

SPECCRETE PLUS SCC

Self-consolidating, shrinkage compensating concrete with corrosion inhibitor & fibers

DESCRIPTION

SPECCRETE PLUS SCC is a single component, self consolidating, shrinkage compensated polymer modified concrete with integral corrosion inhibitor and fibers specially designed for deep vertical or horizontal repairs.

SPECCRETE PLUS SCC is a cost-effective, air entrained, durable concrete repair which can be pumped into hard to access areas such as industrial plants, bridges, parking facilities, balconies, etc...

SPECCRETE PLUS SCC offers superior durability, performance and ease of application in industrial, commercial and infrastructure applications.

FEATURES/BENEFITS

- Pre-extended, just add water.
- New technology for easy placement and pumpability
- Long working time (20-30 minutes)
- High Early Strength Repair (complies ASTM C 928)
- Easy to apply flowable consistency (28" spread)
- Natural concrete-gray color
- Formulated for deep horizontal and form and pour applications
- Polymer modified/integral corrosion inhibitor
- Full Depth placement up to 12"

APPLICATION

Surface Preparation: The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance or other surface contaminants. For maximum durability, saw cut the perimeter of the repair 1/8" deeper than the depth of the repair, creating a notched, reinforced edge. Mechanically abrade the surface by an engineered approved method in accordance with ICRI 310.2 Guideline to a minimum CSP 5. **All concrete surfaces to be repaired must be in a saturated-surface-damp (SSD) condition with no standing water on the surface.**

Priming/Scrub Coat: Thoroughly clean all exposed steel reinforcing of rust. **Prepared concrete must be SSD** and primed with a spray or brush coat of **SpecPrep SB** and the repair mortar applied wet on wet or up to the recommended open time (see **SpecPrep SB** technical data sheet).

As an alternative, apply a scrub coat of the properly mixed repair mortar by scrubbing a thin layer into the pre-dampened substrate with a stiff brush. Place the repair mortar immediately before the bond coat dries.

Mix approximately 2.5 quarts (depending on desired consistency) of clean water per 50 pound bag of material. . Mix single units with a low speed drill. Add recommended amount of clean water into the container, followed by slowly adding the SPECCRETE PLUS SCC powder. Mix 2-3 minutes. Mix only what can be applied within the setting period. SPECCRETE PLUS SCC can be applied in full depth applications.

APPLICATION (con't)

For large applications or for mixing multiple bags use a mortar mixer. Add approx 80% of the water to the mixer 1st, then add the required number of SPECCRETE PLUS SCC bags. Then add the remaining water and mix 3 minutes to the desired consistency

Placement

Trowel, or screed SPECCRETE PLUS SCC firmly into the prepared area, ensuring intimate contact with the bonding surface. Finish SPECCRETE PLUS SCC level with the surrounding concrete and allow to take an initial set. After the initial set, when SPECCRETE PLUS SCC is surface hard, finish by hand trowelling.

Finishing/Curing

Finish the repair material to the desired texture to best match the surrounding concrete. Do not add additional water to the surface during finishing. Lightly mist SpecFilm as a finishing aid on this and any other polymer modified mortars to assist in finishing. SPECCRETE PLUS SCC is self-curing under most conditions. In severe drying conditions, use an ASTM C-309 compliant, water based SpecChem curing compound.

TYPICAL TEST DATA

Set Time at 70°F (ASTM C-191)	
Initial Set	35 minutes
Final Set	45 minutes
Compressive Strength (ASTM C-109)	
3 hours	3400 psi
1 day	5850 psi
7 days	7750 psi
28 days	9475 psi
Bond Strength (ASTM C 882)	1975 psi (28 days)
Split Tensile (ASTM C 496)	850 psi (28 days)
Flexural Strength (AASHTO T97)	700 psi
Air Content	6%
Chloride Permeability (ASTM C 1202)	1150 coulombs
Shrinkage @ 28 days (ASTM C 157)	<.05%
Dynamic Modulus Freeze-Thaw (ASTM T666)	99%



1511 Baltimore Ave, Suite 600
Kansas City, MO 64108

www.specchem.com 816.968.5600

CLEAN UP

Tools and equipment may be cleaned with water before SPEC-CRETE PLUS SCC hardens.

PACKAGING/YIELD

Available in 50 lb, and 3000lb super sacks
50 lb bag yields approx. .42 cu-ft (mixed with 2.5 quarts)

SHELF LIFE

Shelf life of unopened bags stored in a dry facility is 12 months. Excessive temperature differential and/or high humidity can shorten the shelf life expectancy. Store in a cool, dry area away from direct sunlight.

LIMITATIONS/PRECAUTIONS

Minimum thickness for horizontal repairs using SPEC-CRETE PLUS SCC is 1/2". Do not retemper after initial mixing. **Do not add other cements or additives to this product.** SPEC-CRETE PLUS SCC is a fast setting product, so mixing equipment should be cleaned with water as soon as possible.

Do not allow repairs to freeze until the material has reached a minimum of 1000 psi compressive strength.

In adverse temperatures, follow ACI recommendations for hot/cold weather concreting practices.

Use only potable water for mixing.

Minimum surface and ambient temperature of 45°F and rising is required at the time of application.

For optimum results, condition material to between 65°F and 85°F.

Caution: Contains Portland Cement and sand. Cement will cause irritation. Avoid contact. A dust respirator, safety goggles, and rubber gloves are recommended. Avoid prolonged contact with clothing. In case of contact with eyes, immediately flush with water for at least 15 minutes. Get prompt medical attention. Do not wear contact lenses when working with this product. DO NOT take internally. Keep out of reach of children.

Avoid hazards by following all precautions found in the Safety Data Sheet (SDS), product labels, and technical literature. Please read this information prior to using the product.

WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

SpecChem offers this product for sale subject to and limited by the warranty which may only be varied by written agreement of a duly authorized corporate officer of SpecChem. No other representative of or for SpecChem is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

SpecChem warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, SpecChem will replace the defective product with new product without charge to the purchaser. SpecChem makes no other warranty, either expressed or implied, concerning this product. There is no warranty of merchantability. NO CLAIM OF ANY KIND SHALL BE GREATER THAN THE PURCHASE PRICE OF THE PRODUCT IN RESPECT OF WHICH DAMAGES ARE CLAIMED.

INHERENT RISK

Purchaser assumes all risk associated with the use or application of the product.



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