RedGard® Waterproofing and Crack Prevention Membrane

1 Product Name
RedGard® Waterproofing and Crack Prevention Membrane

2 Manufacturer
Custom Building Products
Technical Services
10400 Pioneer Boulevard, Unit 3
Santa Fe Springs, CA 90670
Customer Support: 800-272-8786
Technical Services: 800-282-8786
Fax: 800-200-7765
Email: contactus@cbpmail.net
custombuildingproducts.com

3 Product Description
A ready-to-use elastomeric waterproofing membrane for both commercial and residential tile and stone application. Suited for interior and exterior substrates, RedGard® creates a continuous waterproof membrane barrier with outstanding adhesion and reduces crack transmission in tile and stone floors. It bonds directly to clean metal drains, PVC, stainless steel and ABS drain assemblies and can be used as a slab-on-grade moisture vapor barrier under all types of floor coverings.

Key Features
- Ready to use - Roll it on
- Quick dry formula
- Listed with IAPMO for use as a shower pan liner

Suitable Substrates
- Concrete, cement mortar, masonry
- Cement Backerboard
- Exterior Plywood and OSB (interior, dry areas only)
- Exterior Decks - Contact Technical Services
- Post-Tension Concrete - Contact Technical Services
- Lightweight Concrete (min. 2000 psi compressive strength)
- Gypsum-Based cement topping (min. 2000 psi compressive strength)
- Existing ceramic tile and resilient flooring
- Floor heating systems - contact Technical Services

Composition of Product
RedGard® is a liquid-applied elastomeric waterproofing material that cures to form a monolithic membrane.

Benefits of Product in the Installation
- Easy to use and can be applied by roller, trowel or airless sprayer
- Rated for extra heavy duty service
- Reduces curing time with quick-dry formula
- Isolates cracks to 1/8" (3 mm)
- Suitable for waterproofing pools, spas and water features
- Meets Uniform Plumbing Code specifications for use as a shower pan liner
- Obtained the Notice of Acceptance (NOA) for Miami-Dade County

Limitations to the Product
- Do not apply to surfaces that may drop below 40°F (4°C) within 72 hours of application.
- Do not apply over wet surfaces or surfaces subject to hydrostatic pressure.
- Do not use to bridge or cover over existing expansion, control, construction, cold or saw cut joints; use Crack Buster® Pro Membrane for control, cold or saw cut joints.
- Do not use as an adhesive.
- Do not use as a wear surface; the membrane must be covered with tile or other permanent flooring.
- Do not use solvents in conjunction with the membrane

Packaging
- 1 gallon (3.78 L) pail
- 3.5 gallon (13.2 L) pail

4 Technical Data
Applicable Standards
- ASTM C627 Standard Test Method for Evaluating Ceramic Floor Tile Installation Systems Using the Robinson-Type Floor Tester

Tile Council of North America (TCNA) TCNA Handbook for Ceramic Tile Installation, TCNA Method EJ171, F125 & F125A

Published Date: 8/24/2017
RedGard® Waterproofing and Crack Prevention Membrane

Approvals
RedGard® has tested and complies with Uniform Plumbing Code and International Plumbing Code standards for use as a shower pan liner per IAPMO Research and Testing, Inc., File No. 4244. RedGard® has tested and complies with International Building Code (IBC), International Residential Code (IRC) and International Plumbing Code (IPC) standards for water resistance per ICC Evaluation Service, ESR-413. RedGard® complies with the Product Control Division of the Miami Dade County Building Code Compliance Office for waterproofing standards and has earned a Notice of Acceptance (NOA), File No. 07-1010.16. RedGard® conforms to “safating material” requirements established by the Wisconsin Administrative Code, Chapter Comm 84.30-6f.

