POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYCOAT-AQUASEAL® 5000

Single Component, Bitumen Modified Waterproofing Membrane System

Technical Data Sheet

POLYCOAT - AQUASEAL® 5000 SYSTEM

System Description:

Polycoat-Aquaseal® 5000 is a single component, liquid applied, bitumen modified, coal tar free, moisture cured polyurethane waterproofing membrane. It is available in three application versions: Horizontal (H), Vertical (V), and Water Catalyzing (WC) – available only in horizontal. Polycoat-Aquaseal® 5000 is in complete compliance with SCAQMD air quality standards, and has VOC levels equal to or less than 100 grams per liter.

FEATURES

- Economical
- User Friendly
- Labor Saving
- Resistant to Bacteria
- Meets the Criteria of ASTM C-836 and E-96

TYPICAL USES

- Bridges
- Tunnels
- Planters
- Basements
- Between Slabs
- Foundation Walls
- Shower Pans

Approved City of Los Angeles RR# 25935

Color: Black

Packaging: 5 gallon (18.9 liter) pail. 55 gallon drum, net fill 50 gallons (189 liters)

Mixing For Polycoat-Aquaseal® 5000H / 5000V

Before application, Polycoat-Aquaseal® 5000 should be thoroughly mixed using a mechanical mixer at slow speed to ensure a homogeneous material. Take care not to allow entrapment of air into the material. Do not mix in an up and down motion.

Mixing For Polycoat-Aquaseal® 5000WC-H:

Before application, mix Polycoat-Aquaseal® 5000WC using a mechanical mixer at slow speed. Mix Polycoat-Aquaseal® 5000WC with water (water must be added) at a ratio of one quart of water to five gallons of Polycoat-Aquaseal® 5000WC. This will yield 5¼ gallons of membrane. The mixing ratio is 20 parts Polycoat-Aquaseal® 5000WC membrane to 1 part of water (20:1). Use care not to allow the entrapment of air into the mixture. Do not mix in an up and down motion.

Polycoat-Aquaseal® 5000 (100 VOC) Properties: Coverage @ 1 gal/100 sq. ft results in 14 mils DFT

Based on Drawn Down Film	5000H Horizontal	5000V Vertical	5000WC-H Water Catalyzed	Green Concrete
Hardness, ASTM D-2240	50 ± 5 Shore A	45 ± 5 Shore A	30 ± 5 Shore A	**Polycoat-Aquaseal® 5000 may be applied to Green Concrete.** Green concrete GC Additive must be added to Polycoat-Aquaseal® 5000 at a ratio of ½ pint GC Additive to 5 gallons of Polycoat-Aquaseal® 5000. Thoroughly mix with a variable speed drill and mixing paddle at slow speed. The standard Polycoat-Aquaseal® 5000 may be applied to both fully cured (28 days for poured in place and 10 days after grouting for block) and green concrete.
Tear Resistance, Die C, ASTM D-624	40 ± 20 pli 21 ± 3.5 kNm	35 ± 10 pli 14 ± 2 kNm	50 ± 5 pli 8.8 ± 0.9 kNm	
Tensile Strength, ASTM D-412	350 ± 50 psi 3.45 ± 0.3 Mpa	350 ± 50 psi 3.45 ± 0.3 Mpa	500 ± 50 psi 2.1 ± 0.3 Mpa	
Ultimate Elongation, ASTM D-412	300 ± 50%	300 ± 50%	300 ± 50%	
Specific Gravity	1.32	1.23	1.12	
Total Solids by Weight, ASTM D-236	92 ± 3%	92 ± 3%	95 ± 1%	
Total Solids by Volume, ASTM D-2697	90 ± 3%	90 ± 3%	94 ± 1%	
Viscosity at 80°F (27°C)	5000 ± 2000 cps	40,000 ± 20,000 cps	-	
Service Temperature	- 25°F to 200°F - 31.7°C to 93.3°C	- 25°F to 200°F - 31.7°C to 93.3°C	-	
Volatile Organic Compounds, ASTM D-2369-81	0.83 lb/gal 100 gm/liter	0.83 lb/gal 100 gm/liter	<0.5 lb/gal <60 gm/liter	

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Joints, Cracks and Flashing:

Apply a stripe coat of Polycoat-Aquaseal® 5000 over all cracks up to 1/16" in width. All cracks over 1/16" in width must be caulked with a polyurethane sealant.

