



**PRODUCT INFORMATION**

**HYDRO-RITE FS**

Waterproofing and crack isolation membrane.

**HYDRO-RITE FS** is a water based, liquid applied, elastomeric, waterproofing and crack isolation membrane for interior and exterior installations of tile (ceramic, porcelain, and glass) and natural stone. It can also be used as a moisture barrier for interior installations of wood, vinyl, and carpet flooring. **HYDRO-RITE FS** when used as an anti-fracture membrane reduces crack transmission in ceramic tile or stone floors, and allows the installation of tile surfaces to substrates subject to deflection up to 1/240th of the span.

**TEXTURE:**

Semi-paste / Liquid

**COLORS:**

Green

**PACKAGING:**

1 and 3.5 gallon pails.

**BASIC USE:**

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

**BENEFITS**

- > Allows flood testing after 8 hours of second coat is completely dry.
- > Helps prevent tile from cracking and offers superior water proofing properties.
- > Allows for thinner application layer, resulting in better coverage.
- > New, smoother consistency that allows for easier roll-on application.
- > Meets and exceeds ANSI A118.10 & A118.12.

**LIMITATIONS**

- > Temperature must stay above 40F (4C) and below 90F (32C) 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 FS**.
- > Plywood should be exterior grade and used for interior applications of light floors and countertops, where exposure to water is intermittent.
- > **HYDRO-RITE FS** 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 Waterproof Membranes found in ANSI A118.10. Also meets requirements for Crack Isolation Membranes found in ANSI A118.12.

**INSTALLATION:**

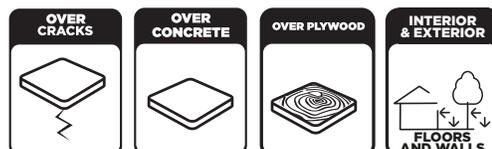
**PREPARATORY WORK**

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 sacrificed or sanded. Cracks in concrete up to 1/8" (3mm) should be pre-filled with membrane prior to application. Cracks in excess of 1/8" (3mm) 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 FS** 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" wide fiberglass mesh into the wet **HYDRO-RITE FS** membrane, 3-inches in each direction. Push the membrane into corners to assure full contact.

**MEMBRANE INSTALLATION:** Next, if using a trowel, spread the **HYDRO-RITE FS** 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" to 1/2" nap roller, apply a continuous, even film with overlapping strokes. Initial membrane appearance is an aqua color when wet and dries to a matte green color. The wet coat



shall be 0.03" - 0.04" thick. After the first coat has turned matte, light green with no blushing or aqua color showing, about 1 hour, visually inspect the film and fill any voids or pinholes with additional material, then apply a second coat 0.03" - 0.04" thick wet coat at right angles to the first. The combined dried coating needs to be a minimum of 0.03" - 0.04" thick, but no more than 0.05" thick. Note: Coverage shall be no more than 45 sq.ft. per gallon for the two combined wet coats. This gives the proper dry thickness 2-4 hours (when the **HYDRO-RITE FS** turns uniform matte, light 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 FS** 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 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 but only one uniform wet coat at 0.03" - 0.04" thick wet (approximately 1/32" dry) is required. The membrane can completely cover the substrate or for crack isolation, apply **HYDRO-RITE FS** 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 FS** using four parts clean water to one part **HYDRO-RITE FS**. Completely coat the slab by using a stiff broom, roller or brush (coverage of 1-gallon of **HYDRO-RITE FS** 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 FS** as directed above for waterproofing, at 0.03"-0.04" 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 products.

**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 0.03"-0.04" of **HYDRO-RITE FS** 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 the tile is not going to be set immediately after curing, **HYDRO-RITE FS** 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**

2 hours at 70°F (21°C) or when color turns matte, light green. A water test can be conducted 8 hours after application if required. For constant water submersions application such as fountain, swimming pools and spas, allow air curing for 14 days before final water filling.

**CLEANING**

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

**COVERAGE**

40 to 45 sq-ft per gallon at 0.04" (40 mils) thickness for waterproofing, 70-80 sq-ft 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 FS**

Test	Typical Values
Elongation at Max. Tensile	> 800%
Initial drying time @70 °F	1.5 - 2 hours
Minimum drying time before flood-testing @70°F	8 hours
Final dry thickness (2 coats)	30 mils at minimum
Coverage (2 coats)	40 - 45 sq. ft. per gallon
ANSI A118.10 & A118.12 Specification Tests	
Mold Growth	Membrane does not support mold growth
Seam Strength	> 20 lbf / 2 in. width
Breaking Strength	> 300 psi
Dimensional Stability	< 0.6%
Waterproofness	No moisture penetration
Shear Strength to Ceramic Tile and Cement Mortar	
7-Day, dry cure	> 100 psi
7-Day, water immersion	> 100 psi
4-Week, dry cure	> 100 psi
12-Week, dry cure	> 60 psi
100-Day, water immersion	> 70 psi
System Crack Resistance Test	Pass

**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. If any material particle get into eyes, flush immediately and repeatedly with water and consult a physician promptly. Freshly material, 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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