

# SF-B (TYPE V STEEL/ SYNTHETIC BLEND)

HIGH PERFORMANCE STEEL FIBER  
AND MULTIMESH® NYLON FIBER

SF-B fibers are Type V steel fibers pre-blended with MULTIMESH synthetic fibers. SF-B fibers provide a superior, high performance concrete.

*SF TYPE V steel fibers meet the requirements of ASTM A820.  
MULTIMESH fibers meet the requirements of ASTM C1116.*

## Product Specs

|                             |   |
|-----------------------------|---|
| <b>Filament Diameter</b>    | 0.046" (1.18 mm) Steel<br>and 8 Denier Nylon  |
| <b>Fiber Length</b>         | 1.5" (38 mm) and<br>0.75" (19 mm)             |
| <b>Specific Gravity</b>     | 7.8 and 1.1                                   |
| <b>Tensile Strength</b>     | 100 ksi (689 MPa) and<br>44 ksi (300 MPa)     |
| <b>Flexural Strength</b>    | 29,000 ksi (203 GPa)<br>and 400 ksi (300 MPa) |
| <b>Melting Point</b>        | 2760° F (1516° C<br>and 435° F (325° C)       |
| <b>Color</b>                | Gray and White                                |
| <b>Water Absorption</b>     | Nil and 3% by Weight                          |
| <b>Alkali Resistance</b>    | High  |
| <b>Corrosion Resistance</b> | High  |

## Product Description

SF TYPE V steel fibers are drawn, continuously deformed steel fibers that are blended with MULTIMESH nylon fibers at a ratio of 23 lb of Type V plus 1 lb of MULTIMESH.

## Advantages/Benefits

- Provides multi-dimensional reinforcement.
- Improves impact resistance of concrete.
- Enhances durability and toughness of concrete.
- Excellent finishability.
- Provides steel macro fiber and synthetic fiber in one.

## Mixing

SF-B steel/synthetic fiber blend 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-B. The addition of SF-B fiber blend 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

- (100) 24 lb (11 kg) paper bags per pallet, 2400 lbs per pallet



| APPLICATIONS / DOSES   | BENEFITS  |
|--|---|
| <b>Shrinkage Control</b><br>20-30 lbs per CY, 10-15 kg/m <sup>3</sup>                    | Length and count is a consideration. Impending or modifying crack growth is one of the benefits of a high fiber count. There are durability benefits provided at this dosage level.                   |
| <b>Light Traffic and/or Static Loading</b><br>30-40 lbs per CY, 15-20 kg/m <sup>3</sup>  | Steel fibers provide secondary shrinkage reinforcement and durability benefits. A degree of load carrying can be assigned to the steel fibers at the upper end of the dose range.                     |
| <b>Medium Dynamic and/or Static Loading</b><br>40-60 lbs per CY, 20-30 kg/m <sup>3</sup> | Steel fibers provide secondary shrinkage reinforcement, durability benefits and for slab-on-grade, a degree of load carrying capacity. Shotcrete and precast products also benefit from steel fibers. |
| <b>Heavy Dynamic and/or Static Loading</b><br>60-100 lbs per CY, 30-50 kg/m <sup>3</sup> | At this dosage, steel fibers translate into enhanced engineering properties. Applications include runways, taxi-ways, tunnel liners, slope stabilization and jointless floors.                        |
| <b>Special Applications</b><br>100-160 lbs per CY, 50-80 kg/m <sup>3</sup>               | These applications include ballistic blast walls and thin architectural panels.   |

## Tooling & Finishing

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

SF-B fiber blend 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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