



Premium Building Products
That Protect

Protecto LM™
Liquid Membrane

TECHNICAL DATA

Properties	Test Method	Test Results
Color		Blue in liquid form, Black when cured
Thickness		30 mil dry
Shear Strength		355 psi
Seam Strength	Exceeds ANSI A118.10 and ANSI A118.12 standards	10.2 lb. /in width
Breaking Strength		2.8 MPa (401 psi)
Elongation		657%
Dimensional Stability		0.70% length change
Damp-proof		Passes
Hydrostatic Resistance		Passes
Fungus 7 Micro Organism Resistance		Passes
Permeance	ASTM E96 method B	0.3 max
Coverage		Approximately 50 square feet per gallon

PACKAGING

1 and 5 gallon pail

Description

PROTECTO LM is a thin, elastomeric Liquid Membrane along with a reinforcing fabric that combines to form a seamless waterproof barrier.

Features

- Inhibits the growth of mildew, fungus and other bacteria causing odors and stains in construction materials.
- Exceeds ANSI A118.10 and ANSI A118.12 standards.
- Interior and exterior applications.
- Bridges shrinkage cracks or other non-structural in-plane cracks up to (1/8").
- Easy to apply - just roll or brush on.
- Fast curing - flooring can be installed in 1 - 2 hours.
- Cleans up with water while still wet.
- Low odor & solvent free.

Uses

Used as a Waterproof flashing on the Protecto Deck membrane system.
Can be used in conjunction with Whisper Mat CS Installations where a waterproof or water resistant Application is required with sound control. Used with AFM/WM for shower wall applications.
Can provide up to 1/8" crack isolation. See Crack Isolation Section.

Limitations

- Not for use as an exposed traffic surface.
- Do not expose uncovered membrane to traffic, water or direct sunlight until fully cured.
Not recommended for use as a roofing membrane over occupied areas, or on unstable surfaces such as chipboard, Masonite, metal, etc.
- Not recommended under negative hydrostatic conditions.
Do not use where excessive substrate moisture and/or where negative Hydrostatic pressure exists. Maximum allowable moisture is (3 lbs. /1000 Ft2) per 24 hours.
Use only on surfaces which are maintained above (50°F) during application and for at least 48 hours after application.

Shelf Life

1 year in unopened container stored in heated conditions

Storage

Store in a cool, dry place away from freezing

Preparation

All surfaces must be clean, even, dry and free of grease, oil, loose paint, curing Liquid Membranes or sealers, protuberances that may puncture cured membrane, or other foreign matter. Existing concrete surfaces which have been shot blasted, ground or sanded to remove contaminants must be thoroughly cleaned of dust, loose concrete, etc. prior to applying membrane. Surfaces should be maintained at a temperature between (50°F) and (90°F) when applying membrane. New concrete surfaces must be fully cured, dry (maximum allowable moisture is (3 lbs. /1000 Ft²) per 24 hours) finished to a wood float or light broom finish, and be true to within (1/4") in (10'). Pre-treat all joints and gaps that are greater than (1/32") with proper compressible backer material and urethane sealant that will be covered with PROTECTO LM.

USE A WET FILM THICKNESS GAUGE TO CHECK THICKNESS DURING APPLICATION

Each coat may be applied by brush or heavy nap paint roller to achieve a 24MIL thickness (wet)

Application

PROTECTO DECK MEMBRANE FLASHING APPLICATION

Apply a generous coat of PROTECTO LM approximately (4") to the edge of the Protecto Deck membrane and 4" up the wall. Embed a (7 1/2") sheet of reinforcing fabric into the wet liquid so that it bleeds through fabric. Next, apply another coat on top of fabric so that fabric is completely covered. Apply a generous coat of PROTECTO LM Liquid Membrane approximately (4") wide over all overlapped seams and terminations of the Protecto Deck Membrane. Allow PROTECTO LM Liquid Membrane to cure for a minimum of 24 hours before flood testing

FULL WATERPROOFING APPLICATIONS WITH WHISPER MAT CS

PROTECTO LM is pre-mixed and ready to use. PROTECTO LM may be applied by brush or roller. Pre-treat all cracks, joints, seams and corners first by applying a generous coat of PROTECTO LM Liquid Membrane approximately (4") to the perimeter of subfloor and (4") up the wall, then Embed a (7 1/2") sheet of reinforcing fabric into the wet liquid so that it bleeds through fabric, overlap fabric seams by at least (2"). Next, apply another coat of liquid so that the fabric is completely covered. Allow to dry to the touch. Apply PROTECTO LM to the entire subfloor, each coat may be applied by brush or heavy nap paint roller to a 24MIL thickness (wet) and allow dry to the touch, apply final coat of PROTECTO LM to entire surface within 24 hours to seal the installation. Once entire installation turns black and is dry to the touch (approximately 1 - 2 hours), tile may be installed using approved Latex Portland Cement Mortars.

