



## CE710 HPC

### HYBRID POLYMER CONCRETE

**ITEM NUMBER** CE710

#### **DESCRIPTION**

CE710 HPC is a three-component, 100% solids, multi-purpose, high strength, and non-shrink epoxy patching mortar. The system combines a high-quality epoxy resin and curing agent with an engineered blend of graded aggregates. Specifically engineered to provide superior patching while demonstrating similar physical characteristics to the concrete substrate.

#### **WHERE TO USE**

Used for patching concrete on bridge decks, parking decks, floors, columns and beams. Can also be used for repairing spalled areas or for general plant maintenance.

#### **ADVANTAGES**

- Chemically bonds to concrete
- Low Modulus
- High tensile, compressive & early strengths
- Withstand freeze/thaw cycles
- Semi-rigid for shock absorption
- Compatible with epoxy overlays
- Provides textured bonding profile
- Color: Grey

#### **PACKAGING**

- 0.5 cu. ft. / .014 cu. m unit: ½ gallon Part A, ½ gallon Part B, 50 lbs. of Part C
- 1.0 cu. ft. / .028 cu. m unit: 1-gallon Part A, 1-gallon Part B, (2) 50 lb. bags of Part C

#### **TECHNICAL DATA**

Shelf Life:	2 years in original unopened container.
Storage Conditions:	40°F – 95°F (5°C – 35°C).
Condition material to:	65°F – 85°F (18°C – 29°C) before using.
<b>Mortar Properties</b>	
Compressive Strength (ASTM C579)	
3-hour cure:	1,400 psi (9.65 MPa)
24-hour cure:	4,800 psi (33.10 MPa)
Compressive Stress (Tex-618-J)	4,000 psi (27.6 MPa)
Bond Strength (ASTM C1583/ACI 503R)	300 psi (2.0 MPa) 100% concrete failure
Wet Bond Strength (Tex-618-J)	450 psi (3.1 MPa)
Shrinkage on Cure (ASTM D2566)	Negligible
Resilience (Tex-618-J)	95%
Thermal Compatibility (ASTM C884)	Pass
Water Absorption (ASTM D570)	0.2% (24 hr.)
Chloride Ion Permeability (AASHTO T277)	0.0 coulomb

#### **APPLICATION**

##### **Surface Preparation:**

- Saw cut approx. ½ in / .2 cm deep around perimeter of area to be patched and remove all deteriorated and unsound concrete with chipping hammers not to exceed 30#.
- Thoroughly clean repair area and exposed reinforcing steel by sandblasting to white metal finish. Vacuum all dust and loose particles from area.

##### **Mixing:**

- Mix complete units only
- Pre-mix each liquid component thoroughly



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- Pour components A and B into pail and mix thoroughly for 3 minutes with a Jiffy type mixer on low-speed (300 rpm) until material is of uniform consistency. Keep mixer at bottom of pail to avoid introducing air.
- Slowly add component C (aggregate) to mixed liquid components. Mix thoroughly until all aggregate is wetted out.

### **LIMITATIONS**

- Shelf Life – 2 years in original unopened container
- Storage Conditions – Store at 40° - 95°F (5° - 35°C). Condition material to 65° - 85°F (18° - 29°C) before using
- Gel Time – (60g mass) : Neat – 30 min at 73° ±2°F (23°C)
- Minimum substrate temperature is 50°F (5°C)
- Minimum age of hardened concrete for bonding should be 5 – 7 days.

### **CLEAN UP**

Uncured material can be removed with Natural Clean or other approved solvent. Cured material can only be removed mechanically. Collect with absorbent material. Flush area with water. Dispose of in accordance with local, state and federal regulations.

### **LIMITED WARRANTY**

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