



EUCLID CHEMICAL

NEWS

FROM THE EUCLID CHEMICAL MARKETING GROUP

TUF-STRAND SF Receives UL Certification

January 13th, 2009 – TUF-STRAND SF, Euclid Chemical's macro-synthetic fiber, has recently been classified for use as an alternate, or an addition, to the welded wire fabric used in Underwriters Laboratories (UL) rated Floor-Ceiling D700, D800 and D900 Series Designs. This use is limited to assemblies having a 2-hour maximum fire resistance rating. TUF-STRAND SF may be added to a concrete mix at a maximum dosage rate of 4.0 lb/yd³ of concrete. This UL approval also applies to ULC (Canada) and is consistent with the recent SDI/ANSI-C1.0 document which also permits the use of macro-fibers to replace WWM in elevated deck construction.

What this means.....

In December, 2008, a section of concrete, supported by steel I-beams, was poured over a metal deck assembly and was loaded with typical floor weights and subjected to a fire with temperatures reaching 1000°F. To pass the test, the assembly was not allowed to collapse for the duration of a two-hour period. This assembly did not have any protective coatings applied to the underside of the metal deck (worst case scenario) which is the designation provided for by the D900 note.

Metal Deck Assemblies with concrete toppings that traditionally have used welded wire mesh as the temperature and shrinkage crack control reinforcement may now be reinforced exclusively with TUF-STRAND SF at up to 4 lb/yd³. Applications for this new market include schools, shopping centers, mixed-use residential developments, high-rise construction, institutional facilities and government offices.

A copy of the completed test report is available at Euclid Chemical and the on-line certification database at UL has been updated to reflect this new approval. For customers and contacts to view this approval, navigate to UL's web-site at www.ul.com, click on the "certifications" tab on the left-hand menu; A new searchable database will appear. The certification for TUF-STRAND SF can be found by either entering Euclid's company name or using the keyword search on the left side of the page. Fiberstrand 100 is also approved for use in D700 and D800 assemblies.

The screenshot shows the Underwriters Laboratories website. The navigation menu on the left includes: Clients, Industries, Regulators, Retailers, Consumers, Newsroom, Certifications (circled in red), UL University, and FAQ. The main content area features the Underwriters Laboratories logo and a text block stating: "UL is the trusted source across the globe for product compliance. Benefiting a range of customers - from manufacturers and retailers to consumers and regulating bodies - we've tested products for public safety for more than a century. And now, we can offer one of the conformity assessment industry's broadest portfolios of capabilities and certification marks. Our unique mix of local expertise in global markets and deep industry knowledge helps bring safer products to markets faster than ever before. [New to UL?](#)" Below this text are two service feature boxes: "REPACKAGING PROGRAM: solutions for clients involved in the redistribution of bulk shipments." and "WATER QUALITY TESTING: Drinking water analyses throughout the U.S.A."

The screenshot shows the "ONLINE CERTIFICATIONS DIRECTORY" search interface. It includes a "BEGIN A BASIC SEARCH" section with the instruction: "To begin a search, please enter one or more search criteria in the parameters below." The search fields are: Company Name (text input with "euclid" entered), City (text input), U.S. State (dropdown menu), U.S. Zip Code (text input), Country (dropdown menu), Region (dropdown menu), Postal Code (text input), UL Category (dropdown menu), UL File Number (text input), and Keyword (text input). There are "SEARCH" and "CLEAR" buttons at the bottom.

The screenshot shows the search results for "CBXQ.813773 Fiber Reinforcement". The results include the company name "EUCLID CHEMICAL CO", address "19218 REDWOOD RD CLEVELAND, OH 44110 USA", and the product description: "Type Fiberstrand 100 Fiber. For use as an alternate or in addition to the welded wire fabric used in Floor-Ceiling D700 and D800 Series Designs with total floor protection. Fiber may also be used in Design Nos. D216, G249, G256, G514, and G561. Fibers added to concrete mix at a rate of 1.5 lb of fiber for each cu yard of concrete." Below this is another entry for "Type Tuf-Strand SF. For use as an alternate or in addition to the welded wire fabric used in Floor-Ceiling D700, D800, D900 Series Designs. Use shall be limited to assemblies having a 2-hour maximum fire resistance rating. Fiber added to concrete mix at a maximum rate of 4.0 lb of fiber for each cu yard of concrete." A "Last updated on 8/27/08" note is visible at the bottom right.

If there are any additional questions, comments or concerns, please feel free to contact me at your earliest convenience.

Best regards,

Michael Mahoney, P.Eng., M.A.Sc.