

CP-96 VTG

Vitrified Tile Grade Novolac Epoxy Mortar / Setting Bed

PRODUCT DESCRIPTION

Blome CP-96 VTG (vitrified tile grade) is a three component, novolac epoxy mortar/setting bed used for the installation of VERSI-LINE™ Vitrified Ceramic Systems. CP-96 VTG is designed for bonding fully-vitrified ceramic tiles, vitrified ceramic pavers, clinker tiles and brick in tank, floor and trench applications requiring resistance to strong acids, bleaches, alkalis, solvents and other corrosive chemicals. CP-96 VTG is especially suited for use in applications requiring resistance to strong mineral acids including 98% sulfuric, 37% hydrochloric, as well as resistance to caustic solutions, hypochlorite bleaches and dilute oxidizing acids such as 30% nitric and 10% chromic.

Blome CP-96 VTG is formulated specifically for sonic vibration and direct bond embedment in the Food, Beverage, and Pharmaceutical manufacturing areas where strong chemical service is expected. The material exhibits excellent bond strength to concrete, VERSI-LINE™ Vitrified Ceramic tile and paver systems and is well suited for applications requiring high physical properties.

TYPICAL USES

Blome CP-96 VTG is suitable for bonding chemical and abrasion resistant masonry units in a variety of applications including:

- VERSI-LINE™ Vitrified Ceramic Systems flooring
- VERSI-LINE™ Vitrified Ceramic lined trenches and sumps
- Abrasion resistant tile linings in harsh chemical service
- Direct bond dairy brick and quarry tile flooring

HANDLING CHARACTERISTICS

Blome CP-96 VTG offers excellent trowelling and handling characteristics, with sufficient body and thixotropy for sonic vibration embedment, or to butter vitrified ceramic tile and paver systems in place and secure them from slipping or sliding while the mortar cures. CP-96 VTG cures rapidly and provides an excellent bond to VERSI-LINE™ Vitrified Ceramic tile and paver units, acid brick and quarry tile. This unique formulation produces excellent results while installing VERSI-LINE™ Vitrified Ceramic tile and paver systems in horizontal, vertical and even overhead areas.

TYPICAL PROPERTIES - WET

Components	Three (3) - Resin, Hardener & Powder
Wet mortar density	112 lbs./ft ³
Mixed consistency	Creamy mortar
Pot life	50°F 50 minutes 77°F 24 minutes
Initial set	50°F 6 - 8 hours 77°F 2 - 4 hours
Final cure	50°F 7 days minimum 77°F 5 days minimum

TYPICAL PROPERTIES - CURED

Blome CP-96 VTG complies with ASTM C-395	
Absorption (ASTM C-413)	0.12%
Bond Strength to brick (ASTM C-321)	brick failure
Coefficient of Thermal Expansion (ASTM C-531)	16 - 18 x 10 ⁻⁶ in/in/°F
Color	gray
Compressive Strength (ASTM C-579)	13,900psi
Tensile Strength (ASTM C-307)	3,300 psi

PACKAGING & STORAGE

Blome CP-96 VTG is supplied as a three (3) component product, with a Resin, Hardener and Filler powder. CP-96 / CP-96TG Resin (Part A) is packaged in short filled, one gallon cans, CP-36/96 VTG Hardener (Part B) is packaged in short filled, one quart cans and CP-36/96 VTG Filler powder (Part C) is packaged in 50 lb. bags.

<u>UNIT SIZE</u>	<u>67.2 lbs</u>	<u>990 lbs</u>
CP-96 / CP-96TG Resin	14.4 lbs. (2 x 7.2 lb. cans)	20 gallons (4 x 5 gal pails)
CP-36/96VTG Hardener	2.8 lbs. (2 x 1.4 lb. cans)	5 gallons (1 x 5 gal pail)
CP-36/96VTG Filler Powder	50 lbs. (1 bag)	15 x 50 lb. bags

Shelf life for CP-96 VTG components is one (1) year. Keep CP-96 VTG 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-96 VTG Powder from water and weather while in storage and on job site.

ESTIMATED COVERAGE

One 66.8 lb. unit of CP-96 VTG covers approximately 60 ft² at 1/8" thickness when used as a setting bed on concrete substrates. This is based on a nominal 1/8" bed joint thickness. This includes sufficient material for bed joint only. This is an estimated coverage rate and does not allow for waste, bed joint variation or other job site contingencies.

BID SPECIFICATION GUIDE

Use Blome CP-96 VTG Novolac Epoxy Mortar/Setting Bed as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome CP-96 VTG must be applied while ambient temperatures are between 50°F and 90°F. Blome CP-96 VTG components, vitrified ceramic tiles and pavers, acid brick, quarry tile and substrate temperatures must also be maintained in this range. Blome CP-96 VTG-LTC Hardener is available for use in low temperatures. CP-96 VTG-LTC Low Temperature Cure Hardener will cure at temperatures as low as 40°F. Installations of CP-96 VTG should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Concrete substrates to which Blome CP-96 VTG will be applied must have a minimum 28 day cure or have a minimum compressive strength of 3,000 psi. Minimum tensile strength of concrete must be 300 psi when tested using a Schmidt Hammer. Concrete must be dry in accordance with ASTM D 4263 Plastic Sheet Test Method. Concrete surfaces must be free of all laitance,

curing compounds and any dust or other loose materials prior to installation of CP-96 VTG bed joint.

Vitrified Ceramic and Brick systems to be installed with Blome CP-96 VTG must be clean, dry and oil free. If ceramic units have been frozen, they must be thawed completely and allowed to dry prior to installation with Blome CP-96 VTG. Liquid or Sheet applied membrane surfaces should be clean and dry prior to installation of Blome CP-96 VTG bed joint. These surfaces should be swept clean and be free of dirt, dust, water or other jobsite contaminants.

SAFETY PRECAUTIONS

Blome CP-96 VTG Resin, Hardener, Filler, and mixes of them present various health hazards if handled improperly. CP-96 VTG Powder contains silica dust, CP-96 VTG Resin will cause eye injury and irritate skin and CP-96 VTG Hardener is a corrosive liquid. Wear respirator suitable for silica dust, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. After working with Blome CP-96 VTG, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome CP-96 VTG 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-96 VTG is applied to brick and substrate with a pointing or margin trowel.

MIXING AND APPLICATION

Mix together one 7.2 lb. can Resin (Part A) and one 1.2 lb. can Hardener (Part B) and blend thoroughly for 1-2 minutes. To this mixture, add approximately one half (1/2) bag Filler powder (Part C), and mix to a uniform mortar consistency. Mix components using a clean, dry mechanical mixer or trowel for a minimum of 1-2 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.

When applied as a setting bed for direct bond installations, trowel mixed mortar to a nominal 1/8" thickness onto concrete substrate. Place vitrified ceramic tiles or pavers, acid brick or quarry tile in wet setting bed in accordance with project specification. When installing, VERSI-LINE™ Vitrified Ceramic Systems, using sonic vibration embedment, bed joint thickness should be a minimum continuous 1/8" thickness.

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

Blome International warrants 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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