Technical Chart

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Requirement</th>
<th>Typical Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungus Resistance</td>
<td>A118.10</td>
<td>No Growth</td>
<td>Pass</td>
</tr>
<tr>
<td>Seam Strength</td>
<td>A118.10</td>
<td>&gt; 8 lbs/” width</td>
<td>16 lbs/2” (7.3 kg/5 cm) width</td>
</tr>
<tr>
<td>Breaking Strength</td>
<td>A118.10</td>
<td>&gt; 170 psi</td>
<td>484 psi (34 kg/cm²)</td>
</tr>
<tr>
<td>Dimensional Stability</td>
<td>A118.10</td>
<td>+/- 0.7%</td>
<td>0.05%</td>
</tr>
<tr>
<td>Waterproofness</td>
<td>A118.10</td>
<td>No Water Penetration</td>
<td>Pass at 25 mils dry</td>
</tr>
<tr>
<td>Steam Shower Requirement</td>
<td>ASTM E-96</td>
<td>&lt; 0.5 perms</td>
<td>0.35 perms at 30 mils dry</td>
</tr>
<tr>
<td>Shear Bond Strength to Cement Mortar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four Week Shear Strength</td>
<td>A118.10</td>
<td>&gt; 50 psi</td>
<td>267 psi (18.8 kg/cm²)</td>
</tr>
<tr>
<td>Shear Strength After Water Immersion</td>
<td>A118.10</td>
<td>&gt; 50 psi</td>
<td>89 psi (6.3 kg/cm²)</td>
</tr>
<tr>
<td>System Crack Resistance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Performance</td>
<td>A118.12</td>
<td>&gt; 1/16” and &lt; 1/8”</td>
<td>Pass at 30 mils dry</td>
</tr>
<tr>
<td>High Performance</td>
<td>A118.12</td>
<td>&gt; 1/8”</td>
<td>Pass at 30 mils dry</td>
</tr>
<tr>
<td>Point Load</td>
<td>A118.12</td>
<td>&gt; 1000 lbs</td>
<td>&gt; 1000 psi</td>
</tr>
<tr>
<td>Robinson Test</td>
<td>A118.12</td>
<td>As Specified</td>
<td>14 Cycles; Extra Heavy</td>
</tr>
</tbody>
</table>

Environmental Consideration
Custom® Building Products is committed to environmental responsibility in both products produced and in manufacturing practices. Use of this product may contribute to LEED® certification.

Published Date: 8/24/2017
RedGard® Waterproofing and Crack Prevention Membrane

Download the illustrated installation details by clicking on the link above or go to CustomBuildingProducts.com/TSD, select "Tile" as the installation type and select the appropriate illustrated TCNA detail by number (example: B414).

RedGard at Drains

Drains should have a clamping ring with open weep holes for thin-set application. Apply the membrane to the bottom of the flange. The drain should be fully supported, without movement, and should be even with the plane of the substrate. Apply the RedGard membrane around drain. Embed a 12" x 12" (30 x 30 cm) fiberglass mesh into the membrane, making sure it does not obstruct the drainage weep holes. Then apply an additional coat of the membrane and smooth. After curing, clamp the upper flange onto the membrane and tighten. Use a silicone caulk around the flange where the membrane and the upper flange make contact. A toilet flange can be handled in much the same manner.

RedGard® as Crack Prevention Membrane

Force RedGard® into cracks with the flat side of the trowel, roller or brush. Using a 3/16"-1/4" (5-6 mm) V-notch trowel or 3/8" (9.5 mm) rough textured roller. Use the flat side of the trowel and flatten the ridges to form a continuous, even coat of material. The membrane should extend a minimum of the diagonal measurement of the tile beyond both sides of the crack. Gaps between plywood sheets and where floors meet walls must also be prefilled. For continuous crack isolation, cover the entire substrate with RedGard® applied at a rate of 100 sq. ft. per gallon. To meet the requirements of ANSI A118.12, apply two coats of RedGard® at a rate of 50 sq. ft. per gallon each coat.

RedGard® as General Waterproof Membrane (ANSI 118.10)

Cracks to 1/8" (3 mm) should be prefilled before beginning the waterproofing application. Lightly dampen all porous surfaces. Use a 3/4" (19 mm) roughtextured synthetic roller or a 3/16"-1/4" (56 mm) V-notch trowel and heavily precoat the corners and the intersections where the floors and walls meet, extending 6" (15 cm) on either side. For extra protection, embed a 6" (15 cm) wide fiberglass mesh into the membrane for changes of plane and for gaps 1/8" (3 mm) or greater. Apply RedGard® at a rate of 110 sq ft per gallon each coat. If using a trowel, spread the material with the trowel held at a 45° angle, and then flattens the ridges. If using a roller, apply a continuous, even film with overlapping strokes. An airless sprayer may be used for the waterproofing application. The sprayer must produce a tip orifice size of 0.025 - 0.029. Apply a continuous film with overlapping strokes. The membrane should be fully cured, with no visible pink color. It typically takes 1-1.5 hours to cure completely red. After the first coat turns red, inspect the film for integrity and fill any voids or pinholes with additional material. Apply a second coat at right angles to the first coat. To meet the requirements of IAMPO, two coats should be applied at a rate of 80 sq. ft. per gallon each coat. In all cases the wetfilm thickness should not exceed 125 mils.

Curing of Product

RedGard® is dry when it turns solid red, with no visible pink color. Typically, drying time is 1-1.5 hours; depending on ambient conditions, drying time can be as much as 12 hours. After the second coat is applied and both coats are fully cured, the application area can be flood tested.

