2. Manufacturer
Parex USA, Inc.
4125 E. La Palma Ave, Suite 250
Anaheim, CA 92807
866-516-0061
www.merkrete.com

3. Product Description
**BASIC USE:** Merkrete BFP Membrane System is a thin, load-bearing crack isolation membrane composed of asphalt-modified latex, reinforced with a polyester fabric that provides a trowel applied monolithic surface with excellent elongation and bond strength. BFP Membrane System, while providing a positive waterproofing, will also provide crack isolation properties by inhibiting the transfer of cracks from the substrate to the finished surface. The membrane is installed in a semi-fluid state and can be applied to practically any form or irregular shape (i.e. base flashings, parapets, walls, etc.) has excellent elongation and strength.

**Uses:** BFP Membrane System is used extensively in heavy-duty applications like high rise buildings, malls and exterior decks to provide waterproofing and crack resistance for thin set ceramic, terrazzo, quarry and stone tile. This membrane can be installed over any sound subsurface.

**Advantages**
- Low VOC
- Interior or exterior
- Crack isolation up to 1/8”
- Thin section – does not interfere with elevations
- Quickly installed. Cures in 24 hours allowing next day overlay
- Completely waterproof with zero porosity
- May be turned up for base flashing and applied to walls for wainscot or shower wall application
- May be installed over a slip sheet for heavier section toppings (i.e. concrete, portland terrazzo, mud set quarry and pavers).

**Suitable Substrates**
- Brick masonry
- Cement backer board\(^1\) and \(^2\)
- Cement mortar beds
- Cement terrazzo
- Ceramic and stone
- Concrete
- Exterior grade plywood\(^2\)
- Gypsum drywall\(^2\)
- Gypsum mortar bed\(^3\)
- Oriented stand board\(^2\)

\(^1\) Consult the cement backer board manufacturer for installation recommendations and to verify acceptability for exterior use
\(^2\) Interior use only – wood substrates; shall be skim coated with Merkrete latex modified thinset mortar
\(^3\) Consult Merkrete Technical Services; requires the use of 101 Overspray primer

4. Technical Data
**Applicable Standards:** Merkrete BFP Membrane System meets or exceeds tile industry requirements: ANSI A118.10 load-bearing bonded waterproof membrane for thin set ceramic tile and dimension stone installation, also ANSI A118.12 crack isolation membrane for thin set ceramic tile and dimension stone installation. Follow ANSI 108.13 and A108.17 for installation, in addition to these directions.

**Approvals**
- ICC Evaluation Report ESR-2619
- IAPMO / UPCc File #4073
- City of Los Angeles, Department of Building and Safety, Research Report #RR-4321
BFP Membrane
Heavy Duty Waterproof and Crack Isolation Membrane

Physical & Test Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Adhesion</td>
<td>&gt; 500 psi</td>
</tr>
<tr>
<td>Elongation</td>
<td>&gt; 500%</td>
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<tr>
<td>Porosity</td>
<td>Zero transmission (115 psi for one hour)</td>
</tr>
<tr>
<td>Range of temperature for use</td>
<td>40° F to 110° F (at installation) 35° F to 150° F (after installation)</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>0% (Total immersion for 24 hours)</td>
</tr>
<tr>
<td>Drying Time*</td>
<td>48 hours at 70° F and 50% R.H.</td>
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</table>

LEED 2.2 NC VOC

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<tr>
<th>Property</th>
<th>EQ Credit 4.1</th>
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<tbody>
<tr>
<td>VOC</td>
<td>BFP Membrane Results</td>
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<tr>
<td>VOC</td>
<td>&lt; 65 g/l VOC</td>
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<td>VOC</td>
<td>&lt; 48 g/l VOC</td>
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LEED 2.2 NC VOC

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<tr>
<th>Property</th>
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<tbody>
<tr>
<td>VOC</td>
<td>BFP Latex/Filler Results</td>
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<tr>
<td>VOC</td>
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<tr>
<td>VOC</td>
<td>&lt; 8 g/l VOC</td>
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</table>

* When cured at 70° F or higher at 50% R.H. Lower temperature at higher R.H. will require longer cure times

Packaging:
- BFP Latex: 5 gal. pail (2-1/2 gal per 40 lb. BFP Filler), 36 pails per pallet
- BFP Filler: 40 lb. bag, 48 bags per pallet
- BFP Membrane: 5 gal. pail, 36 pails per pallet
- Type 3 Synthetic Burlap Fabric: 10” x 300 l/f = 250 s/f, 80 rolls per pallet
- Type 3 Synthetic Burlap Fabric: 40” x 300 l/f = 1000 s/f, 20 rolls per pallet

Shelf Life: Reference Parex USA Expiration Date of Products Technical Bulletin.

5. Installation

Surface Preparation: All surfaces must be between 40º F (4º C) to 95º F (35º C) and structurally sound (deflection not to exceed 1/360 of the span), dry, clean and free from oil, grease, wax, paint, old adhesives, sealers and curing compounds. Any contaminates which inhibit proper bond must be removed. Substrate preparation should be completed following ANSI A108.01 “General Requirements: Subsurfaces and Preparation by Other Trades.” All substrates should be plumb and true, surface deviation should not exceed 1/4” in 10’. Patching, leveling or properly sloping of wet or exterior areas requiring a mortar bed should be prepared using Merkrete underlayments. If product has separated or thicken hard, product should be mixed with a slow mixing drill, not incorporating air. Some separation may occur upon standing, which has no reflection upon the quality of the product.

