



**POLYCOAT-AQUATIGHT®**

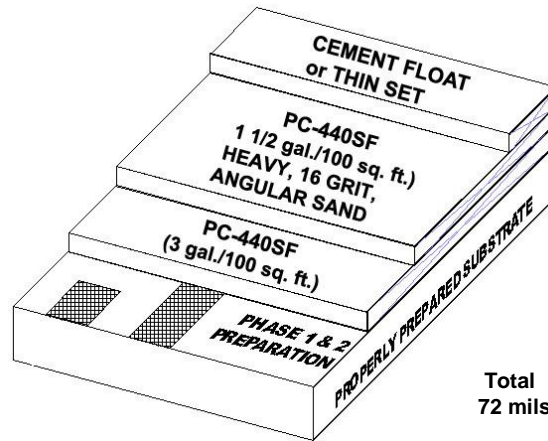
**72 Dry Mills, Solvent Free, Low Odor  
Below Tile, Waterproof Membrane System**

**Primer:**

- Polyprime 21
- Polyprime U22

**Topcoat:**

- PC-440SF



Total  
72 mils

**System Description:**

The Polycoat-Aquatight® waterproofing system is a solvent-free, liquid applied, high solids, aromatic polyurethane, waterproofing membrane. The system utilizes an epoxy-polyamine 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 not soften in heat nor embrittle in cold. The Polycoat-Aquatight® waterproofing system has a wide range of application uses and, installed properly will ensure years of service.

Approvals, Codes and testing:

- ASTM D-751
- ASTM D-752
- ICC-ES Report ESR-2785
- ASTM D-1204
- ASTM D-4068
- ASTM C-482
- ASTM C-836

Features:

- Waterproofing
- Elastomeric
- Meets California VOC and AQMD Requirements, Including SCAQMD Areas.
- Durable
- Economical
- Solvent Free
- Low Odor

Typical Uses:

- Saunas
- Kitchens
- Restrooms
- Steam Rooms
- Shower Pans

Packaging

**Polyprime 21:** 3 gallon kits (One 3.5 gallon pail net 2 gallons of Part-A and One 1 gallon can of Part-B) or 15 gallon kits (Two 5 gallon pails of Part-A and One 5 gallon pail of Part-B).

**Polyprime U22:** 2 gallon kits (One 1 gallon can of Part-A and One 1 gallon can of Part-B) or 10 gallon kits (One 5 gallon pail of Part-A and One 5 gallon pail of Part-B).

**PC-440SF:** 5 gallon pail or 55 gallon drum net 50 gallons.

**Product Instructions:**

For complete information associated with the application of all Polycoat Products systems and products, refer to the General Guidelines and Technical Bulletin sections 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 or U22 (mixture of Part-A & Part-B). Apply a two-part paste consisting of PC-440SF and PC-50 over all joints, cracks and flashing. Mixing ratio is 2 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) Straight Jacket Tape pushing it into the paste with a trowel. Over Polyester 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 or U22 at a rate of 1 gallon (mixture of Part-A & Part-B)/300 sq.ft. (0.14 liters/m<sup>2</sup>). Apply using a brush or phenolic core roller. This will result in 3 dry mils (76 microns) of coating. Allow Polyprime to become tack free before proceeding to Phase 3.

**Phase 3:** Apply a mixture of PC-440SF and PC-50 (1 quart PC-50 to 5 gallons PC-440SF) to the substrate at a rate of 3 gallons/100 sq. ft. (1.22 liters/m<sup>2</sup>). 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 and PC-50 mixture evenly over the entire surface resulting in a 48 ± 2 dry mils (1066± 51 microns) membrane. Allow PC-440SF and PC-50 mixture to cure before proceeding to Phase 4.

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

**Phase 5:** When adhering tile directly to the Polycoat-Aquatight® waterproofing system, broadcast washed, dry, angular sand, heavy, 16 grit (0.0469" or 1.18 mm) or larger aggregate into the final coat of PC-440SF. 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 Polycoat-Aquatight® 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 Polycoat-Aquatight® waterproofing system will provide 72 dry mils (1829 microns), exclusive of fabric, of superior waterproofing protection. Requires a continuous coating application to minimize lines and/or streaking. Any optional adhesion test is to be performed seven days after product application.

#### **Limitations:**

The following conditions must not be coated with Polycoat 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, scalling, 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. Polycoat Products assumes no liability for substrate defects. Field visits by Polycoat 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.

### **Summary of Test Report Conducted by Ramtech Laboratories on the Polycoat-Aquatight® Waterproofing System**

#### **Properties, Test Method, Requirements: US Results**

Fungus, ASTM C-836-89, No Mold Growth, Section 4.1: No growth

Seam Strength, Section 4.2, ASTM D-751, 16 lbs/2in. width: 29.4 lbs/2 in. width

Breaking Strength, ASTM D-752-1989, Section 4.3, 170 psi: 385 psi

Dimensional Stability, ASTM D-1204, Section 4.1, 0.7% max.: +158°F Long. 0.12%, Trans. 0.11%: -15°F Long. -0.11%, Trans. -0.082%

Waterproofness, ASTM D-4068, Annex A2, Section 4.1, No water penetration, (24 inch water head): No water penetration

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

#### **Limited Warranty:**

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local Polycoat Products representative or visit our website for current technical data and instructions.

Polycoat Products warrants its products to be free of manufacturing defects and that they will meet Polycoat Products current published physical properties. Polycoat Products warrants that its products, when properly installed by a state licensed waterproofing contractor according to Polycoat Products guide specifications and product data sheets over a sound, properly prepared substrate, will not allow water migration for a period of one (1) year. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. There are no other warranties by Polycoat Products of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. Polycoat 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. Polycoat 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, staining, shrinkage, 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. Polycoat 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.

#### **Disclaimer:**

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Polycoat Products makes no claim that these tests or any other tests, accurately represent all environments.

Rev. 11/1/12