



## WATERPROOFING & CRACK PREVENTION MEMBRANE

- **GREEN FRIENDLY** - water-based formula, low odor
- **ELASTOMERIC** - crack isolation up to 1/8"
- **EASY TO USE** - roll or spray on application
- **FAST DRYING** - next-day tile application
- **HIGH PERFORMANCE** - exceeds ANSI 118.10 & 118.12 standards

### PRODUCT DESCRIPTION

Triton's LIQUID MEMBRANE (LM) is a ready-to-use liquid applied, elastomeric waterproofing and crack isolation membrane for use in tile and stone applications. It is ideal for use on masonry substrates such as cement, cement backer board and concrete. When applied with an airless sprayer or roller, LM creates a super-bonding, seamless moisture/water barrier. Meets ANSI A118.10 for waterproofing membranes and ANSI A118.12 for crack isolation membranes. LM is designed for waterproofing under tile in showers for both residential and commercial use and meets Uniform Plumbing Code specifications for use as a shower pan liner. LM may also be used as a slab-on-grade moisture barrier under wear-resistant flooring.

### AREAS OF USE

- Showers, Shower Pans
- Steam Rooms
- Interior/Exterior Moisture Barrier Applications
- Interior Waterproofing Applications

### INTENDED SUBSTRATES

- Concrete
- Cement and/or magnesium cement backer boards Triton Backer
- Exterior grade plywood (interior, dry areas for crack isolation only)
- Gypsum drywall

### LIMITATIONS

- LM is not intended to be used as a wear surface and should always be covered by materials.
- Do not apply to surfaces that may be subject to temperatures less than 40° F (4° C) during the first 72 hours after application.
  - Do not apply to surfaces that may be subject to wetness during the first 72 hours after application.
  - Do not apply to surfaces that may be subject to an excess of 30 psi of hydrostatic pressure.
  - Do not apply LM as an adhesive or thin set substitute.
  - Do not apply to any existing control, expansion, saw-cut, cold, or construction joint as a bridge and/or cover.



### APPLICATION

#### **SURFACE PREPARATION - NEW CONCRETE**

Concrete must have a Concrete Surface Profile (CSP) between CSP4 and CSP6. To accomplish a CSP4-CSP6 finish, use a steel trowel and a broom to finish surface. Untreated new concrete substrates must be allowed to cure for 28 days prior to application of LM. Substrate must be structurally sound, clean, and dry. Contaminants such as oil, acidic prep products, and cleaning products may prevent LM'S ability to bond to the substrate. Ensure the surface is free from any and all foreign contaminants. If the application area is subject to wetness, necessary sloping must be done prior to the application of LM.

#### **- EXISTING CONCRETE**

Concrete must be cleaned and scarified. All chips, divots, and chunks (defects) resulting from scarification must be repaired with a fast-setting hydraulic repair mortar prior to application of LM. Concrete must have a Concrete Surface Profile (CSP) between CSP4 and CSP6. Substrate must be structurally sound, clean, and dry. Contaminants such as oil, acidic prep products, and cleaning products may prevent LM'S ability to bond to the substrate. Ensure the surface is free from any and all foreign contaminants. If the application area is subject to wetness, necessary sloping must be done prior to the application of LM.

#### **CRACK ISOLATION MEMBRANE**

Use a 3/8" nap roller or an airless sprayer that produces 1900-2300 psi with flow. Ensure that the LM extends past both sides of the crack a distance equal or more than the diagonal length of the tile. Fill any gaps between plywood, and where the floor meets any well with material prior to application of full crack isolation membrane. Apply material over the entire surface at a 20 mil wet thickness to achieve a continuous crack isolation membrane. (146 sqft./gallon)

#### **WATERPROOF MEMBRANE**

##### METHOD OVERVIEW:

- 3/8" Nap Roller

- Airless Sprayer

Pressure: 1900-2300 PSI w/flow  
Rate: 1.0-1.5 GPM  
Tip Orifice Size: 0.025-0.029  
(do not cut with water)

#### **GENERAL INSTRUCTIONS:**

Apply a uniform coat using overlapping spray and roll strokes. The LM will turn from its "Light Yellow" color to a "Dark Yellow" when the material has dried which typically takes 2 hours. Once dry, fill any pinholes and/or imperfections in the LM with extra material and....

# LIQUID MEMBRANE



...Periodically check the thickness with a wet film gauge. LM must be applied at a thickness of at least 40 mils when wet and no more than 90 mils. (61-70 sqft./gallon)

**INTERIOR DETAILS:** Apply a heavy coat extending 6" in width on both sides in all corners, plane changes, and pipe penetrations prior to full application. In addition, fill any and all cracks [up to 1/8" (3mm)] in concrete substrates with LM.

**EXTERIOR DETAILS:** Embed 6" or 12" wide polyester stitch bond fabric mesh into the membrane on every change of plane (floor to wall union, steps, benches, etc).

**CHANGE OF PLANE (INTERIOR):** Waterproofing applications, especially in the commercial sector, require reinforcement of any plane change that may occur in the interior. To ensure necessary steps are being followed, contact our Technical Support before proceeding with any initialization of application for review and important recommendations. Applications include, but are not limited to:

- Any above grade structures that will be required to hold water permanently.
- Commercial floors that are exposed to wash downs, flooding, etc.
- All applications that contain a floor perimeter coming into contact with a shear wall or curtain wall.
- Floor penetrations such as drainage pipes, electrical conduit, light housings, etc.
- Any post-tensioned or pre-stressed above grade slabs.

