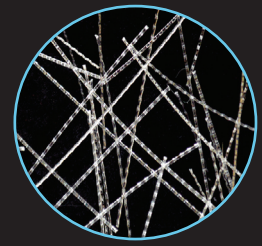


Durastran® 4X

Synthetic Macro-Fiber Reinforcement



Durastran® 4X Synthetic Macro-Fiber is expressly engineered to increase the concrete's toughness, as a tensile response under load; changing the mode of product failure from a brittle fracture to ductile behavior. This resulting outcome enhances the product's flexural strength and its ability to absorb energy. Durastran® 4X is a replacement for WWR and conventional steel bars when used as secondary reinforcement; to control all types of intrinsic cracking.

4X Configuration = Wide-Ranging Results

The unique design of the Durastran® 4X combines the attributes of a Micro-Fiber and the long-term value of a Macro-Fiber.

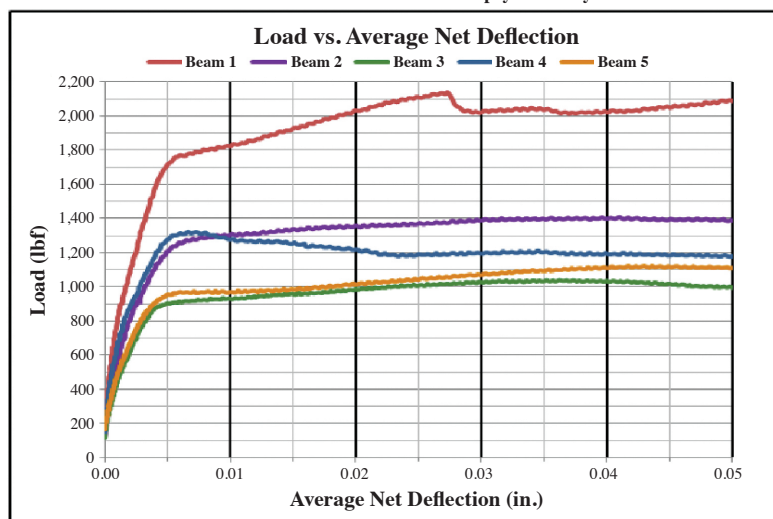
With **4-times the Macro-Fiber count**, 4X behaves similar to a Micro-Fiber by reducing and eliminating cracks that occur in concrete during its plastic phase. (e.g. *Plastic shrinkage and plastic settlement cracking*)

However, as a proven Macro-Fiber, Durastran® 4X is an excellent choice for replacing secondary steel reinforcement for temperature and drying shrinkage; without sacrificing finishability.

Key Benefits of Use

- For Increased Durability and Flexural Toughness in Both Precast Structures and SOG applications
- As *Built-In Reinforcement*, 4X is Positioned Three Dimensionally – Providing Performance Throughout the Entire Concrete Matrices
- When used as a Replacement for conventional steel reinforcement; realize bottom-line savings in total project time, direct labor & costs:
 - ▶ No extra labor for cutting, bending, & placing
 - ▶ Enhanced reinforcement without corrosion
 - ▶ Sustainable, safer, and easier to use
 - ▶ Better performance for less cost

ASTM C1399 — Durastran® 4X at 5 pcy — 28 days



Durastran® 4X Synthetic Macro-Fibers consistently achieve an average residual strength value of 235 psi for every 5.0 lbs / yd³. When compared with conventional steel reinforcement, Durastran® 4X becomes an Effective Solution for both early age and long-term cracking issues, and simply a **Better Crack Management System!**

Product Characteristics

Specific Gravity	0.91
Fiber Configuration	Conforming; Crimped
Fiber Length	38 & 51 mm (1.5 & 2.0")
Color	Natural – White
Absorption	Nil
Alkali Resistance	Excellent
Chemical Resistance	Excellent
Melting Point	160°C (320°F)
Ignition Point	590°C (1094°F)

Typical Applications

Precast Structures

- Cemetery Products; Burial Vaults
- Sanitary & Stormwater Products; Septic Tanks
- Building and Site Amenities; Wall Systems
- Agriculture Products; Bunks, Guards, Slats
- Blast & Hazardous Materials Containment

Slabs on Grade

- Elevated Slabs and Composite Metal Decks
- Industrial, Commercial and Residential Slabs
- Engineered Cementitious Composites (ECC)
- Pavements: Overlays and White-toppings

Shotcrete and Pumping Applications

Fiber Cement Products

Engineering Specifications

Durastran®4X Synthetic Macro-Fiber is a safe, easy to finish, QA/QC alternative for traditional reinforcement practices.

Do specify Durastran®4x for enhanced concrete properties; with improved ductility & flexural performance.

Do specify Durastran®4X for economic benefits; Reduced project costs in materials and labor.

Do specify Durastran®4X as a sustainable, noncorrosive reinforcement alternative for steel fibers or conventional steel reinforcement.



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FiberWorx hopes the information given herein is helpful. All information is based on test data and knowledge considered to be true and accurate, and is offered for the user's consideration, investigation and verification.



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