

SF TYPE I (NEEDLES)

HIGH PERFORMANCE STEEL FIBER, ASTM A820

Low-carbon, drawn wire for reinforced concrete. SF Type I steel fibers distribute stresses within the concrete and provide improvement to ductility.

Meets the requirements of ASTM A820.

Product Specs

Filament Diameter	0.008" (0.2 mm)
Fiber Length	0.5" (13mm)
Specific Gravity	7.8
Tensile Strength	285 ksi (1900 MPa)
Flexural Strength	29,000 ksi (203 GPa)
Melting Point	2760° F (1516° C)
Color	Copper
Water Absorption	Nil
Alkali Resistance	High
Corrosion Resistance	High

Product Description

SF Type I "Needles" (N) steel fiber products are 0.2 mm diameter x 13mm monofilament steel fibers for use in reinforced concrete and shotcrete. SF Type I (N) are specifically designed for use in concrete products for the purpose of primary reinforcement.

Applications

SF Type I (N) utilize the mixing activity to disperse the fibers into the mix and provide a multi-dimensional fiber network. NYCON-SF Type I steel fibers do not affect curing process chemically.

SF Type I (N) can be used in all types of concrete.

SF Type I (N) used in shotcrete applications will increase the compaction and density of shotcrete, reducing rebound and permitting thicker layers per pass.

Advantages/Benefits

- Provides multi-dimensional reinforcement.
- Improves impact resistance of concrete.
- Enhances durability and toughness of concrete.
- Excellent finishability

Mixing

SF Type I steel fibers can be added directly to the mixing system during or after the batching of the ingredients and mixed at high speed for a minimum of five minutes. Additional mixing does not adversely affect the distribution or overall performance of SF Type I steel fibers. The addition of SF Type I steel fibers at the normal recommended dosage rate does not require any mix design or application changes. A water reducer or super-plasticizer is recommended in concrete products where improved workability and finishability are desired.



Storage and Shelf Life

NYCON products should be stored in dry warehouse. Protect product from the rain.

Packaging

- (50) 50 lb (22.7 kg) paper bags per pallet, 2500 lbs per pallet

Tooling & Finishing

Fiber reinforced concrete can be finished by most finishing techniques. SF Type I steel fiber does not affect the finishing characteristics of concrete. SF Type I steel fiber can be used in power/hand troweled concrete, colored and broom finished concrete.

SF Type I steel fiber can be pumped and placed using conventional equipment. Hand screeds can be used, but vibratory and laser screeds are recommended to provide added compaction and bury surface fibers.

KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

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