



FASTRAC 6k SCC CONCRETE

DESCRIPTION

FasTrac 6k SCC Concrete is a one-component, portland-cement, polymer-modified, corrosion inhibitor enhanced concrete mix containing factory blended coarse aggregates.

WHERE TO USE

- Full depth concrete repairs
- On grade, above grade, and below grade concrete Horizontal surfaces (e.g. for spall repairs on flat work, or as an overlay)
- Vertical and overhead surfaces when formed and poured, or formed and pumped with a concrete pump
- Structural repair material for parking facilities, industrial plants, walkways, bridges, tunnels, dams, abutments, floors and balconies
- Filler for voids and cavities
- Repair of substrates such as concrete, mortar, and masonry

FEATURES/BENEFITS

- Pre-packaged factory-blended formulation containing coarse aggregates
- Silica fume enhanced
- Polymer-modified
- Eliminates the need to extend material in the field, thus eliminating the risk of extending with reactive aggregate
- Compatible with the typical coefficient of thermal expansion of concrete
- Increased resistance to deicing salts
- Simple-to-use, labor-saving system
- Easily mixed with clean water
- Good freeze/thaw resistance Easily applied to a clean, sound and properly prepared substrate
- Maximum size aggregate included: typical 3/8 inch (10 mm)

YIELD

Approx. 49 cubic feet per 60-lb bag.

PACKAGING

60 lb bags

SHELF LIFE

12 mos. properly stored

STORAGE

Store and transport in clean, dry conditions

TECHNICAL INFORMATION

Compressive Strength	1 day	2,000 psi (13.8 MPa)	(ASTM C 39) 73° f (23° C) 50% R.H.
	7 days	5,500 PSI (37.9 MPa)	
	28 days	6,000 PSI (41.4 MPa)	
Flexural Strength	28 days	1000 psi (6.9 MPa)	(ASTM C 293) 73° F (23° C) 50% R.H.
Splitting Tensile Strength	28 days	1000 psi (6.9 MPa)	(ASTM C 496) 73° F (23° C) 50% R.H.
Slant Shear Strength	28 days	2,500 psi (17.2 MPa)	(ASTM C 882 modified)* 73° F (23° C), 50% R.H.
		* Mortar scrubbed into mechanically prepared, saturated surface dry (SSD) substrate.	
Shrinkage	28 days	< 0.05 %	(ASTM C 157) 73° F (23° C) 50% R.H.



FASTRAC 6k SCC CONCRETE

Rapid Chloride Permeability	28 days	< 650 Coloumbs	(ASTM C 1202, AASHTO T 277) 73° F (23° C), 50% R.H
-----------------------------	---------	----------------	--

APPLICATION INFORMATION

Mixing Ratio	5 to t.5 pints of clean water per bag		
Coverage	0.45 ft ³ per bag (Yield figures do not include allowance for surface profile and porosity or material waste)		
Layer Thickness	<u>Minimum</u> 1 inch (25 mm)	<u>Maximum in one lift *</u> 8 inches (203 mm)	
	* If repair requires multiple lifts, each lift should be applied as soon as the previous lift has developed enough initial strength to support it.		
Consistency	Initial Slump Slump at 30 minutes	25-30" (6.4-7.6 cm) > 15" inches (3.9cm)	(ASTM C 1611) 73° F (23° C), 50% R.H.
Product Temperature	65° - 75° F (18° - 24° C)		
Ambient Air Temperature	45° - 95° F (7° - 35° C)		
Substrate Temperature	45° - 95° F (7° - 35° C)		
Pot Life	Approximately 60 minutes		

HOW TO APPLY

Surface Preparation (See ICRI guidelines)

- Surfaces must be clean and sound. Remove all deteriorated concrete, dirt, dust, oil, grease, contaminants and other bond-inhibiting materials from the area to be repaired.
- Be sure the repair area is not less than 1 inch (25 mm) in depth.
- Preparation work should be done by high pressure water blasting, scabbling, or other appropriate mechanical means. Obtain an exposed aggregate surface with a minimum surface profile of ±1/8 inch (3 mm) [ICRI CSP-6 to CSP-7] on clean, sound concrete.
- To ensure optimum repair results, the effectiveness of decontamination and substrate preparation can be assessed by a Pull-Off test (i.e. a Tensile Adhesion test per ASTM C 1583).
- Saw cutting the perimeter edges of the repair area is recommended, preferably cut at a dovetail angle..
- Substrate should be saturated surface dry (SSD) with clean water prior to application. No standing water should remain during application.

CORROSION PROTECTION

Reinforcing Steel: Should be thoroughly prepared by mechanical cleaning to remove all traces of rust and scale. Where corrosion has occurred, the steel should be high-pressure washed with clean water after mechanical cleaning.