## **DRAINS:**

LM must be applied to the bottom of the flange. The chosen drain unit must have a clamping ring and weep holes for the application of thin set. The drain should also be level with the substrate plane and completely fixated. Continue by following necessary steps outlined under "Application" when applying LM. Around the perimeter of the drain, Embed 6" or 12" Polyester Stitch Bond Fabric (PSBF) into the first coat of LM. Ensure the drainage hole itself is not obstructed by the Fabric (PSBF). While wet, apply a second coat of liquid membrane over the PSBF. When the Liquid membrane is cured, use silicone caulk on the entirety of the union then clamp and tighten the upper flange to the LM. When the 2nd coat is cured, use Triton AD or urethane sealant on the entirety of the union then clamp and tighten the upper flange to the LM. Then, use Triton AD or urethane sealant on the entirety of the union between the LM and the upper flange around the drain.

## **EXPANSION JOINTS:**

As described prior, do not bridge any joints or gaps that are there to experience movement. Honor these joints all the way to the wear surface (tile) during the job application. To treat the joint properly, clean it prior to application of an open or closed cell foam backer rod. Install the rod to the proper depth specified by the Tile Council Handbook (EJ 171). Once installed, compress the architecturally specified sealant into the joint ensuring it contacts both sides and dries flush with the surface plane. Once the sealant is completely dry, place a bond breaking tape over the joint and continue to apply LM making sure to overlap the tape. Follow any and all instructions under the "Application" section of this document. As a reminder, the tile installation to follow must honor the joints. **DO NOT BRIDGE THE JOINT.** Once the tile is set properly, you may fill the joint with the specified sealant following any architectural or manufacture specifications that may apply to the project.

## **CURING**

LM turns from a "Light Yellow" to a "Dark Yellow" when drying. This color change will take between 1-2 hours. The total drying time will depend on various job site conditions such as temperature, airflow, humidity, etc. In cold, humid conditions drying may take up to 12 hours. If a water test is required after application conduct the test 72 hours after installation.

## **CLEAN-UP**

LM can be cleaned with soap and water while still in liquid form. It is recommended to clean all tools, equipment and especially spray equipment while the material is still wet.

## **PROTECTION**

If LM is to be exposed for more than 24 hours use felt paper to protect the membrane from any punctures or scraping prior to the wear surface installation.

## **TILE INSTALLATION**

When installing tile use a polymer-modified mortar that meets or exceeds ANSI A118.4 or A118.11 standards.

## **COVERAGE**

### *Crack Prevention Membrane*

1 gallon pail: 146 sq.ft. at 20 mil thickness when wet  
3.5 gallon bucket: 511 sq.ft. at 20 mil thickness when wet  
5 gallon bucket at 730 sq.ft. at 20 mil thickness when wet

### *Waterproof Membrane*

1 gallon pail: 61-70 sq. ft. at 40 mil thickness when wet  
3.5 gallon bucket: 214-245 sq.ft. at 40 mil thickness when wet  
5 gallon bucket: 305-350 sq.ft. at 40 mil thickness when wet

## **STORAGE**

- Packaged in 1-Gallon Cans, 3.5-Gallon Pails, and 5-Gallon Pails.
- Store at 40°F to 90°F.
- Shelf life is approximately 18 months.
- Protect from freezing.

## **SAFETY**

Avoid material contact with eyes. If it occurs, flush with water vigorously for 15 minutes and call a physician. Wash thoroughly after handling. **KEEP OUT OF REACH OF CHILDREN. DO NOT INJECT.**

## **DAMAGE LIMITATION**

Seller shall not be liable for any damages, injury, loss, direct or consequential, resulting from its products. The parties intend that the limitation of damages, including consequential damages, applies even if the exclusive remedy provided for herein fails of its essential purpose.

## **EXCLUSIVE REMEDY**

Seller's sole obligation, and buyers exclusive remedy shall be to replace material if found to be defective.

## **WARRANTY DISCLAIMER**

There are no warranties which extend beyond the description of the fact hereof. Seller expressly disclaims all other warranties regarding the use of its products, whether expressed or implied, including the implied warranties of merchantability and for fitness of a particular purpose. Since use of the product is beyond the Seller's control, the Buyer assumes all risk of use.

# LIQUID MEMBRANE



## WARRANTY

Materials are guaranteed with respect to uniformity and quality within manufacturer's specifications.

## TECHNICAL DATA

Meets and exceeds ANSI A118.10 for load-bearing, bonded, waterproof membranes for thin-set ceramic tile and dimensional stone installations.

Meets and Exceeds ANSI A118.12 for crack isolation membranes. Exceeds Uniform Plumbing Code specifications for use as a shower pan liner.

TEST	DESCRIPTION	EVALUATION	ANSI SPECIFICATION
4.1	Mold Growth	Does not support	Shall not Support
4.3	Breaking Strength	525 PSI	170 PSI
4.4	Dimensional Stability		
	(158°F)	-.19%	.7% Max Change
	(-15°F)	.35%	.7% Max Change
5.3	7 Day Shear Strength	241 PSI	>50 PSI
5.4	7 Day Water Immersion	179 PSI	>50 PSI
5.5	4 Week Shear Strength	229 PSI	>50 PSI
5.6	12 Week Shear Strength	134 PSI	>50 PSI
5.7	100 Day Water Immersion	140 PSI	>50 PSI
5.1.6	Accelerated Aging Shear Strength	372 PSI	>50 PSI
5.2	Point Load Test	1811 lbf (Average)	>1,000 lbf