



# Waterproofing and Crack Prevention Membrane

SURFACE PREPARATION

Tile Perfect™ Waterproofing and Crack Prevention Membrane forms a smooth, monolithic watertight surface over walls, floors and ceilings. Tile Perfect Waterproofing and Crack Prevention Membrane stops in-plane cracks up to 1/8" (3 mm) wide at the subfloor from telegraphing through to ceramic and stone tile. Use for residential to extra heavy commercial applications. Exceeds ANSI A118.10 Specifications for Waterproofing Membranes and ANSI A118.12 Specifications for Crack Isolation Membranes.

- Protects from water intrusion and tile cracking
- Easy roller or trowel application
- Ready to use
- Membrane resistant to growth of mold and mildew
- Interior/exterior
- IAPMO approved

### Warranty

For details about our limited warranties, see your sales associate or [www.hbfuller-cp.com/tp](http://www.hbfuller-cp.com/tp).

### Suitable Substrates

Recommended for use over the following clean, dry, structurally sound and unpainted surfaces:

- Concrete (minimum 3 days old), cured mortar beds and masonry (interior or exterior)
- Gypsum wallboard (interior), cementitious backer units (CBU or cement board. Interior or exterior.)
- APA Grade Trademarked Exposure 1 Plywood [CDX or better; two layers, 1-1/8" (28 mm) total minimum thickness, interior floors only]
- Existing ceramic tile, VCT or non-cushioned sheetgoods provided they are single layer only and well bonded to a substrate approved for tile (interior)
- Adhesive residue (except tacky or pressure-sensitive adhesive)
- Cold rolled steel

### Limitations

Not for use as a final wear surface. Do not apply over wet areas. Do not use over dimensionally unstable substrates such as particle board, pressboard, lauan plywood, oriented strand board, waferboard, tempered hardboard (e.g, Masonite), fiberglass or single layer wood floors. Do not use in areas subject to hydrostatic pressure from beneath the membrane. Avoid inhaling dust if abrading product.

### Packaging

1 gallon (3.78 L) plastic pail

### Coverage

One gallon covers approximately 50 sq. ft. (4.65 m<sup>2</sup>) when applied at a thickness of 50 mils.

### Product Specifications

Description	ANSI A118.10 Requirement	Typical Results
Shear Strength		
7-Day	50 psi (.34 MPa)	160 psi (1.09 MPa)
7-Day, Water Immersion	50 psi (.34 MPa)	105 psi (0.72 MPa)
4-Week	50 psi (.34 MPa)	180 psi (1.23 MPa)
12-Week	50 psi (.34 MPa)	200 psi (1.37 MPa)
100-Day, Water Immersion	50 psi (.34 MPa)	220 psi (1.50 MPa)
Fungus Resistance	Shall not support mold growth	Passes
Seam Strength	8 lb./inch width	8.1 lb./inch width (1.4 kg/cm)
Breaking Strength	Minimum 170 psi (1.17 MPa)	200 psi (1.37 MPa)
Dimensional Stability	Maximum 0.7% length change	< 0.4% length change
Waterproofness <small>Tested in accordance with American Standards for Load Bearing, Bonded, Waterproof Membranes for Thin Set Ceramic Tile and Dimension Stone Installations—ANSI A118.10</small>	No visible water penetration after 48 hours	Passes
Description	ANSI A118.12 Requirement	Typical Results
Point Load	Minimum 1000 lb. load without cracking tile	Passes
Shear Deflection (Movement Before Shear)	Standard Performance Min. 1/16" (1.5 mm) High Performance Min. 1/8" (3 mm)	High Performance
Crack Resistance Test	Standard Performance Min. 1/16" (1.5 mm) High Performance Min. 1/8" (3 mm)	High Performance
Additional Tests	Test Method	Typical Results
Accelerated Test for Fungal Defacement	ASTM D-5590	Passed with no growth and 10 mm zone off inhibition.
Elongation	ASTM D-751	1400%
Tensile Strength	ASTM D-751	95 psi (0.65 MPa)
Description		
Physical State	Liquid: Styrene Butadiene Rubber Emulsion Waterproofing Mesh: Non-hazardous Fibrous Mesh	
Color Cured:	Yellow	
Odor	Cured: None	
Tile Installation	Time 3-4 hours after membrane application. See CURING [at 70°F (21°C)] section for more information.	
Foot Traffic Rating (ASTM C627)	Residential to Extra Heavy Commercial (depending on substrate)	
Service Temperature Rating	-20°F (-29°C) to 320°F (160°C)	
VOC	6.1 g/L	
VOC (less water)	9.56 g/L	
Freeze/thaw Stability of Liquid	1 cycle	

