

Blome Membrane 72 Trowelable Urethane Membrane

PRODUCT DESCRIPTION

Blome Membrane 72 is a two-component, elastomeric membrane based on high performance, un-extended polyurethane resin. Membrane 72 cures to form a flexible and impermeable membrane that is used behind acid brick, tile and polymer concretes. These membrane/brick and membrane/monolithic systems are used for the installation of chemical resistant tank linings, floors, trenches and sumps. Membrane 72 exhibits excellent resistance to pulp mill, bleach plant chemicals, including oxidizing bleaches, acids, and caustic solutions. The material exhibits excellent bond strength to properly prepared and primed concrete and steel substrates. Blome Membrane 72 remains flexible over a temperature range of -60°F to 180°F and is suitable for temperature excursions up to 220°F and above in many applications. When used as a membrane behind brick or ceramic tile, Blome Membrane 72 will withstand temperatures of at least 235 °F in wet immersion conditions, depending on the thickness of the masonry units.

TYPICAL USES

Blome Membrane 72 Trowelable Urethane Membrane is suitable for use in a variety of applications including:

- Chlorine Dioxide Bleach Towers
- Chlorine Dioxide Storage Tanks
- Pulp Washers and Seal Boxes
- Chlorine Dioxide Generating Equipment
- Acid Brick Flooring, Sumps and Trenches

HANDLING CHARACTERISTICS

Blome Membrane 72 is supplied as a two (2)-component product, in 35 lb. pre-measured units. Blome Membrane 72 is supplied in a trowelable paste consistency. This creamy, thixotropic formulation has ideal handling properties and is smooth spreading for easy application by steel trowel. Typical trowel application is 125 mils (1/8"), applied in two passes, each 1/16" thick. Blome Membrane 72 is easily applied to horizontal, vertical and overhead substrates.

TYPICAL PROPERTIES

WET

Components:	Two (2) – Resin and Activator
Mixed consistency:	Trowelable Paste/Gel
Pot life:	50°F 75 minutes 77°F 60 minutes
Initial set:	50°F 12 hours 77°F 6 hours
Final cure	50°F 7 days minimum 77°F 5 days minimum

CURED

Color	Tannish yellow
Elongation	82%
Solids Content	>99%
Temperature Resistance (stand-alone)	180°F (continuous) 220°F (excursions)
Temperature Resistance - immersion (behind brick/tile)	235°F
Temperature Resistance – dry heat, gas (behind brick/tile)	400°F

PACKAGING, ESTIMATING & STORAGE

Blome Membrane 72 is supplied as a two (2)-component product, with a Resin and Activator. Membrane 72 Components are packaged as follows:

Unit Size	<u>35 lb. unit</u>	<u>Coverage per unit</u>
Resin (Part A)	32 lbs. (1 x short filled 5 gallon pail)	35 ft ² @ 1/8" thickness
Activator (Part B)	3 lbs. (1 x short filled ½ gallon can)	

Shelf life for Membrane 72 components is twelve (12) months. Keep Membrane 72 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. Protect Membrane 72 from water and weather in storage and on job site.

BID SPECIFICATION GUIDE

Use Blome 72 Trowellable Urethane Membrane as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Weather conditions, especially dew point, should be constantly monitored. Final blast cleaning and application of membrane system must only be performed when the temperature of steel substrates will not fall within 5 degrees of the dew point. Dehumidification and/or temperature control may be necessary to meet this requirement. Use a surface thermometer to frequently monitor the temperature of steel substrates during membrane installation.

Blome Membrane 72 is best applied while ambient temperatures are between 60°F and 90°F. Blome Membrane 72 components and substrate temperatures must also be maintained in this range and at least 5 degrees above the dew point. For best results, store Membrane 72 components at 75°F minimum, for 24 – 36 hours prior to installation. Avoid installing Membrane 72 in direct sunlight. Installations of Membrane 72 should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Steel substrates should be prepared by abrasive blasting or grinding to achieve near white metal clean SSPC 10. Blasted steel substrates must not be allowed to flash rust prior to installing membrane. Therefore, this surface preparation must be completed immediately prior to appropriate primer. For application to blasted steel, Blome 75 Epoxy Primer is recommended prior to installation of Membrane 72. Apply and cure Blome Primer 72 as directed.

Concrete substrates to which Blome Membrane 72 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, oil, curing compounds and any dust or other loose materials prior to installation of Membrane 72.

Concrete substrates to which Blome Membrane 72 will be applied should be primed using Blome 75 Epoxy Primer prior to installation of Membrane 72 membrane. Apply Blome 75 to prepared concrete substrates using brush or roller, making certain to work primer into the pores of the concrete. Allow primer to cure tack free or until the next day prior to installation of Membrane 72.

SAFETY PRECAUTIONS

Blome Membrane 72 Resin, Activator, and mixes of them present various health hazards if handled improperly. Membrane 72 Resin will cause eye injury and irritate skin and Membrane 72 Activator is an isocyanate material and is a skin and eye sensitizer. Wear respirator suitable for organic vapors, safety glasses with side shields, gloves and long sleeve shirts to prevent all contact with skin and eyes. After working with Blome Membrane 72, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome Membrane 72 is best mixed with a drill motor driven paddle blade or "Jiffy" mixer. All mixing and application equipment must be clean, dry and free of any contaminants including Portland cement, other mortars or resins. When mixed, Membrane 72 is applied using a clean, dry, steel finishing trowel.

MIXING AND APPLICATION

Mix Resin (Part A) and Activator (Part B) together with a drill motor driven paddle blade or "Jiffy" mixer and blend thoroughly for 1-2 minutes. It is good practice to then transfer this mixture to a second pail, scraping the sides of the first pail into the second pail and remixing the unit, in the second pail for another 1-2 minutes. This will minimize the likelihood of any unmixed components being installed during application. The units should be mixed completely and not split, as the mix ratio is critical and any variation can potentially lead to decreased or changed physical properties and chemical resistance.

Trowel apply Membrane 72 over prepared and primed substrate to a nominal thickness of 1/8". This is best applied in two passes, each 1/16" thick. This two-pass installation will help to shear any air bubbles trapped within the paste membrane material. Mixed Membrane 72 has a somewhat translucent appearance when applied at thicknesses less than 3/32". This will indicate areas that likely have less than the minimum 1/8" thickness. These areas should have additional material applied until the appearance matches that of areas with the required 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

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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