



EM CBC IV

EPOXY ADHESIVE / MORTAR

TYPE: EM CBC IV is a solvent free, 2 component thermosetting, moisture insensitive high modulus epoxy system.

Florida DOT type A&B, Georgia DOT Type II, Louisiana DOT Type 1B

DESCRIPTION: Pilgrim EM CBC IV is a versatile system with excellent physical properties that make its consideration a requisite in many situations involving new construction or repair of concrete. EM CBC IV has a 35 year record of excellent performance. Used neat, it is an outstanding adhesive... mix it with an aggregate and you have a trowelable, no-shrink mortar for patching & topping, for splicing concrete pilings, for leveling heavy equipment and for anchoring bolts or re-enforcing steel. Use as a bonding adhesive between plastic concrete and hardened concrete.

ADVANTAGES:

- Convenient one and two gallon pre-proportioned units.
- Adheres to most materials used in construction.
- No by-products are generated during cure.
- Curing shrinkage is low.
- Long term dimensional stability is excellent.
- High tensile and compressive strength.
- Sure-cure in the presence of moisture.
- Resistant to the action of weathering, moisture, acids, alkalis and most other environmental factors.

PROPERTIES OF CURED STATE:

Ultimate Tensile Strength	8900 psi
Tensile Elongation	2.5%
Ultimate Flexural Strength	16,000 psi
Flexural Modulus	0.48 x 10 ⁶ psi
Compressive Yield Strength	13,200 psi
Hardness	86 shore D
Heat distortion Temp.	138°F
Water Absorption	0.17%

HANDLING PROPERTIES:

Original viscosity	@77°F (cps)	4000
Pot Life	150g@77°F (min)	40
Max. exotherm	@77°F	115

HIGH STRENGTH: Compressive strength of **EM CBC IV** develops to 7200 psi after 24 hrs at 25° C with an approximate 2 to 1 ratio of aggregate to epoxy.

SURFACE PREPARATION: The success of any adhesive application is directly proportional to the completeness of the substrate preparation and the care your crews put into the application. Remove rust, laitance, grease, curing compounds, impregnations, waxes, foreign particles, and disintegrated materials from surfaces. Approved mechanical methods are recommended. Sandblast steel to appropriate finish.

PROPORTIONING: Preproportioned one gallon & two gallon kits are standard. Custom packaging available. Mix by volume - 2 1/2 parts A to 1 Part B.

To bond fresh concrete to hardened concrete - Apply by brush, roller, broom or spray. Place fresh concrete while CBC IV is still tacky. If coating cures to the point where it is no longer tacky, recoat with additional CBC IV and proceed.

MIXING: Proportion components into a clean pail and mix for approximately 3 minutes with a jiffy mixer (or equivalent) on a low-speed (400-600 rpm) drill until color is a uniform blend. **Pilgrim EM CBC IV** is designed for application both neat and as mortars. Proportion of aggregate to mixed epoxy varies with proposed end use. A 1 1/2 to 2 parts aggregate to 1 part mixed **EM CBC IV** is a general recommendation.

CAUTION-- Aggregate must be oven dried to avoid encapsulation of moisture.

CURE SCHEDULE: 7 days @77°F to achieve max. physical properties.

LIMITATIONS: Do not thin **EM CBC IV** - Solvents will prevent proper cure. Exposure to temperatures (after cure) above 200°F dry and 130° wet not recommended. Substrate temperature must not be below 32°F during application to avoid possibilities of ice crystals inhibiting bond.

CAUTION: Pot life is dependent upon material temperature and quantity mixed. The greater the mass the shorter the pot life.

HANDLING PRECAUTIONS: May produce skin irritations. Skin contact should be avoided by the use of protective clothing such as rubber gloves and eye protection. Consult Material Safety Data Sheets.

CLEAN-UP: **Pilgrim #5 CLEANER** is formulated to remove uncured material from tools and equipment. Do not allow material to harden on tools.

1 gal. unit neat (no aggregate) will cover approximately 100 sq. ft.
1 gal unit of EM CBC IV with 2 gallons of aggregate yields 462 cu. inches of grout.

EM CBC IV COVERAGE	
Thickness (1000 mils = 1in.)	Coverage / gallon w/2 volumes aggregate
1/4" = 250 mils	12.8 sq. ft.
3/16" = 188 mils	17 sq. ft.
1/8" = 125 mils	25.6 sq. ft.
100 mils	32.0 sq. ft.