Description
The Polycoat-Aquatight™ waterproofing system is a solvent-free, liquid applied, high solids, aromatic polyurethane, waterproofing membrane. The system utilizes an epoxy-polymine primer, two coats of a solvent free aromatic polyurethane polyurea coating and a heavy grit sand aggregate. The Polycoat-Aquatight waterproofing system is a specialized application of a polyurethane coating as a waterproof underlayment for ceramic tile. The system is durable and will protect surfaces against spalling and freeze/thaw damage. It is an elastomeric system designed to expand and contract with normal structural movements. The system will neither soften in heat nor brittle in cold. The Polycoat-Aquatight waterproofing system has a wide range of application uses and, installed properly will ensure years of service.

Technical Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Typical Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below Tile, Waterproof Membrane System</td>
<td>ICC-ES Evaluated</td>
</tr>
<tr>
<td>Primer</td>
<td>Polyprime® 21</td>
</tr>
<tr>
<td>Base Coat</td>
<td>PC-440SF</td>
</tr>
</tbody>
</table>

Properties, Test Method, Requirements: US Results

<table>
<thead>
<tr>
<th>Summary of Test Report Conducted by Ramtech Laboratories on the Polycoat-Aquatight™ Waterproofing System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fungus, ASTM C836-89, No Mold Growth, Section 4.1: No growth</td>
</tr>
<tr>
<td>Seam Strength, Section 4.2, ASTM D751, 16 lbs/2in. width: 29.4 lbs/2 in. width</td>
</tr>
<tr>
<td>Breaking Strength, ASTM D752-1989, Section 4.3, 170 psi: 385 psi</td>
</tr>
<tr>
<td>Dimensional Stability, ASTM D-1204, Section 4.1, 0.7% max.: +15°F Long. 0.12%, Trans. 0.11%: -15°F Long. -0.11%, Trans. -0.082%</td>
</tr>
<tr>
<td>Waterproofness, ASTM D-4068, Annex A2, Section 4.1, No water penetration, (24 inch water head): No water penetration</td>
</tr>
<tr>
<td>Shear Strength, ASTM C-482, Section 9.12, 50 psi: 7-day, 100 psi (Control); Water Immersion: 7-day, 59 psi: 4-week, 72 psi; 12-week, 60 psi; 100-day, 54 psi</td>
</tr>
</tbody>
</table>

Approvals, Codes & Testing

- ASTM C482
- ASTM C836
- ASTM D1204
- ASTM D4068
- ASTM D751
- ASTM D752
- ICC-ES Report ESR-2785

Product Instructions

For complete information associated with the application of all Polycoat Products decking systems and products, refer to the General Guidelines and Technical Data Sheets of the Polycoat Products catalog, which describes the products, surface preparation, job conditions, finishing details and other necessary information.

Application

**Phase 1:**
Check area of application to ensure it conforms to substrate requirements. Prime all joints, cracks, and flashings with Polyprime® 21. Apply a two-part paste consisting of PC-440SF and PC-50 over all joints, cracks and flashing. Mixing ratio is ½ pint of PC-50 to 1 gallon of PC-440SF (0.24 liters per 3.78 liters) or 1 quart PC-50 to 5 gallons of PC-440SF (0.9 liters per 18.9 liters). Do not mix more material than can be used in 20 minutes. Bridge the joints, cracks, and flashings with 4” (10 cm) bridge strips. Each coat of PC-440SF shall be applied within 2 hours of mixing and can be applied up to a maximum of 24 hours after mixing. Each coat of PC-50 shall be applied within 1 hour of mixing, and can be applied up to a maximum of 2 hours after mixing.

**Packaging**

- Polyprime® 21: 3-gallon kit: One 3.5 gallon pail, net fill 2 gallons (7.57 liters) of Side-A and One 1 gallon (3.78 liter) can of Side-B or 15-gallon kit: Two 5 gallon (18.9 liter) pails of Side-A and One 5 gallon (18.9 liter) pail of Side-B
- PC-440SF: 5 gallon (18.9 liters) pail or 55 gallon drum net 50 gallons (189 liters)
cm) Straight Jacket Tape pushing it into the paste with a trowel. Over Straight Jacket Tape apply a stripe coat of the PC-440SF and PC-50 mixture and taper it onto the adjacent surface. Allow the surface to cure for up to 6 to 8 hours.

