - 3 lbs. pcy</p> <p>Standard dosage rate</p> <p><b>MACRO</b></p> <p>3 - 11 lbs. pcy</p> <p>Standard dosage rate</p>
<b>DIAMETER</b>	<b>APPROVALS</b>
<p><b>MICRO</b></p> <p>Less than 580 denier (0.012 in) Less than 0.30 mm</p> <p><b>MACRO</b></p> <p>580 denier (0.012 in) or greater 0.30 mm or greater</p>	<p><b>MICRO</b></p> <p>ASTM C1116, Section 4.1.3 &amp; Note 2 ATSM D7508 ICC ES AC32 ICC ESR-1699 ASTM D7508</p> <p><b>MACRO</b></p> <p>ASTM C1116, Section 4.1.3 &amp; Note 2 ASTM D7508 ANSI/SDI C-2011 (alternative to WWR)</p>
<b>APPLICATIONS</b>	<b>PRODUCTS</b>
<p><b>MICRO</b></p> <p>Slabs and concrete elements where surface appearance is important and evaporation rate is high, where additional toughness is needed, to replace WWR 6x6-W1.4xW1.4 in slabs</p> <p><b>MACRO</b></p> <p>Slabs-On-Ground Composite Steel Floor Decks Concrete Pavements Precast Concrete Shotcrete Bridge Decks</p>	<p><b>MICRO</b></p> <p>FiberForce 100 FiberForce 150 FiberForce 300 FiberForce 500</p> <p><b>MACRO</b></p> <p>FiberForce 650 FiberForce 1000 HP Macro Pro Performance Plus DOT</p>

FiberForce is a fully integrated leading manufacturer of microsynthetic and macrosynthetic concrete fibers for the ready-mix industry. FiberForce offers more than 18 concrete fiber products so engineers and contractors are able to select the optimum fiber reinforcement for your next concrete project.

*FiberForce Synthetic Fibers are the Value Engineering Answer for Your Next Project!*