

CP-100C **Carbon Filled Vinyl Ester Mortar**

PRODUCT DESCRIPTION

Blome CP-100C is a three-component, carbon-filled, vinyl ester mortar used for the installation of chemical resistant brick and tile. CP-100C is available with a standard resin or HMW resin, depending on service conditions. CP-100C is designed for bonding carbon brick, acid brick and tile in tank, floor and trench applications. CP-100C with HMW Resin is well-suited service in strong acids, including HF, strong oxidizers, solvents and other corrosive chemicals. CP-100C (with standard resin) is especially suited for use in applications requiring resistance to strong hot caustic service. The material exhibits excellent bond strength to carbon brick, acid brick and tile and is designed for applications requiring outstanding physical properties.

TYPICAL USES

Blome CP-100C is suitable for bonding acid brick, tile and carbon brick in a variety of applications including:

- Nitric / HF pickling operations
- Chromic acid plating applications
- Acid brick and carbon brick tank linings
- Acid brick and tile flooring
- Acid brick lined trenches and sumps
- Alkaline/Caustic service (use standard resin)

HANDLING CHARACTERISTICS

Blome CP-100C offers excellent troweling and handling characteristics, with sufficient body and thixotropy to butter brick in place and secure them from slipping or sliding while the mortar cures. CP-100C cures rapidly and provides an excellent bond to brick and tile. This unique formulation produces excellent results while installing brick in horizontal, vertical and even overhead areas.

TYPICAL PROPERTIES

WET

Components:	Three (3) – powder, resin, catalyst
Wet mortar density:	110 lbs./ft ³
Mixed consistency:	Creamy mortar
Pot life	50°F 30-40 minutes 77°F 20-30 minutes
Initial set:	50°F 6 - 8 hours 77°F 2 - 4 hours
Final cure	50°F 9 days minimum 77°F 7 days minimum

CURED

Blome CP-100C Complies with ASTM C-395	
Absorption (ASTM C-413)	less than 0.4%
Bond Strength to brick (ASTM C-321)	>250 psi
Coefficient of Thermal Expansion (ASTM C-531)	12 - 14 x 10 ⁻⁶ in/in/°F
Color	black
Compressive Strength (ASTM C-579)	14000 psi
Temperature limit	400°F (dry heat)
Tensile Strength (ASTM C-307)	2,750 psi

PACKAGING & STORAGE

Blome CP-100C is supplied as a three-component product, with a filler powder and a resin. 410C Powder (Part B) is packaged in 50 lb. bags and CP-100C Resin (Part A) is packaged in 5-gallon (45 lb.) pails and VE Cure is supplied in 15 fl. oz bottles (addition rate of 3 oz per gallon of resin). The use ratio of Powder to Resin is approximately 2 to 1 by weight.

Unit Size	145 lbs.
Powder	100 lbs. (2 x 50 lb. Bags)
Resin	45 lbs. (1 x 45 lb. Pails)
Catalyst	15 fl. oz

Shelf life for CP-100C standard and HMW resin is three (3) months. 410C Powder and VE Catalyst have a shelf life of 12 months. Keep CP-100C components tightly sealed in original containers until ready for use. Store components in a cool, dry place, out of direct sunlight, and on pallets at temperatures between 50°F – 80°F. Protect bags of CP-100C Powder from water and weather while in storage and on job site.

ESTIMATED COVERAGE

Please refer to Blome Brick Mortar Usage Chart in Chemical Proofing Section of Blome International Catalog. This chart gives estimated coverage rates and does not allow for waste, joint variations or other job site contingencies.

BID SPECIFICATION GUIDE

Use Blome CP-100C Carbon Filled Vinyl Ester Mortar as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-100C must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-100C components, brick, tile and substrate temperatures must also be maintained in this range. Blome Vinyl Ester Low Temperature Accelerator is available for use when temperatures drop below 50°F. Consult Blome for application and use details. Installations of CP-100C should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Brick and tile to be installed with Blome CP-100C must be clean, dry and oil free. If brick or tile has been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-100C. Liquid or Sheet applied membrane surfaces should be clean and dry prior to installation of Blome CP-100C bed joint. These surfaces should be swept clean and be free of dirt, dust, water or other job site contaminants.

SAFETY PRECAUTIONS

Blome CP-100C Powder, Resin, VE Cure and mixes of them present various health hazards if handled improperly. Wear respirator suitable for carbon powders, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. Organic vapor cartridge respirators may be necessary in poorly ventilated areas. After working with Blome CP-100C, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-100C is best mixed with a KOL, pail type mixer or in a pail using a drill motor driven paddle blade. This mixing equipment must be clean, dry and free of any contaminants including Portland Cement, other mortars or resins. When mixed, CP-100C is applied to brick and substrate with a pointing or margin trowel.

MIXING AND APPLICATION

Add 3 oz. VE Cure per gallon of CP-100C Resin and mix thoroughly for 1-2 minutes. Add approximately 2 parts by weight CP-100C Powder to 1.0 part by weight catalyzed CP-100C Resin. Mix components using a clean, dry mechanical mixer or trowel for a minimum of 2-3 minutes, making sure there are no lumps or dry pockets of powder. The amount of powder may be adjusted, up or down, to achieve desired consistency for specific uses. More powder will produce a thicker consistency for vertical or overhead applications. Using a clean, dry pointing or margin trowel, butter brick or tile evenly on 4 or 5 sides. Slide buttered brick or tile into place, squeezing excess mortar from joints and striking off. Mortar joint thickness should be 1/8".

CLEANUP

All tools, mixing equipment, gloves and application equipment should be cleaned up immediately using a citrus or biodegradable cleanser, with hot water, while material is still wet. If material begins to cure, solvent based cleaners will be required for removal.

WARRANTY

We warrant that our goods will conform to the description contained in the order and that we have good title to all goods sold. Our material data sheets and other literature are to be considered accurate and reliable, but are used as guides only. WE GIVE NO WARRANTY OR GUARANTEE, WHETHER OF MERCHANTABILITY OR FITNESS OF PURPOSE OR OTHERWISE, AND WE ASSUME NO LIABILITY IN CONNECTION THEREWITH. We are happy to give suggestions for applications; however, the user assumes all risks and liabilities in connection therewith regardless of any suggestion, we may give. We assume no liability for consequential or incidental damages. Our liability, in law and equity, shall be expressly limited to the replacement of non-conforming goods at our factory, or at our sole option, to repayment of the purchase price of the non-conforming goods.

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