



**DIVISION: 09 00 00—FINISHES**  
**Section: 09 30 00—Tiling**

**REPORT HOLDER:**

**PAREX USA, INC.**  
[www.parexusa.com](http://www.parexusa.com)

**EVALUATION SUBJECT:**

### MERKRETE HYDRO-GUARD WATERPROOF MEMBRANES

#### 1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2021, 2018, 2015, 2012 and 2009 *International Building Code*® (IBC)
- 2021, 2018, 2015, 2012 and 2009 *International Residential Code*® (IRC)
- 2021, 2018, 2015, 2012 and 2009 *International Plumbing Code*® (IPC)
- 2021, 2018, 2015, 2012, 2009 *Uniform Plumbing Code*® (UPC)
- 2019, 2016, 2013, 2010 *California Plumbing Code*® (CPC)
- 2020 and 2017 *City of Los Angeles Plumbing Code*
- 2021, 2018, 2015 and 2012 *National Standard Plumbing Code*® (NSPC)
- 2017 and 2007 *Code of Massachusetts Regulation 248 CMR 10.00: Uniform State Plumbing Code*
- 2020 and 2017 *Florida Building Code - Plumbing*

**Property evaluated:**

Water resistance

#### 2.0 USES

Merkrete Hydro-Guard waterproof membranes are used on concrete substrates, as a barrier to liquid water migration, in bonded, thin-set installations of ceramic tile, dimensioned stone and other finishing materials under the IBC and the IRC. The membranes are also used as a shower sub-pan lining material in accordance with the IPC and the UPC.

#### 3.0 DESCRIPTION

##### 3.1 General:

Merkrete Hydro-Guard waterproof membranes are liquid-applied, elastomeric waterproofing materials that

incorporate reinforcement and cure to a monolithic membrane.

##### 3.2 Materials:

**3.2.1 Merkrete Hydro-Guard Membranes:** Ready-to-use, 50-percent-solids, asphalt-modified neoprene latex liquids. Shelf life is one year from the date of manufacture when stored unopened at temperatures between 50°F and 70°F (10°C and 21.1°C). The liquid material must not be allowed to freeze.

**3.2.2 Type 2 Reinforcing Fabric:** The Type 2 reinforcing fabric is a spunbonded polyester with a weight of 1.5 pounds per 100 square feet (0.073 kg/m<sup>2</sup>). The fabric is provided in 1200-square-foot (110.4 m<sup>2</sup>) and 280-square-foot (26.1 m<sup>2</sup>) rolls.

#### 4.0 INSTALLATION

##### 4.1 Surface Preparation:

Concrete substrates must be clean and free of all oils, greases, curing compounds, sealers, primers and other contaminants that might affect the adhesive bond. Dry or dusty surfaces must be swept off and dampened. New concrete must be sloped for proper drainage and cured a minimum of 28 days prior to application. All voids, cracks, holes, joints and excessively rough areas must be filled with a cementitious material to achieve a smooth and uniform surface before application of the Merkrete Hydro-Guard materials.

##### 4.2 Application:

Merkrete Hydro-Guard liquid is applied to the substrate in three coats, using a brush, roller [<sup>3</sup>/<sub>8</sub>-inch (9.5 mm) nap] or trowel [<sup>1</sup>/<sub>8</sub>-by-<sup>1</sup>/<sub>8</sub>-inch (3.2 by 3.2 mm) v-notch]. Ambient and substrate temperatures must be between 40°F and 110°F (4.4°C and 43°C). The first coat is applied at a coverage rate of 1 gallon per 100 square feet (0.41 L/m<sup>2</sup>) for a wet thickness of approximately 17 mils [0.017 inch (0.43 mm)]. While the surface is wet, the reinforcing fabric is embedded into the liquid. The reinforcing fabric must be applied over the entire surface, around drains, in corners, and at any change in plane. The reinforcing fabric must be overlapped 2 inches (51 mm) at edges and ends and turned up at all wall junctions a minimum of 4 inches (102 mm). The second coat of liquid is then spread over the fabric at a coverage rate of 1 gallon per 100 square feet (0.41 L/m<sup>2</sup>). The second coat must dry a minimum of eight hours before application of the third coat. The third coat of liquid is then applied at a coverage rate of 1 gallon per 100 square feet (0.41 L/m<sup>2</sup>). The membrane must dry a minimum of eight hours before application of ceramic tile or dimension stone. Approximate membrane dry thickness is 46 mils (1.17 mm). Ceramic tile must comply with ANSI A137.1.

