



CEMSTONE®

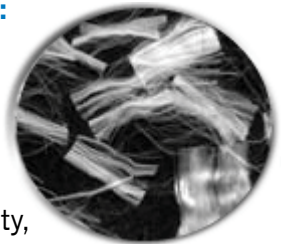
Fiber Products
For Durable Concrete



Cemstone offers a full product offering of synthetic and steel fiber reinforcing products. These fibers provide three-dimensional reinforcement to improve the concrete's durability and resistance to cracking. The product line includes three types of fibers: micro synthetic, macro synthetic and steel fibers.

Micro Synthetic Fibers:

Micro, mono, and fabricated synthetic fibers disperse well in the concrete matrix and offer superior finishability, making them ideal for residential applications.



Mono-Synthetic

Applications

Recommended for use in:

- Residential slabs-on-ground
- Commercial slabs-on-ground
- Stucco
- Dry-packaged cement-based products
- Pools and pool decks
- Water-retention tanks
- Precast concrete
- Decorative concrete

Benefits

- Measurably reduces plastic settlement cracking
- Enhances impact and surface abrasion resistance
- Enhances durability

Synthetic fibers meet the requirements of ASTM C1116/ C1116M Section 4.1.3, Type III, and note 2



Macro Synthetic Fibers:

Macro synthetic reinforcing fibers are specifically engineered for use as secondary reinforcement, providing excellent plastic shrinkage control and reduced settlement cracking.

Applications

Recommended for use in:

- Mining
- Slope stabilization
- Retaining walls
- Irrigation channels
- Burial vaults
- Septic tanks
- Thin wall precast
- Shotcrete
- Wall systems
- Industrial and warehouse floors
- Commercial slab construction
- Concrete pavement
- White topping and overlays



Macro-Synthetic

Benefits

- Eliminates the need for welded wire reinforcement (WWR) and conventional steel bars as secondary reinforcement, depending on the application
- Effective tight crack control
- Provides excellent plastic shrinkage crack reduction and settlement control
- Reduces production time and overall labor and material costs
- Improves green strengths – permits earlier stripping of forms with less rejection

Synthetic fibers meet the requirements of ASTM C1116/ C1116M Section 4.1.3, Type III, and note 2



Steel Fibers:

Steel fibers improve toughness, flexural resistance, and increase the tensile strength and shear resistance of concrete.

They allow for a faster

industrialized production process through the partial or total elimination of steel reinforcement cages.



Steel

Applications

Recommended for use in:

- Industrial and commercial flooring
- Residential foundations and basement walls
- Pavements
- Compression layers
- Precast tunnel segments
- Final tunnel lining
- Slope stabilization and retaining walls
- Irrigation channels
- Thin wall precast
- Shotcrete
- Wall systems
- White topping and overlays
- Burial vaults
- Septic tanks

Benefits

- Reduces shrinkage cracking
- Reduces tunnel lining construction time
- Improves impact resistance
- Improves energy absorption
- Reduces temperature variations
- Can reduce required concrete thickness
- Improves durability in aggressive environments

Fiber Alternative Design Request

Application

- Slab on Grade
- Composite Metal Deck
- Topping Slab

Total square feet of slab _____

Slab thickness _____

Specified concrete strength _____ psi

Specified concrete reinforcement _____

Welded wire or rebar location

- Top of slab
- Middle of slab

Cost for welded wire or rebar _____

Figured labor cost per square foot to install



Cemstone's "Fiber Wizard" Can Help You Cut Costs!

Ask your local salesperson to create a free analysis for you using our new **Fiber Wizard** to see how much you can save by using macro-synthetic and steel fibers in place of welded wire reinforcement (WWR) and small diameter rebar for shrinkage and temperature (secondary) reinforcement. Welded wire reinforcement is difficult to work with, rusts, increases labor costs and is often not placed properly.

**WWR and rebar significantly
increase labor costs**



Additional Information

For more information on Cemstone Products Co., contact your local sales representative, or visit www.cemstone.com.

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