



SILATEC MICROSILICA CONCRETE ADDITIVE

MANUFACTURER

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DESCRIPTION

SILATEC FIBER REINFORCED MICROSILICA CONCRETE ADMIXTURE is a prepackaged powdered additive containing microsilica, super plasticizer, fibers and cement. Microsilica reacts chemically with the calcium hydroxide in the cement paste to produce a calcium silicate hydrate gel which yields a substantially improved in place concrete.

GENERAL USES

Designed to be used as a ready mix additive, to obtain a less permeable, more durable, longer lasting concrete. Faster strength gain from the use of this product allows coating & loading times of one or two days; whereas, regular concrete does not gain comparable strengths until cured 28 days.

BENEFITS

- Prepackaged to eliminate jobsite mixing errors.
- Faster strength gains.
- Less down time.
- Very low porosity
- Better chemical resistance.
- Can be coated in 24-36 hours.

APPLICATION

Add three bags SILATEC FIBER REINFORCED MICROSILICA ADMIXTURE to the following typical 5000# PSI concrete mix design:
658# Portland cement Type I (7 bag mix design)
1300# Sand
1800# Coarse Aggregate
* Water * Deliver to site at a 1" slump
150# Silatec Fiber Reinforced Microsilica Concrete Additive (3 bags)
* CAUTION: Do not use any water reducers or super plasticizers in plant mix designs.
*It is highly recommended that ice and/or chilled water be used to extend set time*Typical Properties of aforementioned mix design:
Compressive Strengths*
(ASTM 109)
1 day 5000 PSI
7 days 7000 PSI
28 days 9000 PSI

*Depends on water to cement ratio
Other mix designs to provide enhanced properties are available.

BATCHING

Initial concrete from the batch plant should have a delivered slump of 1"- 2". Slow down drum rotation during additive addition. Mix at high speed for 10 minutes then discharge as soon as practical. Add CemTec SP LIQUID if additional slump is needed at a rate of 2 gallons per yard. SP liquid may also be added if the slump begins to decrease during placement, this decrease in slump is the indication that the concrete is beginning to set. The addition of SP LIQUID may buy enough time to finish discharging the load. At this point, adding water to the concrete has little effect on retarding the set.

PLACING

Place using conventional concrete placing techniques. A moisture barrier is recommended for most applications due to the quick cure times.

FINISHING

Use a fast track method of screeding, floating and finishing immediately after placing to minimize the possibility of surface cracks.

CURING

Wet cure immediately after finishing, following appropriate concrete curing techniques. Use of a curing compound is also recommended, if a coating will be applied later, check with the coating manufacturer for compatibility with the curing compound.

PRECAUTIONS

May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (Silicosis). Eliminate exposure to dust Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water, and consult a physician promptly. Avoid contact with skin where possible and wash exposed skin areas promptly with water. KEEP OUT OF REACH OF CHILDREN.