Protection

If tile or stone will not be set immediately after curing, protect the application from heavy traffic damage. Protect from rain and inclement weather for 72 hours after application. If delays longer than 72 hours are expected, cover the area with felt paper. Care should be taken to prevent the application from becoming soiled or punctured during and after application.

Tile and Stone Installation

Install tile or stone with a Custom® Building Products polymer-modified mortar that meets ANSI A118.4 or A118.15 standards.

Cleaning of Equipment

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

Health Precautions

Wear impervious gloves and eye protection while using this product. Avoid contact with eyes or prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, rinse cautiously with water for several minutes, remove contact lenses if easy to do: continue rinsing. Immediately seek medical advice if symptoms are significant or persist. Do not take internally. KEEP OUT OF REACH OF CHILDREN.

Conformance to Building Codes

Installation must comply with the requirements of all applicable local, state and federal code jurisdictions.

6 Availability & Cost

<table>
<thead>
<tr>
<th>Location</th>
<th>Item Code</th>
<th>Size</th>
<th>Color</th>
<th>Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>LQWAF1</td>
<td>1 gallon (3.78 L)</td>
<td>Pink</td>
<td>Pail</td>
</tr>
<tr>
<td>USA</td>
<td>LQWAF3</td>
<td>3.5 gallon (13.2 L)</td>
<td>Pink</td>
<td>Pail</td>
</tr>
<tr>
<td>Canada</td>
<td>CLLQWAF1</td>
<td>1 gallon (3.78 L)</td>
<td>Pink</td>
<td>Pail</td>
</tr>
<tr>
<td>Canada</td>
<td>CLLQWAF3</td>
<td>3.5 gallon (13.2 L)</td>
<td>Pink</td>
<td>Pail</td>
</tr>
</tbody>
</table>

7 Product Warranty

Custom® Building Products warrants to the original consumer purchaser that its product shall be free from defects in material and workmanship under normal and proper usage for a period of one year following the date of original purchase. CUSTOM’s sole liability under this warranty shall be limited to the replacement of the product. Some states, countries or territories do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty will not extend to any product which has been modified in any way or which has not been used in accordance with CUSTOM’s printed instructions. CUSTOM makes no other warranties either expressed or implied. This warranty gives you specific legal rights, and you may have other rights that vary from state to state or from one country/territory to another. This warranty is not transferrable.
When RedGard® Waterproofing and Crack Prevention Membrane is used as a part of a qualifying full installation system of CUSTOM products, the installation can qualify for up to a lifetime system warranty. CUSTOM will repair and/or replace, at its discretion, the affected area of the system. For more information, find details and limitations to this warranty at custombuildingproducts.com.

8 Product Maintenance
Properly installed product requires no special maintenance. Do not use as a wear surface.

9 Technical Services Information
For technical assistance, contact Custom technical services at 800-272-8786 or visit custombuildingproducts.com.

10 Filing System
Additional product information is available from the manufacturer upon request.

Related Products
Waterproofing and Anti-Fracture Membrane Mesh
RedGard® SpeedCoat® Waterproofing Membrane
## Coverage

<table>
<thead>
<tr>
<th>Size</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RedGard as Crack Prevention Membrane:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Gallon (3.78 L)</td>
<td>100 sq. ft (9.3 M²)</td>
</tr>
<tr>
<td>3.5 Gallon (13.2 L)</td>
<td>350 sq. ft (32.5 M²)</td>
</tr>
<tr>
<td><strong>RedGard as Crack Prevention Membrane meeting ANSI A118.12:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Gallon (3.78 L)</td>
<td>25 sq. ft (2.3 M²)</td>
</tr>
<tr>
<td>3.5 Gallon (13.2 L)</td>
<td>88 sq. ft (8.2 M²)</td>
</tr>
<tr>
<td><strong>RedGard as Waterproof Membrane:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Gallon (3.78 L)</td>
<td>55 sq. ft (5.1 M²)</td>
</tr>
<tr>
<td>3.5 Gallon (13.2 L)</td>
<td>192 sq. ft (17.8 M²)</td>
</tr>
<tr>
<td><strong>RedGard as IAPMO Pan Liner meeting ANSI A118.10:</strong></td>
<td></td>
</tr>
<tr>
<td>1 Gallon (3.78 L)</td>
<td>40 sq. ft (3.7 M²)</td>
</tr>
<tr>
<td>3.5 Gallon (13.2 L)</td>
<td>140 sq. ft (13 M²)</td>
</tr>
</tbody>
</table>

Chart for estimating purposes. Coverage may vary based on installation practices and jobsite conditions.