



Blome Membrane 67 FGD Urethane Asphalt Membrane

PRODUCT DESCRIPTION

Blome Membrane 67 FGD is a two-component, elastomeric membrane based on urethane asphalt. Membrane 67 FGD cures to form a flexible and impermeable membrane that is used behind acid brick, polymer concretes, as a standalone monolithic liner, and behind acid proof gunite linings. These membrane/brick and membrane/monolithic systems are used for the installation of chemical resistant tank linings, floors, pads, trenches, sumps, stacks and ductwork. Membrane 67 FGD is resistant to most mineral acids including dilute sulfuric, hydrochloric and phosphoric, as well as caustic solutions. The material exhibits excellent bond strength to properly prepared concrete and steel substrates. Blome Membrane 67 FGD remains flexible over a temperature range of -60°F to 180°F and is suitable for temperature excursions up to 220°F and above some in dry service applications.

TYPICAL USES

Membrane 67 FGD Urethane Asphalt Membrane is suitable for use in a variety of applications including:

- Acid Brick Flooring and Linings
- Acid Proof Gunite Linings
- Polymer Concrete Installations
- External Membrane for Precast Trenches
- Stand Alone Monolithic Liner for Approved FGD Service

HANDLING CHARACTERISTICS

Blome Membrane 67 FGD is available in two (2) grades, spray grade and trowel grade. Both grades are supplied in 4-gallon pre-measured units and exhibit the same chemical resistance. 67 Spray Grade is supplied in a mastic consistency, and is best applied by roller, brush or spray. A minimum 56:1 airless spray rig is recommended for spray application of Membrane 67 FGD. Typical spray application is 60 mils, applied in at least two (2) overlapping, cross directional passes. Membrane 67 FGD Trowel Grade is supplied in a trowelable paste consistency. This 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 into two passes to horizontal and vertical substrates.

TYPICAL PROPERTIES

WET

Components	Two (2) – Resin and Activator
Wet density	7.6 lbs. per gallon
Mixed consistency	Spray Grade: Mastic Trowel Grade: Paste/Gel
Pot life	50°F 60 minutes 77°F 40 minutes
Initial set	50°F 12 - 18 hours 77°F 8 - 12 hours
Final cure	50°F 7 days minimum 77°F 5 days minimum

CURED

Absorption	Less than 0.1%
Bond strength to steel (ASTM D412)	135 psi
Color	black
Elongation (ASTM D412)	142%
Perm Rate (ASTM C96, Method E)	0.0048 perm inches
Solids Content	77%
Tensile Strength (ASTM D412)	216 psi

PACKAGING, ESTIMATING & STORAGE

Blome Membrane 67 FGD is supplied as a two (2)-component product, with a Resin and Activator. Membrane 67 FGD components are packaged as follows:

<u>Unit Size</u>	<u>Four (4) Gallon</u>	<u>Coverage per unit</u>
Resin (Part A)	3.9 gallons (1 x short filled 5 gallon pail)	50 ft ² /unit @ 1/8"
Activator (Part B)	0.1 gallons (1 x short filled 1 pint can)	100 ft ² /unit @ 1/16"

Shelf life for Membrane 67 FGD components is twelve (12) months. Keep Membrane 67 FGD 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 67 FGD from water and weather in storage and on job site.

BID SPECIFICATION GUIDE

Use Membrane 67 FGD Urethane Asphalt 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°F 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 67 FGD is best applied while ambient temperatures are between 60°F and 90°F. Blome Membrane 67 FGD components and substrate temperatures must also be maintained in this range and at least 5° above the dew point. For best results, store Membrane 67 FGD components at 75°F minimum, for 24 – 36 hours prior to installation. Avoid installing Membrane 67 FGD in direct sunlight. Installations of Membrane 67 FGD should be protected from water and weather during installation and curing.

SURFACE PREPARATION

Concrete substrates to which Blome Membrane 67 FGD 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 67 FGD.

Dry concrete substrates should be primed using a field mix primer, consisting of a 50/50 mixture of Membrane 67 FGD and mineral spirits. Mix full unit of Membrane 67 FGD as directed, pour ½ of mixed unit into separate pail, then fill first pail with mineral spirits to make a low viscosity primer for concrete. Damp concrete substrates to which Blome Membrane 67 FGD will be applied should be primed using Blome 75 Epoxy Primer prior to installation of Membrane 67 FGD membrane. Apply Blome 75 to prepared concrete substrates using brush or roller, making certain to work primer into the pores of the concrete. Allow either primer to cure tack free or until the next day prior to installation of Membrane 67 FGD.

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 67 FGD. For application to blasted steel, Membrane 67 FGD is self-priming.

SAFETY PRECAUTIONS

Blome Membrane 67 FGD Resin, Activator, and mixes of them present various health hazards if handled improperly. Membrane 67 FGD Resin is flammable, will cause eye injury and irritate skin and Membrane 67 FGD 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 67 FGD, wash thoroughly before eating, drinking, smoking or other activities.

APPLICATION EQUIPMENT

Blome Membrane 67 FGD 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 67 FGD Spray Grade is sprayed using a minimum 45:1 airless spray rig equipped as listed below. Membrane 67 FGD Trowel Grade is applied using a clean, dry, steel finishing trowel.

Spray rig set-up for Blome Membrane 67 FGD Spray Grade:

Mastic Pump – Graco 45:1 or larger Airless, use inductor plate for pails & drums

Air Regulator – 207-651 air regulator

Mastic Gun – Graco Silver Airless Gun

Gun Tip – Graco Reverse-A-Clean Tip; 0.045 inch orifice + GHD Tip

Material Hose to Gun – 6 feet whip end, ½” i.d., working pressure 5,000 psi, burst 16,000 psi

Material Hose – 50 feet overall, ¾” i.d., working pressure 4,000 psi, burst 12,000 psi

Material Hose – 100 or 150 feet overall, 1” i.d., working pressure 3,000 psi, burst 12,000 psi

Air Compressor – 100 cfm @ 100 psi minimum.

Air Hose from Compressor to Mastic Pump – ¾” to 1” i.d. 100 feet long.

Note: The foot valve of the pump must be immersed in the product. This material will not siphon.

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.

Membrane 67 FGD Trowel Grade is typically applied with a trowel or squeegee 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.

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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Supersedes all previous literature