

FD HITEMP CONCRETE SCC

Description- FDHT is a one component, Calcium aluminate Cement concrete containing heat resistant aggregate, polymers and reinforcing fibers for making full depth repairs of all types of concrete structures. Will withstand temperatures up to 1800°.

Uses- Full depth repairs on grade and below grade concrete. Minimum thickness of 1 inch to a maximum thickness of 8 inches (thicker applications can be achieved through applying in lifts.) Structural repair for horizontal and form and pour repairs. Excellent for balcony, parking lot, parking deck, pedestals, curbs, equipment bases, re-sloping floors and industrial plant repairs. Also for use in refractories, steel mills, etc.

Benefits-

- Pre-packaged to eliminate jobsite mixing.
- Contains coarse aggregate, no need to extend in the field.
- Contains a corrosion inhibitor Very low porosity for better chemical resistance
- SCC Spread 25-30 inches

Surface Preparation- All surfaces must be clean and free of dirt, dust, paint, sealers, coatings, loose material, adhesives, curing compounds or any material that will inhibit patching material from coming in contact with the concrete pores. Removal of any anti adherents or loose materials must be accomplished mechanically. Steel reinforcement: Mechanically clean all surfaces to remove rust and corrosion (repair rebar as needed). Ensure enough concrete is removed to produce a 1 inch minimum repair.

Priming- In addition to a saturated, surface dry (SSD) substrate, the use of an epoxy or latex primer should be considered.

Mixing- Place 1 gallon of water into mixing container, followed by 1 65lb. bag of FDS. Mechanically mix water and material to uniform consistency. Adjust water as needed up to 1.25 gal. Material may be pumped or poured into forms.

For Best Results- In cold weather use warm (not hot) water for mixing. Dampen the surface of the work area before applying the new material. For a rough or non-slip surface, finish with a wooden float or broom. For a smooth finish, use a steel trowel. Avoid over troweling. For proper curing, keep moist for 3 days with an occasional fine spraying with water or cover with wet burlap or plastic. The use of a curing compound conforming to ASTM C-309 will also work; however curing compounds will need to be mechanically removed prior to coating. (Check with the coating manufacturer.) Hot weather: (above 80° F) will cause faster setting; mix with cold water or ice to slow setting time.

Precautions- Contains Portland cement; avoid eye contact or prolonged contact with skin. Wash thoroughly after handling. In case of eye contact, flush with plenty of water for at least 15 minutes. Consult a physician immediately. Keep out of reach of children. Contains free silica - DO NOT breathe dust. May cause delayed lung injury. Follow OSHA safety and health standards for crystalline silica (quartz).

Packaging- 65 multi-walled paper bags. 3000 lb. super sacks.

Coverage- approximately 0.5 cu. Ft. per bag

Technical data-

- ASTM C109
 - o 1 day- 2100psi
 - o 7 day- 3500 psi
 - o 28 day- 5500 psi
- ASTM C78
 - o 28 days- 700psi
- ASTM C496
 - o 28 days- 760psi

Chloride ion permeability

- ASTM C1202
 - o 28 days- 1000 coulombs (very low)

Bond Strength

- ASTM C882 (modified)
 - o 28 days- 1600psi

Set Time

Gillmore Needle	Initial Set	50 min.	@75° F
	Final Set	60 min.	@ 75° F