All metal flashings must be primed with manufacturer's recommended primer.

Application:

Polycoat-Aquaseal® 5000 may be applied with a brush, squeegee, trowel, roller or airless sprayer. Over smooth surfaces, such as poured-in-place concrete, apply Polycoat-Aquaseal® 5000 evenly in two 30 mil coats. The application rate to achieve 30 dry mils is 50 sq. ft. / gallon.

Polycoat-Aquaseal® 5000WC-H (Water Catalyzed) can be applied at any thickness.

Apply Polyprime 21 per product data sheet in all applications where the Aquaseal 5000 membrane will be submerged in water.

Curing:

At 75°F (24°C) and 50% relative humidity, allow each coat of Polycoat-Aquaseal® 5000 Vertical, Horizontal and Green Concrete to cure 16 hours minimum.

Cure time will vary depending on temperature and humidity. If more than 48 hours pass between coats the surface must be re-primed.

For Polycoat-Aquaseal® 5000 WC applications, at 75°F (24°C) and 50% relative humidity, allow coating to cure a minimum of 2-4 hours before proceeding to subsequent coats. Cure time will vary depending on temperature and humidity If more than 48 hours pass between coats the surface must be re-primed.

Polycoat-Aquaseal® 5000 is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Use caution in thickness of application. Limit single coat thickness to 30-40 wet mils.

Equipment Cleanup:

Equipment should be cleaned with an environmentally safe solvent, as permitted under local regulations, immediately after use.

Storage:

Polycoat-Aquaseal® 5000 has a shelf life of one (1) year from date of manufacture in original, factory-sealed containers when stored indoors at a temperature between 60-95°F (15-35°C).

Limitations:

The following conditions must not be coated with Polycoat **deck coatings or systems:** split slabs, buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, magnesite, and lightweight concrete. On grade slabs may receive Polycoat system coatings provided a moisture-vapor transmission test is first performed. Please contact Polycoat technical department with the results.

With regard to coating asphalt surfaces, please contact Polycoat technical department.

Surfaces must be dry, clean and free of foreign matter. Clear coating may turn opaque and cloudy due to moisture penetration, especially in exterior applications. Surface may be slippery when wet. Containers that have been opened must be used as soon as possible. Do not dilute under any circumstance.

Warning:

This product contains Aromatic Hydrocarbons, Isocyanates and Solvent.

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 users 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.

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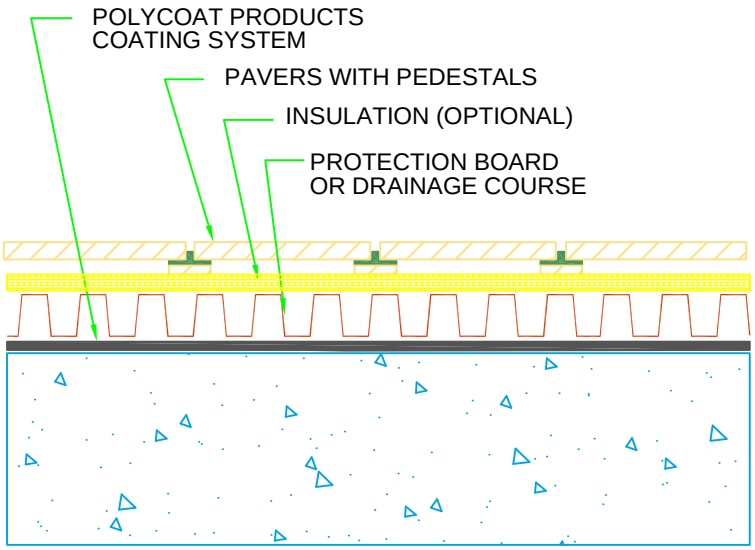

23 INSULATED PLAZA WITH PAVERS