



## TUF-STRAND™ MACRO-SYNTHETIC FIBERS

# FIBER REINFORCED CONCRETE PAVEMENT APPLICATIONS



### ENGINEERING SERVICES

- DOT certifications
- On-site consultation and field support
- Professional engineers on staff
- Available R&D laboratories
- Carbon footprint analysis
- Specification development
- ICC-ES Accreditation
  - ESR-4072
- Software and design assistance
  - ACI 360
  - ACI 544
  - TR34
  - fib Model Code
  - ASTM C1609, 1550

### OTHER APPLICATIONS

- Foundation Walls
- Retaining Walls
- Structural Rehabilitation
- Pools and Tanks
- Underground Precast Products
- Insulated Concrete Formwork

### FEATURES AND BENEFITS

Fiber-Reinforced Concrete using **TUF-STRAND™ SF** by Euclid Chemical offers a cost-effective, sustainable solution for resurfacing and rehabilitating existing pavements and bridge decks. State DOTs and other transportation agencies are promoting macro-synthetic fibers and developing performance-based specifications for overlays and full depth replacement systems to increase service life and reduce long-term maintenance costs. By using macro-synthetic fibers, the expense and installation time of conventional reinforcing are eliminated while providing a concrete that is easily placed with a reduction of the environmental impact on the jobsite.

**TUF-STRAND SF** is a patented, macro-synthetic fiber specifically engineered to replace conventional reinforcing, such as rebar and wire mesh for pavement applications, white toppings, bridge decks, wall systems, slabs on ground, precast concrete, composite steel decks and shotcrete applications. Engineered dosage rates are based on strength-to-strength calculations and supported by standardized test methods and industry practices. This non-corroding, three-dimensional reinforcement will also provide abrasion, fatigue and impact resistance while increasing service life through improved toughness and durability.

### FIBER REINFORCED CONCRETE PAVEMENTS

**Increase Speed, Improve Safety, and Design Sustainably**  
Reinforcement provided by concrete producer to provide a more durable and longer-lasting concrete with reduced environmental impact.

#### Concrete Mix Design

Experienced assistance to develop mix designs in combination with chemical admixtures, cement additives, air entrainment and other specialty products.

#### Engineered Calculations and Specification Development

Design aids and mobile tools to determine correct dosage rates with specification review for correct fiber selection and performance.

#### Fiber Resources

Technical and marketing materials for the education and training of owners, engineers, contractors and ready-mix producers.

