

RF4000

PVA (POLYVINYL ALCOHOL),
LARGE DENIER MACRO, SUPERIOR BOND

PVA fibers are unique in their ability to create a fully-engaged molecular bond with mortar and concrete that is 300% > other fibers. RF4000 is a component of the NYCON TUFF-SLAB™ blend.

Meets the requirements of ASTM C-1116, Section 4.1.3 and AC-32 at 1.0 lb (0.45 kg) per CY.

Product Specs

Fineness	4,444 dtex ± 222
Filament Diameter	4,000 Denier (660 Microns)
Fiber Length	1.18" (30mm ± 1.5)
Specific Gravity	1.3
Tensile Strength	124 ksi (858 MPa ± 117) 6.6 cN/dtex ± 0.9
Elongation at Break	9.0% ± 1.5
Melting Point	Over 392° F (200° C)
Color	Yellow
Alkali Resistance	Excellent
Concrete Surface	Not Fuzzy
Corrosion Resistance	Excellent

Product Description

RF4000 fiber products are 4,000 denier, monofilament PVA fibers for use in fiber reinforced concrete, shotcrete, TUFF-SLAB™ and precast. PVA RF4000 is specifically designed for use in concrete products for the purpose of controlling plastic shrinkage, thermal cracking and improving abrasion resistance.

Application

PVA utilizes the mixing activity to disperse the fibers into the mix. PVA acts with a molecular bond in the concrete with a multi-dimensional fiber network. PVA does not affect curing process chemically.

PVA can be used in all types of concrete. RF4000 at 6 lb (2.7 kg) per CY is the macro fiber and RSC15 at 3 lbs (1.35 kg) per CY is the micro fiber used together in NYCON's TUFF-SLAB™ product.

Advantages/Benefits

- Molecular bond with the concrete
- Reduces the formation of plastic shrinkage cracking in concrete.
- Provides multi-dimensional reinforcement.
- Improves impact, shatter and abrasion resistance of concrete.
- Enhances durability and toughness of concrete.
- Excellent, "no fuzz" finishability

Mixing

RF4000 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 PVA. The addition of PVA at the normal or high 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

- (30) 1 lb (0.45 kg) paper beater bags per box, 600 lbs per pallet
- (30) 1 lb (0.45 kg) water soluble bags per box, 600 lbs per pallet
- (21) 22 lb (10 kg) paper bulk bags, 462 lbs per pallet

Tooling & Finishing

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

PVA 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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