BLOME INTERNATIONAL

Surrounding You with Exceptional Protection

Blome Membrane 510
Chemical Resistant Sheet Membrane

PRODUCT DESCRIPTION

Blome Membrane 510 is an impervious, elastomeric membrane supplied in sheet form. Membrane 510 is produced in preformed rolls, at a uniform thickness of 60 mils and assures an impervious membrane system for acid brick and polymer concrete construction. The material is a fiberglass reinforced elastomer that is based on asphalt, modified with rubber and topcoated with a Mylar® polyester film for a working surface. This Mylar® film offers excellent resistance to strong acids, solvents and other corrosive chemicals that exceed the service limits of standard asphalt membrane systems. Membrane 510 is resistant to most mineral acids including sulfuric, hydrochloric and phosphoric, many aggressive solvents and acid/solvent solutions. The system exhibits excellent bond strength to properly prepared concrete and steel substrates. Blome Membrane 510 is fabric reinforced with a multi-directional glass structure throughout the membrane system. This provides excellent crack bridging properties and increases the system's tear resistance.

TYPICAL USES

Blome 510 Chemical Resistant Sheet Membrane is suitable for use in a variety of applications including:

- Acid Brick Flooring
- Acid Brick Tank Linings
- Acid Brick Lined Sumps and Trenches
- Polymer Concrete Flooring
- Silicate Concrete Installations

HANDLING CHARACTERISTICS

Blome Membrane 510 is supplied in preformed rolls that are installed with overlapping seams over Blome 501 Primer. Blome 501 Primer is best applied by roller, brush or spray. 510 Membrane is rolled into place after primer dries to a tacky film. Seams between rolls are then sealed using Blome 550 Tape. This unique membrane system eliminates the use of dangerous hot asphalt, requires minimal curing time and is ready for immediate installation of acid brick or castable polymer concrete overlay.

TYPICAL PROPERTIES

WET

	Primer
Wet density:	7.86 lbs. per gallon
Consistency:	Low Viscosity
Solids Content:	24%
Initial Set:	50°F 4 - 6 hours
	77°F 1 – 2 hours

CURED

Membrane Compound

Absorption:	0.25% maximum
Color:	black, with shiny film surface
Softening Point:	230°F
Elongation of Compound:	1600 – 1900%

PACKAGING & STORAGE

Blome Membrane 510 is supplied as a three (3) component system, consisting of a Primer, Sheet Membrane and Tedlar® Tape for seams. Membrane 510 components are packaged as follows:

Component	Package Size	Coverage
501 Primer	5 gallon pails	125 ft^2/gallon
510 Sheet Membrane	200 sq. ft. rolls (50' x 4')	Area + 7%
550 Tedlar® Tape	3" wide rolls	all lineal seams

Shelf life for Membrane 510 components is twelve (12) months. Keep Membrane 510 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 510 components from water and weather while in storage and on job site.

BID SPECIFICATION GUIDE

Use Blome 510 Chemical Resistant Sheet Membrane as manufactured by Blome International, O'Fallon, MO.

JOB SITE ENVIRONMENTAL CONDITIONS

Blome Membrane 510 is best applied while ambient temperatures are between 60°F and 90°F. Blome Membrane 510 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 510 components at 75°F minimum, for 24 – 36 hours prior to installation. Avoid installing Membrane 510 in direct sunlight. Installations of Membrane 510 should be protected from water and weather during installation and curing of primer and installation of sheet membrane and tape.

When applying to steel substrates, 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.

SURFACE PREPARATION

Concrete substrates to which Blome Membrane 510 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 510.

Steel substrates should be prepared by abrasive blasting 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 installation of Membrane 510 membrane.

SAFETY PRECAUTIONS

Blome Membrane 510 presents various health hazards if handled improperly. 501 Primer and 510 Membrane are flammable, will cause eye injury and irritate skin. 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 510 components, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome 501 Primer is best re-mixed prior to use 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 re-mixed, 501 Primer is typically applied using roller or brush. Primer can also be sprayed using an airless spray rig. Clean sharp razor knives are required to cut 510 Sheet Membrane to required sizes and lengths.

MIXING AND APPLICATION

Thoroughly remix 501 Primer with a drill motor driven paddle blade or “Jiffy” mixer and blend thoroughly for 1-2 minutes prior to application. Blome 501 Primer is best applied using roller, brush or by spraying. A standard airless spray rig is recommended for spray application of primer. Allow primer to cure to a tacky film prior to sheet membrane installation.

510 Sheet Membrane is then rolled onto the tacky primer. Be certain to remove release film from the back of the sheet prior to installation. Open areas can be covered rapidly by unrolling the sheet and removing the release film simultaneously. The sheet is rolled directly into place. Hand rub sheet into place working out any air bubbles as the sheet is placed on tacky primer. Hand rub any vertical areas to assure a good bond. For use in tight areas, with limited access the membrane should be measured and precut into sizes and lengths prior to placement. Remove release film from precut sections and apply them over primed substrate. Hand rub precut sections as they are placed to remove air bubbles and to help assure a good bond.

Overlap roll edge seams using the “leading edge” design of Membrane 510. Seams at the ends of rolls can be butted together or melted using a propane torch. All seams are then sealed using Blome 550 Tedlar® Tape. This tape is adhesive backed and supplied in 3” wide rolls. Be certain that seams are clean, dry and free of dust and other contaminants before taping. Roll tape onto seams slowly, hand rubbing all areas to work out any air bubbles in tape as it is applied.

Completed installations of 510 Membrane must be protected from traffic and physical abuse immediately after installation, until acid brick or polymer concrete overlay is installed. Care must be taken not to puncture Mylar® film or Sheet Membrane. Protect installation from traffic with plastic sheets or plywood, making certain all workers’ shoes are clean before entering work area. Any small punctures in Mylar® film must be patched immediately with Tedlar® Tape. Remove traffic protection immediately prior to installing acid brick or polymer concrete overlay, taking care not to damage membrane while installing overlay.

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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