

CP-105AR
Vinyl Ester Mortar

PRODUCT DESCRIPTION

Blome CP-105AR is a two-component vinyl ester mortar that utilizes unique fillers for enhanced performance in abrasive slurries and alkaline environments. Blome CP-105 AR offers high bond strength to brick and tile combined with excellent resistance to oxidizing acids and alkalis. The materials' inherent bond strength also provides an exceptionally high bond of resin to aggregate resulting in outstanding resistance to wear and erosion in applications exposed to both harsh chemicals and constant flow of pulp, ore slurries, limestone slurries, or other abrasive media.

TYPICAL USES

Blome CP-105 AR is suitable for bonding chemically resistant brick and tile in a variety of applications including:
 Bleach Towers and Process Vessels
 Paper Machine Tile Tanks
 Slurry Tanks and Piping
 Ore Leaching Tanks
 Tuckpointing deteriorated mortar joints

HANDLING CHARACTERISTICS

Blome CP-105 AR is smooth spreading and offers preferred troweling & handling properties. CP-105 AR will hold brick and tile and secure them from slipping while the mortar cures. CP-105 AR cures rapidly and provides an excellent bond to acid brick and glazed tile. This unique material helps to produce quality results and high production rates.

TYPICAL PROPERTIES

WET

Components:	Two (2) - powder & resin
Wet mortar density:	165 lbs./ft ³
Mixed consistency:	Creamy mortar
Pot life:	50°F 25-30 minutes 77°F 15-18 minutes
Initial set:	50°F 6 - 8 hours 77°F 1 - 2 hours
Final cure	50°F 9 days minimum 77°F 7 days minimum

CURED

Blome CP-105 AR complies with ASTM C-395	
Absorption (ASTM C-413)	less than 0.4%
Bond Strength to brick	>200 psi
Color	Off white
Compressive Strength (ASTM C-579)	12,500 psi
Temperature limit	Continuous: 180°F In suitable chemical service Excursions: 210°F vapor 250°F dry
Tensile Strength (ASTM C-307)	2,400 psi

PACKAGING & STORAGE

Blome CP-105 AR is supplied as a two-component product, with a filler powder and a resin. CP-105 AR Powder (Part A) is packaged in 70 lb. Bags and CP-105 Resin (Part B) is packaged in 40 lb. pails or 450 lb. Drums. The use ratio of Powder to Resin is 4.0 pbw to 1.0 pbw for installing glazed tile. Use a mix ratio of 3.5 pbw to 1.0 pbw for acid brick installations requiring tighter joints or for tuckpointing.

Unit Size	180 lbs.
Powder	140 lbs. (2 x 70 lb. bags)
Resin	40 lbs. (1 x 40 lb. pails)

Shelf life for CP-105 AR components is up to nine (9) months if stored below 70°F at 50% relative humidity. Keep CP-105 AR components tightly sealed in original containers until ready for use. Store components in a cool dry place out of direct sunlight on pallets at temperatures between 50°F - 80°F. For maximum shelf life, protect bags of Powder from water, humidity and weather, and keep Resin out of direct sunlight while in storage and on job site.

ESTIMATED COVERAGE

Please refer to Blome Brick Mortar Usage Chart in Chemical Proofing Section of Blome Catalog. This chart has estimated usage rates and does not allow for waste, joint variations or other variables.

BID SPECIFICATION GUIDE

Use Blome CP-105 AR Vinyl Ester Mortar as produced by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-105 AR must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-105 AR 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-105 AR should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Brick or tile to be installed with Blome CP-105 AR must be clean, dry and oil free. If brick or tile have been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-105 AR. If applied over Liquid or Sheet membranes, these surfaces should be clean and dry prior to installation of Blome CP-105 AR bed joint. These surfaces should be swept clean and be free of dirt, dust, water or other job site contaminants.

SAFETY PRECAUTIONS

Blome CP-105 AR Powder, Resin and mixes of them present various health hazards if handled improperly. Refer to Material Safety Data Sheet before working with this product. CP-105 AR Powder contains silica and peroxide powders and CP-105 AR 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-105 AR, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-105 AR 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-105 AR is applied to tile or brick with a pointing or margin trowel.

MIXING AND APPLICATION

Add approximately 3.5 - 4.0 parts by weight CP-105 AR Powder to 1.0 part by weight CP-105 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 tile evenly on 2 or 3 sides. Slide buttered 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.

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