Alternate Fiber Uses

There are also synthetic fibers for structural applications in concrete and here are some examples of companies that produce this new product: **Strux 90/40 Fiber Reinforcement for Flooring** has been introduced by Grace Construction Products as part of its "Peak Performance" initiative. The product is designed to replace steel fibers and welded wire fabric in flooring applications.

The fibers enhance safety during installation because they weigh less and eliminate the risk for potential injury caused by the cuts from steel fibers or welded wire fabric, product engineers contend. Strux also reduces concrete handling and placement difficulties commonly associated with steel fiber or welded wire reinforcement — at potentially lower in-place costs. Because it contains more fibers than steel at the same volume percentage, the product offers better crack control, developers note.

Made from a polymer blend, the fibers provide high-strength, high-modulus synthetic reinforcement that is distributed throughout the concrete to improve its material properties. Strux 90/40 fibers are patented, high-tenacity synthetic monofilaments 40 mm (1.6 in.) in length with an aspect ratio of 90, specifically designed to ensure ease of use, rapid dispersion, good finishability and improved pumpability in concrete. They can be reached at: Grace Construction

SI Concrete Systems' Novomesh™ e3® fiber reinforcement meets the requirements of the Steel Deck Institute's (SDI) recently adopted specifications for shrinkage and temperature reinforcing of composite metal decks (CMDs). This new blended product category, created with a combination of steel and synthetic fibers, provides superior levels of crack minimization and containment for CMDs, slabs on grade, and numerous other applications.

SI's Novomesh e3 is an engineered blend of steel and synthetic fibers designed for projects that need a higher level of secondary reinforcement. Novomesh e3 puts steel throughout the slab, ensuring that it is in the right place all the time.