### Mesh Application (Flashing)

Flashing with TEC Waterproofing Mesh for common problem areas like; inside corners, outside corners, anywhere vertical surfaces meet horizontal surfaces; or anywhere dissimilar materials meet is optional.

To accomplish flashing, first pre-coat the substrate intersections 4" (100 mm) on each

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side. Then fully embed the 6" (152 mm) wide waterproofing mesh in both directions into the pre-coated areas with a 3" (75 mm) overlap on each side. Allow to dry (approximately 30 to 45 minutes) before full application of membrane.

### Membrane Application

Clean substrate from dust with a damp sponge and install membrane right away. For crack isolation apply one coat 50 mils thick. For embrane must be applied in two 25 mils thick coats over the entire surface. Using a 1/4"-1/2" (6-12 mm) nap roller or 3/16" x 5/32" (4.8 x 4 mm) V-notch trowel, apply a continuous, even film with overlapping strokes. Make sure there are no voids, bubbles or breaks in the membrane after cured. Apply first coat at 25 mils wet thickness measuring periodically with a wet film thickness gage. Let it dry for 1 hour. Apply a second 25 mils thick coat at right angle to the first in order to fill the imperfections and pinholes. If trowel used, smooth out the membrane ridges with a flat side of the trowel immediately after the application.

NOTE: If water testing is desired/required prior to tile installation, allow membrane to cure at least 24 hours or when color is changed from milky yellow to dark yellow. If chalk lines will be used for tile layout smooth out the surface of the membrane with a flat side of the trowel when membrane is still wet.

### Curing/Protection

Tile Perfect™ Waterproofing and Crack Prevention Membrane is typically ready for tile application in 3-4 hours. In all cases, care should always be taken to not gouge or otherwise disturb or damage the integrity of the cured membrane. Install tile using any Tile Perfect latex-modified mortar. Cure times based on 70°F (21°C) and 50% RH. Colder temperatures, higher humidity or green concrete (not fully cured) will extend cure times.

### Clean Up

Clean tools, hands and excess material immediately (while still fresh) with water. Material that is cured is difficult or impossible to remove.

### Cautions

FIRST AID MEASURES: In all cases, seek medical attention if symptoms develop or persist. EYES: Flush with water for 20 minutes. SKIN: Wash with soap and water. IF VAPORS INHALED: Remove to fresh air. IF SWALLOWED: Do not induce vomiting. WARNING! This product contains chemicals known to the State of California to cause cancer, birth defects or reproductive harm. KEEP OUT OF REACH OF CHILDREN. For Medical Emergency Information, call 1-888-853-1758.

This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Tile Perfect brand product(s) under normal environmental and working conditions. Because each project is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

### Storage/Shelf Life

Store unopened containers in a cool, dry location out of direct sunlight and protected from weather. Product must be kept at temperatures of 40°-90°F (4°-32°C). Maximum of 1 year from date of manufacture in unopened package.

### Customer and Technical Services

#### Customer support

Toll Free: 800-832-9002  
Fax: 800-952-2368

#### Technical assistance

Information is available by calling the Technical Support Hotline.

Toll Free: 800-832-9023  
Fax: 630-952-1235



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