**PHASE 2:**
Prime the surface with Polyprime® 21 at a rate of 1 gallon (mixture of Side-A & Side-B)/300 sqft (0.14 liters/m²) or 300 sqft/gallon. Apply using a brush or phenolic core roller. This will result in 5 dry mils (125 microns) of coating. Allow Polyprime to become tack free before proceeding to Phase 3.

**PHASE 3:**
Apply a mixture of PC-440SF to the substrate at a rate of 3 gallons/100 sqft (1.23 liters/sq.m) or 33 sqft/gallon. Do not mix more material than can be used in 20 minutes. For best results, apply using a notched trowel or squeegee. A phenolic core roller may be used but extra care should be taken to prevent air bubbles. Spread PC-440SF evenly over the entire surface resulting in a 48 ± 2 dry mils (1066 ± 51 microns) membrane. Allow PC-440SF to cure before proceeding to Phase 4. PC-50 must be added to the PC-440 at a ratio of 1 quart PC-50 to 5 gallons PC-440.

**PHASE 4:**
Apply a second coat of PC-440SF at a rate of 1 1/2 gallons/100 sqft (0.62 liters/sq.m) or 66 sqft/gallon, spread evenly over the entire surface, resulting in a 24 ± 2 dry mils (610 ± 51 microns) membrane.

**PHASE 5:**
Broadcast washed, dry, angular sand, heavy, 16 grit (1.18 mm) or larger aggregate into the final coat of PC-440SF until refusal. Allow the membrane to cure, remove the excess aggregate, and apply a thin set mortar when ready for tile installation.

When utilizing a mortar bed over the Polycoc-Aquagiment™ waterproofing system, allow the completed membrane to cure prior to installation of the float. A water test can be conducted after 24 hours.

**FINISHED SYSTEM:**
When applied as directed, the Polycoc-Aquagiment™ waterproofing system will provide 72 dry mils (1829 microns), exclusive of fabric, of superior waterproofing protection.

**Requirements and Limitations**

**The following conditions must not be coated with Polycoc Products coating systems or products:** Concrete over an unvented metal pan, magnesite, lightweight concrete, asphalt surfaces and asphalt overlays. Concrete must exhibit 3000 psi minimum strength. Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair brooming, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function. New concrete and masonry must be cured for 28 days. Concrete cleaning (see General Guidelines). The only acceptable grade of plywood is APA rated exterior grade or better. The appearance and physical characteristics of the plywood and grade should be considered. Plywood should be new or cleaned and sanded (see general guidelines). Coating should be applied at least 5°F (3°C) above the dew point.

Coverage rates recommended are based on lab conditions, applied at 75°F (24°C) ambient temperature and are intended to be minimum coverage rates on clean, smooth plywood, and are exclusive of additional amounts needed to fill potholes, spallings, scalings, rough and irregular surfaces. Porosity and roughness of the substrate, aggregate size, and product temperature will affect coverage rates. Material mil thickness rates are calculated on theoretical coverage for a smooth substrate and do not account for the actual texture or substrate conditions in the field or at the time of application. Sample mockups on the projects are recommended to determine the exact coverage rates necessary to waterproof the deck to acceptable standards.

Equipment should be cleaned with a urethane grade environmentally safe solvent, as permitted under local regulations, immediately after use. Uncured materials are sensitive to heat and moisture. The substrate must be structurally sound and sloped for proper drainage. Polycoc Products assumes no liability for substrate defects. Field visits by Polycoc Products personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

**Warning**
The products in this system contain Isocyanates, Aromatic Hydrocarbons, Curatives and Solvents.

**Limited Warranty:** Please read all information in the General Guidelines, Technical Data Sheets, Guide Specifications and Safety Data Sheets (SDS) before applying material. These products are for professional use only and preferably applied by professionals who have prior experience with the Polycoc Products materials or have undergone training in application of Polycoc Products materials. Published technical data and instructions are subject to change without notice. Contact your local Polycoc Products representative or visit our website for current technical data, instructions, and project specific recommendations.

Polycoc Products warrants its products to be free of manufacturing defects and that they will meet Polycoc Products’ current published physical properties. Seller’s and manufacturer’s sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by Polycoc Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoc Products shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. Polycoc Products shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, shrinking, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. Polycoc Products reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

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