



CP-100 Vinyl Ester Resin Mortar

PRODUCT DESCRIPTION

Blome CP-100 is a two-component, silica filled vinyl ester mortar used for the installation of chemical resistant brick and tile. CP-100 is designed for bonding acid brick and tile in tank, floor and trench applications requiring resistance to acids, bleaches, alkalis, solvents and other corrosive chemicals. CP-100 is especially suited for use in applications requiring resistance to strong oxidizers such as chlorine, chlorine dioxide, hypochlorite bleaches and oxidizing acids such as nitric and chromic. The material exhibits excellent bond strength to acid brick and tile and is well suited for applications requiring high physical properties.

Blome CP-100HMW High Molecular Weight, Vinyl Ester Mortar is also available for enhanced performance at higher temperatures and in strong acid or solvent service. CP-100HMW withstands temperature excursions up to 250°F, resists higher concentrations of acids and withstands exposure to many aggressive solvents. Specify when ordering.

TYPICAL USES

Blome CP-100 is suitable for bonding chemical and abrasion resistant masonry units in a variety of applications including:

- Chlorine dioxide generation units
- Chlorination towers and tubes
- Tuckpointing tile tanks and chests
- Acid brick and tile flooring
- Acid brick lined trenches and sumps

HANDLING CHARACTERISTICS

Blome CP-100 offers excellent trowelling 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-100 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:	Two (2) - powder & resin
Wet mortar density:	123 lbs./ft ³
Mixed consistency:	Creamy mortar
Pot life	50°F 50 minutes
	77°F 30 minutes
Initial set:	50°F 8 - 10 hours
	77°F 2 - 4 hours
Final cure	50°F 9 days minimum
	77°F 7 days minimum

CURED

Blome CP-100 complies with ASTM C-395	
Absorption (ASTM C-413)	less than 0.2%
Bond Strength to brick (ASTM C-321)	200 psi
Coefficient of Thermal Expansion (ASTM C-531)	12 - 14 x 10 ⁻⁶ in/in/°F
Color	off white
Compressive Strength (ASTM C-579)	11,000 psi
Temperature limit	CP-100 210°F CP-100HMW 250°F
Tensile Strength (ASTM C-307)	2,200 psi

PACKAGING & STORAGE

Blome CP-100 is supplied as a two component product, with a filler powder and a resin. CP-100 Powder (Part A) is packaged in 60 lb. bags and CP-100 Resin (Part B) is packaged in 40 lb. pails or 450 lb. drums. The use ratio of Powder to Resin is 3.0 pbw to 1.0 pbw.

Unit Size	160 lbs.
Powder	120 lbs. (2 x 60 lb. Bags)
Resin	40 lbs. (1 x 40 lb. Pails)

Shelf life for CP-100 powder and resin is three (3) months. Keep CP-100 Powder and Resin tightly sealed in original containers until ready for use. Store Powder and Resin in a cool, dry place, out of direct sunlight, and on pallets at temperatures between 50°F – 80°F. Protect bags of CP-100 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-100 Vinyl Ester Resin Mortar as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-100 must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-100 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-100 should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Brick and tile to be installed with Blome CP-100 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-100. Liquid or Sheet applied membrane surfaces should be clean and dry prior to installation of Blome CP-100 bed joint. These surfaces should be swept clean and be free of dirt, dust, water or other jobsite contaminants.

SAFETY PRECAUTIONS

Blome CP-100 Powder, Resin and mixes of them present various health hazards if handled improperly. CP-100 Powder contains silica and peroxide powders and CP-100 Resin is flammable and will cause eye injury and irritate skin. Wear respirator suitable for silica and peroxide powders, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. After working with Blome CP-100, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-100 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-100 is applied to brick and substrate with a pointing or margin trowel.

MIXING AND APPLICATION

Add approximately 3.0 parts by weight CP-100 Powder to 1.0 part by weight CP-100 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" to 1/4"

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 MERCHANT ABILITY 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.