



**PRODUCT INFORMATION**

**hydro-rite**

Water-proofing and crack isolation membrane

**HYDRO-RITE** is water based liquid applied, elastomeric, waterproofing and crack isolation membrane for all interior or exterior ceramic tile and stone installations. It can also be used in interior applications under wood, vinyl and carpet. It is applied with roller or trowel to produce a continuous moisture barrier over a variety of surfaces. **HYDRO-RITE** when used as a crack isolation membrane reduces crack transmission in ceramic tile or stone floors and allows the installation of tile surfaces to substrates subject to deflection up to 1/240 th of the span.

**TEXTURE:**

Semi-paste / Liquid

**COLORS:**

Green

**PACKAGING:**

1 and 5 gallon pails.

**BASIC USE**

> **HYDRO-RITE** is used as a positive waterproofing membrane on substrates prior to the installation of ceramic tile, vinyl tile, rubber tile, brick, strip wood, parquet, marble and stone.

**AREA OF USE**

**HYDRO-RITE** waterproofing membrane can be used for interior, exterior, vertical and horizontal applications. Since **HYDRO-RITE** is highly elastic, it permits the installation of hard surfaces to substrates subject to deflection up to 1/240th of the span.

**BENEFITS**

- > When fully cured, it performs exceptionally when continuously exposed to water.
- > The elastomeric properties of **HYDRO-RITE** when used under latex portland cement dry-set mortar or over "mud bed" installations help reduce the risk of substrate cracks transferring to tile or stone.
- > **HYDRO-RITE** can reduce moisture transmission in slabs from 12 lb to 3 lb per 1000 sq ft per day when properly applied.

**LIMITATIONS**

- > Temperature must stay above 40 °F (4 °C) and below 90 °F (32 °C) during application and initial (72 hours) cure after application including substrate.
- > Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- > Do not leave exposed to UV light for more than 30 days.
- > Tile, stone or other surface coverings must be installed over **HYDRO-RITE**.
- > Plywood should be exterior grade and used for interior applications of light traffic floors and countertops, where exposure to water is intermittent.
- > **HYDRO-RITE** is not used as a wearing surface.
- > Do not damage, tear or cut membrane from other construction trade traffic.

**APPLICABLE STANDARDS**

Meets the requirements for Load Bearing Waterproofing Membranes found in ANSI A118.10.

**INSTALLATION: PREPARATORY WORK**

All surfaces must be structurally sound, clean and free from dirt, grease, sealers, paints and curing compounds. Concrete must be cured a minimum of 28 days, have a fine broom finish. Existing surfaces should be scarified or sanded. Cracks in concrete up to 1/8" (3 mm) should be pre-filled with membrane prior to application. Cracks in excess of 1/8" (3 mm) should be treated as expansion joints. Gaps between plywood sheets and where they meet walls or drains should also be pre-filled with membrane. Extremely porous surfaces should be dampened slightly with water. All exterior and wet areas shall have proper slope to drains.

**APPLICATION AS WATERPROOFING MEMBRANE**

**FLASHING:** Using a brush, roller or trowel, pre-coat **HYDRO-RITE** six-inches in each direction, all inside and outside corners, where walls and floors or any horizontal and vertical surfaces meet such as benches, curbs and columns, etc. and where any dissimilar materials meet. Embed 6" (1.5 cm) wide fiberglass mesh into the wet **HYDRO-RITE** membrane, 3 inches (75 mm) in each direction. Push the membrane into corners to assure full contact.

**MEMBRANE INSTALLATION:** Next, if using a trowel, spread the **HYDRO-RITE** with a 3/16" V-notch trowel held at a 45° angle then flatten the ridges with the flat side of the trowel over the entire surface to be waterproofed, including flashing. If using a brush or 1/4" (6 mm) to 1/2" (12 mm) nap roller, apply a continuous, even film with overlapping strokes. Initial membrane appearance is an aqua color when wet and dries to a dark green color. The wet coat shall be 3/64" (47 mil or 1.1 mm) thick. After the first coat has turned green with no blushing or aqua color showing, about 1 hour, visually inspect the film and fill any



OVER TILE



INTERIOR FLOORS / WALLS



OVER CONCRETE



OVER PLYWOOD



OVER CRACKS



WATER RESISTANT



ROLLER APPLIED

voids or pinholes with additional material, then apply a second coat 3/64" (47 mils or 1.1 mm) thick wet coat at right angles to the first. The combined dried coating needs to be a minimum of 3/64" (47 mils or 1.1 mm), but no more than 1/8" (3 mm) thick. NOTE: Coverage shall be no more than 40 sq ft (3.7m<sup>2</sup>) per gallon for the two combined wet coats. This gives the proper dry thickness for waterproofing. Allow the second coat to dry approximately 2-4 hours (when **HYDRO-RITE** turns uniform dark green) and tile or stone can then be installed using one of the Texrite polymer modified thin-sets. Do not cover if water test is required. See curing section.

