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 Hydro Guard 2000 is a heavy duty, thin, load-bearing membrane composed of a modified elastomeric copolymer. With excellent elongation properties and high strength, Hydro Guard 2000 provides a 100% waterproof membrane coating in addition to performing as a crack isolation membrane, limiting the transfer of substrate cracks to the finished overlay. The membrane is installed in a liquid state and can be applied to practically any form or irregular shape (i.e. base flashings, parapets, walls, etc.).

Uses: Hydro Guard 2000 is ideal for use in commercial buildings, residential housing and other areas requiring positive waterproofing like pools, fountains, steam rooms, spas, hot tubs, kitchens, countertops, balconies, tub surrounds, shower stalls and pans, under terrazzo, quarry, ceramic and stone tile. This membrane can be installed over any sound substrate, vertically or horizontally, interior and exterior.

Advantages
• Low VOC
• Reduced odor
• Interior or exterior
• Crack isolation up to 1/8"
• Adheres to all common surfaces
• Built in antimicrobial for mold and mildew resistance at the substrate
• Installs quickly, cures in 2 – 4 hours (70° F, 50% R.H.)
• Fast drying, foot traffic in 4 – 6 hours
• Thin section that does not interfere with elevations
• Fabric reinforcement assists in controlling proper membrane depth
• Exceeds ANSI A118.10 and A118.12 membrane requirements
• Easy to use; can be applied by trowel, airless sprayer, paint brush and roller
• May be turned up for base flashing and applied to walls for wainscot or shower wall application

Suitable Substrates
• Brick masonry
• Cement backer board for interiors only¹
• Cement mortar beds
• Cement terrazzo
• Ceramic and stone
• Concrete
• Exterior grade plywood²
• Gypsum drywall²
• Gypsum mortar bed³
• Oriented stand board²

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 Requires the use of 101 Overspray primer

4. Technical Data
Applicable Standards: Merkrete Hydro Guard 2000 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 ANSI A108.17 for installation, in addition to these directions.
Hydro Guard 2000
Heavy Duty Elastomeric Waterproof and Crack Isolation Membrane

Approvals
ICC Evaluation Report ESR-2619
IAPMO / UPCc File #4073
City of Los Angeles, Department of Building and Safety, Research Report #RR-4321
Peoples Republic of China approval

Physical & Test Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Hydro Guard 2000</th>
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<tbody>
<tr>
<td>Adhesion (shear)</td>
<td>&gt; 250 psi</td>
</tr>
<tr>
<td>Elongation</td>
<td>&gt; 500%</td>
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<tr>
<td>Porosity</td>
<td>0 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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</tbody>
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LEED 2.2 NC VOC

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<thead>
<tr>
<th>EQ Credit 4.1 Hydro Guard 2000 Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
</tr>
<tr>
<td>&lt; 65 g/l VOC</td>
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<tr>
<td>&lt; 15 g/l VOC</td>
</tr>
</tbody>
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* When cured at 70° F or higher at 50% R.H. Lower temperature at higher R.H. will require longer cure times

Packaging:
• 2 Gallon Unit: 2 gal. pail (7.56 l) of Hydro Guard 2000 liquid, 36 pails per pallet

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

5. Installation
Surface Preparation: All surfaces must be between 40° F (4° C) to 95° F (35° 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
Hydro Guard 2000 has been formulated to perform as a waterproof membrane with reinforcing fabric. As a waterproof membrane, manufacturer recommends the use of supplied 8” and 36” reinforcing fabrics to ensure maximum protection in the field as well as at joints, cracks, protrusions, dissimilar materials, and drains.

Preparation
Joints, Cracks and Protrusions: Pre fill all substrate cracks, cold and control joints with Merkrete latex modified thin sets or PUC caulking. Fill all voids with Merkrete latex modified thin sets to within a minimum of 1/8”. Apply a liberal coat of Hydro Guard 2000 liquid around joints, cracks and protrusions. Embed Merkrete 8” reinforcing fabric into the wet Hydro Guard 2000, cover with a second coat of Hydro Guard 2000, “sandwiching” the reinforcing fabric. Apply an additional application to prevent pinholes.

Drains: must be of the clamping ring type with weep holes for thin set application. Drain should be even, level, plumb and fully supported, without movement. Fill all voids with Merkrete Latex Modified thin set to within a minimum of 1/8” from the drain. Apply a liberal coat of Hydro Guard 2000 liquid around and over the bottom drain clamping ring. Embed Merkrete 8” reinforcing fabric into the wet Hydro Guard 2000, cover with a second coat of Hydro Guard 2000, “sandwiching” the reinforcing fabric. Apply an additional application to prevent
After drying, set the upper clamping ring onto the Hydro Guard 2000 membrane with a continuous bead of Merkrete PUC caulking or similar material. A toilet flange can be treated in the same manner.

**Cement Substrates:** All concrete substrates should be cured a minimum of 28 days. Smooth steel troweled floors to a fine broom finish.

**Cement Backer Board:** Follow cement board manufacturer’s instructions. Tape and fill joints per manufacturer’s directions and “Preparation” section of this data sheet.

**Plywood and OSB Substrates:** All plywood installations should be interior areas only and protected from exposure to moisture. Skim coat plywood surfaces with Merkrete latex modified thin set before membrane application.

**Membrane Application:** Allow any recently prepared areas to dry. Apply a liberal coat of Merkrete Hydro Guard 2000 Membrane at a rate of 50 sf per gallon. Periodically, check the film thickness with a wet film thickness gauge, first wet coat should be applied 30 mils wet thickness. Apply Merkrete reinforcing fabric into the wet Hydro Guard 2000, overlap fabric seams approximately 2”. After the Hydro Guard 2000 turns black, cover with a second coat of Hydro Guard 2000 at 30 mils wet thickness, “sandwiching” the reinforcing fabric. An additional coat of Hydro Guard 2000 liquid should ensure any voids or pinholes missed in the first two applications are coated. Total Hydro Guard 2000 membrane thickness after drying should be 40 mils.

**Control joints and cracks:** Any tile soft joints near substrate control joints or cracks must be filled with Merkrete PUC sealant or any TCNA EJ 171 approved sealant, in the tile joint. To assist tile layout, those soft joints maybe moved over to the closest tile grout joint each side of the control joint or crack. Detail soft joints like TCNA method F125.

**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 Hydro Guard 2000 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 immediately after the Hydro Guard 2000 membrane has dried to the touch. Merkrete recommends a quality latex portland cement thin set like Merkrete Systems: 705, 710, 7D10, 720, 750, 801 and 820 mortars. Follow the directions on thin set container for proper application.

**Curing:** Water testing can usually be done after a minimum of 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 membrane. Provide adequate protection for Hydro Guard 2000 membrane, even if covered with a ceramic or stone tile application, against exposure to rain, or inclement weather for a minimum of 24 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 (Approximate)**
- 2 gallon unit: 100 sf
- 5 gallon unit: 250 sf
Limitations: Do not use Hydro Guard 2000 membrane below 40°F (4°C); do not allow membrane 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 Hydro Guard 2000 membrane. Do not apply over surfaces subject to hydrostatic pressure. Do not use as a primary roofing membrane. Do not leave Hydro Guard 2000 membrane 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. Maximum amount of moisture in the concrete substrate using a calcium chloride test should not exceed 5 lbs/1,000 ft².

6. Availability
Merkrete Hydro Guard 2000 membrane is available at leading tile houses and construction distributors. Contact Merkrete for the name of the nearest dealer.

7. Warranty
5 year, 10 year and Limited Lifetime warranties are available. Contact Merkrete Technical Services or visit our web site 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.

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