Mixing

- Pour 5 to 5.5 pints of clean water into a suitably sized mixing container or concrete mixer.
- Add the entire bag's contents of FasTrac 6k SCC Concrete to the container while continuously mixing with a low-speed rotary drill (400-600 rpm) and paddle or concrete mixer.
- Do not overwater as excess water will cause segregation.
- Mix to a uniform consistency, maximum 3 minutes. Thorough mixing and proper proportioning are necessary.



FASTRAC 6k SCC CONCRETE

APPLICATION

- Ensure substrate is properly prepared and saturated surface dry (SSD) before application.
- Ensure good intimate contact with the substrate is achieved either through a bonding agent or a scrub coat application, or other suitable means such as vibration of the material or pumping under pressure.

Form and Pour / Pump Installations:

- Vibrate form while pouring or pumping.
- Pump with a variable pressure concrete pump.
- Continue pumping until a 3 to 5 psi (20 - 34 Pa) increase in normal line pressure is evident then STOP pumping.
- Form should not deflect. Vent to be capped when steady flow is evident, and forms to be stripped when appropriate.

Horizontal Installations:

- After filling repair area, screed the material. Allow FasTrac 6k SCC Concrete to set to desired stiffness, then finish with wood or sponge float for a smooth surface or broom or burlap-drag for a rough finish.
- If a smoother finish is desired, a magnesium float should be used.

Refer to ACI 305 the "Guide to Hot Weather Concreting" or ACI 306 the "Guide to Cold Weather Concreting" when there is a need to place this product while either hot or cold temperatures prevail. Thinner placements will be more sensitive to the temperature conditions

CURING TREATMENT

- As per ACI recommendations for Portland-cement concrete, curing is required.
- Moist curing should commence immediately after finishing.
- Moist cure with wet burlap and polyethylene, a fine mist of water or a water-based, compatible* curing compound meeting ASTM C 309.
- Curing compounds adversely affect the adhesion of following layers of mortar, leveling mortar or protective coatings.
- Protect newly applied material from direct sunlight, wind, rain and frost.
- To prevent from freezing, cover with insulating material (e.g. curing blanket).

*Pretesting of curing compound for compatibility is recommended.

LIMITATIONS

- Do not use solvent-based curing compound.
- Do not use any other types of admixtures (e.g. plasticizers, accelerators, retarders, etc.) or add cement to FasTrac 6k SCC Concrete.
- FasTrac 6k SCC Concrete does not form a vapor barrier.
- As with all cement based materials, avoid contact with aluminum to prevent adverse chemical reaction and possible product failure. Insulate potential areas of contact by coating aluminum bars, rails, posts etc. with an appropriate epoxy.
- Elevated temperatures will decrease working time and slump.
- Rate of strength gain will be reduced at colder temperatures. On site testing is recommended.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

Clean Up

Clean tools and equipment with clean water immediately after use. Cured material must be removed mechanically.

Health and Safety

Make certain the most current versions of product data sheet and SDS are being used

Risks

Product contains portland cement and sand (crystalline silica); it can cause skin and eye irritation. Ingestion or inhalation of dust may cause tract irritation. This contains free respirable quartz, which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.



FASTRAC 6k SCC CONCRETE

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Prevent contact with skin and eyes. Prevent inhalation of dust. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or is used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes, and seek medical attention. In case of skin contact, wash affected areas with soap and water. If the irritation persists, seek medical attention. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If the discomfort persists, breathing difficulty occurs, or if swallowed seek medical attention. Refer to Safety Data Sheet (SDS) for further information.

Proposition 65

This product contains material listed by California as known to cause cancer, birth defects, or other reproductive harm.

VOC Content

0 lbs/gal or 0 g/L

Limited Warranty Notice

Every reasonable effort is made to apply exacting standards both in the manufacture of "FasTrac 6k SCC Concrete" product and in the information, which we issue concerning these products and their use. We warrant our products to be good quality and will replace or, at our election, refund the purchase price of any products proved defective. Satisfactory results depend not only on quality products, but also upon many factors beyond our control. Therefore, except for such replacement or refund, Western Material and Design, LLC makes no warranty or guarantee, express or implied, including warranties of fitness for a particular purpose or merchantability, respecting its products, and Western Material and Design, LLC shall have no other liability with respect thereto. Any claim regarding product defect must be received in writing within one year from the date of shipment. No claim will be considered without such written notice or after the specified time interval. User shall determine the suitability of the products for the intended use and assume all risks and liability in connection therewith. Any authorized change in the printed recommendations concerning the use of our products must bear the signature of the Western Material and Design, LLC technical manager.