**FOR DRAINS**

Extend **HYDRO-RITE** to the bottom of the drain flange taking care not to block weep and drain holes. Embed 6" wide fiberglass mesh into wet membrane around the drain making sure it does not obstruct the drainage hole. Then apply an additional coat of membrane over the mesh. After curing, clamp upper flange onto membrane and tighten. Caulk around flange where membrane and upper flange make contact with a silicone caulk. See TCNA installation method for shower receptors.

**APPLICATION AS CRACK ISOLATION MEMBRANE.**

Use the same V-notch trowel or roller as for waterproofing but only one uniform wet coat at 3/64" (47 mils) thick wet (approximately 1/32" dry) is required. The membrane can completely cover the substrate or for crack isolation, apply **HYDRO-RITE** on both sides of the crack a minimum width of the diagonal measurement of the tile or stone. Allow to dry 1 to 1 1/2 hours and set the tile or stone with a Texrite polymer modified thin-set.

**APPLICATION AS MOISTURE TRANSMISSION REDUCTION**

First, apply as a primer by diluting the **HYDRO-RITE** using four parts clean water to one part **HYDRO-RITE**. Completely coat the slab by using a stiff broom, roller or brush (coverage of 1-gallon of **HYDRO-RITE** and 4-gallon water is 400-450 sq. ft.) After the primer coat is dry (usually within 1 hour), apply an additional coat of undiluted **HYDRO-RITE** as directed above for waterproofing, at 3/64" wet. This will reduce the moisture transmission of 12 pounds or less, to a transmission of 3 pounds per 1000 sq ft per day. Refer to the flooring material manufacturer for specific recommendations and testing procedures.

**EXPANSION JOINTS, CONTROL JOINTS**

Clean the joint of debris. Next install compressible backer rod as outlined in EJ171 in the TCNA Handbook, into the joint. Next, compress a sealant as specified by the architect into the joint leaving it flush with the surface. After the sealant is dry, cover the sealant with bond breaker tape. Apply a minimum 3/64" of **HYDRO-RITE** over the joint and substrate following the instructions in the application section. Install the tile or stone onto the membrane but do not bridge the joint. After the tile or stone is set properly, fill the joint with colored caulk or sealant, following the architect and manufacturer's instructions.

**PROTECTION**

If tile is not going to be set immediately after curing, **HYDRO-RITE** should be protected from rain and inclement weather for 72 hours after application. If delays longer than 72 hours, cover with felt paper. Care should be taken to prevent membrane from becoming soiled or punctured during and after application.

**CURING**

24 hours. A water test can be conducted 72 hours after application if required.

**CLEANING**

Clean tools and hands with water before material dries. Clean all spray equipment immediately after use.

**COVERAGE**

34 to 40 sq ft per gallon at 3/64" (47 mils) thickness for waterproofing. 70-80 sq ft at 1/32" for anti-fracture membrane.

**STORAGE LIFE**

Two years if kept in sealed containers at temperatures of 40° to 90 °F. Protect from freezing.

**TECHNICAL DATA: HYDRO-RITE**

Initial dry time @ 70 °F	1 1/2 - 2 hours
Drying time @ 70 °F	24 hours
Elongation ASTM D-638, 21 day	562%
Hydrostatic pressure & alkali resistance, ASTM C-836	Passes
<b>ANSI A118.10 Specification Tests</b>	
Fungus & micro-organism resistance (sec. 4.1)	Passes
Seam strength wide (sec. 4.2)	10.2 lbs/inch
Breaking strength (sec. 4.3)	400 psi
Dimensional stability (sec. 4.4)	0.70%
Waterproofness (sec. 4.5)	Passes
Shear strength:	
7 day dry cure (sec. 5.3)	200 psi
7 day water immersion (sec. 5.4)	150 psi
4 week dry cure (sec. 5.5)	355 psi
12 week dry cure (sec. 5.6)	390 psi
100 day water immersion (sec. 5.7)	190 psi

**SAFETY - CAUTION:** May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.

**KEEP OUT OF REACH OF CHILDREN**

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