WATER RESISTANT APPLICATIONS WITH WHISPER MAT CS

After installing Whisper Mat CS, apply a generous coat of PROTECTO LM approximately (4") to the edge of the Whisper Mat CS membrane and 4" up the wall. Embed a (7 1/2") sheet of reinforcing fabric into the wet liquid compound so that it bleeds through fabric. Next, apply another coat on top of fabric so that fabric is completely covered. Apply a generous coat of PROTECTO LM approximately (4") wide over all field seams of the Whisper Mat CS Membrane. Allow to dry to the touch, then apply a second coat of PROTECTO LM, once the liquid turns black and is dry to the touch (approximately 1 - 2 hours), tile may be installed using approved Latex Portland Cement Mortars.

WATERPROOFING SHOWERS WITH AFM/WM

After installing AFM/WM to shower pan, apply a generous coat of PROTECTO LM approximately (4") on each side of wall corners, coves and seams. Embed a (7 1/2") sheet of reinforcing fabric into the wet liquid so that it bleeds through fabric. Next, apply another coat on top of fabric so that fabric is completely covered. Allow to dry to the touch. Apply PROTECTO LM to the entire wall surface, including pre-treated joints, corners and coves membrane overlaps. Each coat may be applied by brush or heavy nap paint roller to a 24MIL thickness (wet) and allow to dry to the touch, apply final coat of PROTECTO LM to entire surface within 24 hours to seal the installation.

CRACK ISOLATION MEMBRANE SYSTEM

For use as a Crack Isolation Membrane System, Protecto LM Liquid and Protecto LM Fabric must both be used together in a double layer fashion with a cure time between layers plus a Final Sealer Coat. Protecto LM and LM Fabric are to be applied over the crack a minimum of 2 times the size of the tile and as needed to ensure any portion of a tile going over the crack is completely supported by the Protecto LM System. This system can be used to treat shrinkage cracks and other in-plane minor cracks up to 1/8" (3 mm).

Note: All construction, expansion, and isolation joints designed into the substrate must be carried through the Tile Installation and should Not be covered with Protecto LM System.

Installation Steps

- Initial Layer
 - Using a heavy nap roller, apply Protecto LM Liquid to the concrete substrate in a thick coat (24 mils wet) then lay in strips of the 7.5" wide Protecto LM Fabric side by side with 1/2" overlaps. It is important to totally saturate the Liquid thru the Fabric and that there are no wrinkles in the Fabric.
 - While the base layer is still wet, apply a second coat of Protecto LM Liquid (24 mils wet) over the Protecto LM Fabric and allow to cure prior to proceeding with the Top Layer. Cure time will require several hours depending on weather conditions. Protecto LM Liquid changes color from purple to dark gray when cured.
 - Note: Recommend working in sections with lengths of 4' to 5' max to help assure the base coat remains wet until the second coat can be applied. (vs. applying all of the base layer first...)

- Top Layer
 - Once the Initial Layer has cured, repeat the process of the Initial Layer as stated above to create the Top Layer and allow it to cure before proceeding with the Final Sealer Coat.

- Final Sealer Coat
 - Once the Top Layer has cured, apply a Final Sealer Coat (24 mils wet) over the Protecto LM System and allow to cure. Tile installation can begin once the Final Sealer Coat has cured and turned dark grey.

Approximate Coverage – Protecto LM coverage for the Installation Steps noted above is approximately 40 sf per gallon. Actual coverage may vary depending on jobsite conditions.

Note: Same Installation Steps above apply to full floor coverage

FLOOD TESTING:

PROTECTO LM must cure at least 24 hours prior to flood testing. Perform flood test with a minimum of 2" and a maximum of 4" of water for 24 hours. Drains should be plugged and barriers placed to contain the water. All leaks shall be located and repaired (see "Repairs") prior to covering the membrane. Re-flood test membrane once repaired.

WARRANTY CAN NOT BE ENFORCED WITHOUT DOCUMENTATION OF LEAK FREE FLOOD TESTING SUBMITTED TO PROTECTO WRAP COMPANY WITHIN 30 DAYS AFTER TESTING. THE APPLICATOR AND GENERAL CONTRACTOR MUST SIGN THE SUCCESSFUL FLOOD TESTING DOCUMENT.

Clean Up

PROTECTO LM can be cleaned up with water while still wet

Limited Warranty

This product is covered by the Protecto Wrap Standard 10 year Limited Warranty

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