Reinforcement

BFP System has been formulated to perform as a waterproof and crack isolation membrane with reinforcing fabric. As a waterproof membrane, manufacturer recommends the use of supplied 10” and 40” Synthetic Type 3 reinforcing fabric to ensure maximum protection in the field as well as joints, changes in plane, cracks, protrusions, dissimilar materials, and drains.

Membrane Application:
Prime Coat: Mix 2-1/2 gallons of BFP Latex with one 40 lb. bag of BFP Filler. Trowel or brush the primer mixture 5 inches up all vertical surfaces and the entire area that will receive BFP Membrane trowel. Allow to dry to the touch.

Perimeter: Next, apply the waterproofing at the perimeter. Flash in 4 foot long sections, brush BFP Membrane over the primed vertical surfaces and coving 5” onto the floor. Immediately lay 10” wide Synthetic Burlap into the wet membrane on the walls and floor, brush back and forth to remove wrinkles and allow bleed through of liquid membrane. Then firmly brush additional BFP Membrane to completely saturate, coat and cover the fabric. Overlap fabric edges a minimum of 2 inches. Finish the application on the perimeter area before beginning work on the field area.
In the Field: Apply BFP Membrane by roller, brush or trowel to a 42" wide section of the floor and lay the 40" wide Synthetic Burlap Type 3 fabric into the wet liquid membrane and apply additional BFP Membrane to saturate and cover the fabric. Overlap each edge of the fabric a minimum of 2 inches. Allow BFP Membrane to dry to the touch. After the BFP Membrane has dried, apply the protection coat. Merkrete recommends a second coat if pin holes are visible.

Protection Coat: Mix 2-1/2 gallons of BFP Latex with one 40 lb. bag of BFP Filler. Brush, roll or trowel apply the protection coat over the BFP Membrane and allow to dry.

Movement (expansion) joints: Designed to experience movement, should be provided to comply with TCA method EJ 171. For waterproofing of movement (expansion) joints, the membrane must not be applied unsupported to bridge across expansion joints. The joint must be cleaned to remove any loose debris and an opened or closed – cell backer rod is installed to the joint to the proper depth as specified by designer. Merkrete PUC sealant or Merkrete approved equal is pressed into the joint, coating the sides and leaving the joint flush with the surface. After the sealant is dry, the BFP Membrane is applied following the “Membrane Application” instructions above. Then ceramic or stone tiles are installed over the membrane, leaving a gap over the joint as specified by the designer. After the tile is set, the joint must be filled as specified by the designer.

Ceramic or Stone Application: Ceramic or stone tile can be installed 24 hours after the BFP Membrane has dried to the touch. Merkrete recommends a quality latex portland cement thin set like Merkrete Systems: Latex 200/211 Filler, 735, 750, and 820 mortars. Follow the directions on the thin set container for proper application.

Curing: Water testing can usually be done after a minimum of 48-72 hours at 70° F (21° C) and 50% R.H. For pools, water features, and submerged areas; a minimum of 10 day cure is required before water test. For faster water testing use Merkrete Hydro Guard SP-1 waterproof membrane. Provide adequate protection for BFP Membrane System, even if covered with a ceramic or stone tile application, against exposure to rain, or inclement weather for a minimum of 48 hours at 70° F (21° C) and 50% R.H.

Cleaning: Clean tools, hands and equipment with warm soapy water before the material has dried. Material that has dried is difficult to remove, remove while fresh.

Coverage:
- 1st Coat: BFP Latex and BFP Filler (Primer Coat): coverage is approximately 250 sf per mix (BFP Latex 2-1/2 to BFP Filler 40 lb.)
- 2nd Coat: BFP Membrane: coverage is approximately 40 sf per gallon (200 sf per 5 gallons) when used with Type 3 Burlap.
- 3rd Coat: BFP Latex and BFP Filler (Protective Coat): coverage is approximately 250 sf per mix (BFP Latex 2-1/2 to BFP Filler 40 lb.)
*Primer and Protection Coat: 1 @ 5 Gallon Container of Latex and 2 @ 40 lb bags of filler will cover 250 sf for both layers*

Limitations: Do not use BFP Membrane System or substrate to be below 40° F (4° C) for the first 72 hours after application. Cool and wet weather may delay the set times of the BFP Membrane components. Do not apply over surfaces subject to hydrostatic pressure. Do not use as a primary roofing membrane. Do not leave BFP Membrane System unprotected or exposed to weather for more than 30 days. Do not use membrane as an adhesive or wearing surface, membrane must be covered with ceramic or stone tile. BFP Membrane will not bridge substrate expansion joints, consult Merkrete for required special treatment. Plywood subsurfaces must be adequately blocked at joints. Joints that are open more than 1/16” must be filled with suitable underlayment prior to the application of the membrane. Consult manufacturer for special requirements.
6. Availability
Merkrete BFP Membrane System is available at leading tile houses and construction distributors. Contact Merkrete for the name of the nearest dealer at www.merkrete.com.

7. Warranty
5 year, 10 year and Limited Lifetime warranties are available. Contact Merkrete Technical Services for specific warranty information. Merkrete Systems warrants that this product meets applicable ANSI standards in force at the time of manufacture.

8. Maintenance
None required, but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. Technical Services
Merkrete Systems maintains technical field representatives available throughout the country. Call Technical Services at 800-226-2424 for the nearest representative.

10. Filing Systems
Merkrete architectural product information available either in catalog form, or electronically on our website at www.merkrete.com.