See Figure 1 for typical installation details.

#### 4.3 Application at Expansion Joints:

The membrane must not be applied unsupported to bridge across expansion joints. When applied into an expansion joint, the joint must be cleaned to remove any loose debris, and an opened or closed-cell backer rod is installed into the joint to proper depth as specified by the designer. A sealant is pressed into the joint, coating the sides and leaving the joint flush with the surface. After the sealant is dry, the membrane is applied as described in Section 4.2. The tiles or other finishing materials are then applied over the membrane, leaving a gap over the joint as specified by the designer. After the work is set, the joint must be filled as specified by the designer.

#### 4.4 Method of Repair:

The damaged membrane in the area requiring repair must be cut out and the area cleaned, allowing for a minimum 2-inch (51 mm) overlap. Following removal of the damaged membrane, Merkrete Prep Seal latex adhesive is applied to the area and allowed to dry to the touch before the new membrane is applied as described in Section 4.2. If there is a need to remove existing tile, stone or other finishing materials to repair the damaged membrane, tile, stone or other finishing materials must be chipped away from the side between the tile or stone and the thin set without disturbing any undamaged membrane beneath the thin set. The thin set is ground (lightly) to the top surface of the membrane without disturbing any undamaged membrane. The damaged membrane in the area requiring repair must be cut out and the area cleaned, allowing for a minimum 2-inch (51 mm) overlap. Merkrete, Prep Seal latex adhesive is applied to the area and allowed to dry to the touch before the membrane is applied as described in Section 4.2.

#### 5.0 CONDITIONS OF USE

The Merkrete Hydro-Guard waterproof membranes described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

#### 5.1

Application must comply with this report, the manufacturer's published installation instructions and the applicable code. In the event of a conflict between the installation instructions and this report, this report governs. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

#### 5.2

Application is limited to ceramic tile, dimension stone or other finishing materials installed on floors. The membranes are also used as shower sub-pans or linings.

#### 5.3

The membrane must not be applied unsupported to bridge across expansion joints in the substrate.

#### 6.0 EVIDENCE SUBMITTED

Data in accordance with the Acceptance Criteria for Waterproof Membranes for Flooring and Shower Lining (AC115), dated June 2003 (editorially revised November 2016) and TNCA/ANSI A118.10-2014 (R19).

#### 7.0 IDENTIFICATION

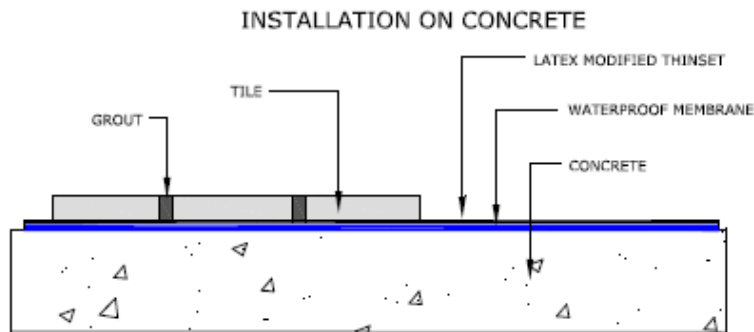
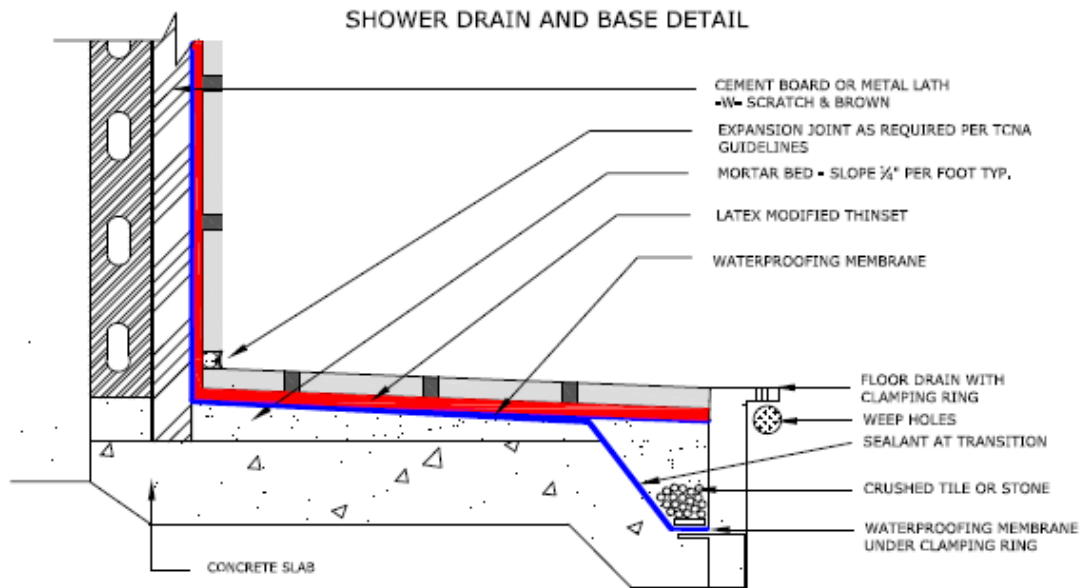
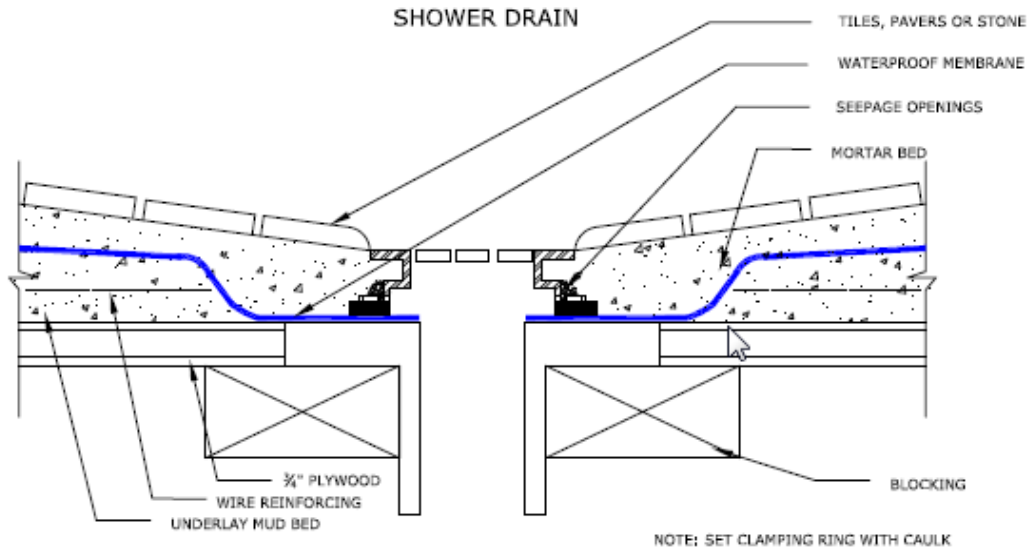
#### 7.1

Each container of Merkrete Hydro-Guard liquid is identified by a label bearing the Parex USA, Inc., name and address, the product name, the date of manufacture, and the evaluation report number (ESR-2619). The reinforcing fabric, expansion joint fabric and latex adhesive are identified with the Parex USA, Inc., name and the product names (Type 2 Reinforcing Fabric and Prep Seal).

#### 7.2

The report holder's contact information is the following:

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**FIGURE 1—TYPICAL INSTALLATION DETAILS**