

TECHNICAL DATA SHEET | Section 8.3

POLYCOAT AQUASEAL® 5000 WC/GC

A Single Component, Water Curable, Liquid, Cold Applied Reinforced Roofing and Waterproofing Membrane System

REVISION 04/09/18

Product Description

Polycoat-Aquaseal® 5000 WC/GC is a seamless and joint free waterproofing system created from a single component, water curable liquid applied, coal tar free, urethane/polyurea roofing and waterproofing membrane system for vertical and horizontal surfaces. The coating may be applied in the field from 30 to 2500 mils (0.076 -6.35 cm) in one application while supplying simultaneous curing throughout the coating. The system may be applied as one or two applications of Polycoat-Aquaseal® 5000 WC/GC when heavily reinforced with Tie-Tex 326 Fabric. The System is capable of correcting negative slope, filling pond areas and creating moderate positive slope to drain. Polycoat-Aquaseal® 5000 GC (Green Concrete) is available in horizontal (GC-H), vertical (GC-V), or spray gun (GC-SG).

Color

Black

Coverage

Polycoat-Aquaseal® 5000 WC/GC System should yield a minimum 60 mils (1524 microns) thickness in one or two coats without fabric. Systems with a total of 100 mils (0.25 cm) with the Tie-Tex 326 Fabric will require 45 mils (0.11 cm) of base membrane and 45 mils (0.11 cm) of topcoat membrane. Systems with a total of 150 mils (0.38 cm) will require a base membrane of 70 mils (0.18 cm) and a topcoat membrane of 70 mils (0.18 cm) with the Tie-Tex 326 Fabric sandwiched between coats.

Surface Preparation

Refer to General Guidelines for complete information.

Joints, Cracks and Flashing:

Apply a stripe coat of Polycoat-Aquaseal® 5000 WC/GC over all cracks up to 1/16" (1.58 mm) width. All cracks over 1/16" (1.58 mm) width must be caulked with a polyurethane sealant.

FEATURES

- Economical
- » User Friendly
- » Labor Saving
- » Fast Curing
- » Low Odor
- » Resistant to Bacteria
- » Applied at Any Thickness
- » Highly Flexible Over Extreme Temperatures
- » Meets the Criteria of ASTM C-836 and E-96

TYPICAL USES

- Bridges
- Between Slabs

- Tunnels
- » Foundation Walls
- » Planters
- » Terrazzo and Tile Floors
- » Basements» Modified Cap Sheets
- Green Roof Waterproofing
- » Under Malls, Plazas and
- I.R.M.A. Roofing
- Promenade Decks

PACKAGING

5-Gallon 5 gallon (18.9 liter) pail

55-Gallon 55 gallon drum, net fill 50 gallons (189

liters)

TECHNICAL DATA (BASED ON DRAW DOWN FILM) POLYCOAT-AQUASEAL® 5000 (100 VOC) PROPERTIES

	AQUASEAL 5000WC	AQUASEAL 5000 GC-H	AQUASEAL 5000 GC-V	AQUASEAL 5000 GC-SG
Hardness, ASTM D-2240	30 ± 5 Shore A	30 ± 5 Shore A	30 ± 5 Shore A	30 ± 5 Shore A
Tear Resistance, Die C, ASTM D-624	50 ± 20 pli 20 ± 3.5 kN/m	80 ± 10 pli 14 ± 2.6 kN/m	100 ± 20 pli 17.5 ± 3.5 kN/m	100 ± 20 pli 17.5 ± 3.5 kN/m
Tensile Strength, ASTM D-412	300 ± 50 psi 2.4 ± 0.3 MPa	$350 \pm 30 \text{ psi}$ 2.41 ± 0.3 MPa	$350 \pm 30 \text{ psi}$ 2.41 ± 0.3 MPa	$350 \pm 30 \text{ psi}$ 2.41 ± 0.3 MPa
Ultimate Elongation, ASTM D-412	650 ± 50%	550 ± 50%	550 ± 50%	550 ± 50%
Specific Gravity	1.12 ± 0.1	1.20 ± 0.1	1.19 ± 0.1	1.18 ± 0.1
Total Solids by Weight, ASTM D-2369	95 ± 3%	85 ± 3%	85 ± 3%	88 ± 3%
Total Solids by Volume, ASTM D-2697	94 ± 3%	85 ± 3%	85 ± 3%	88 ± 3%
Viscosity at 80°F (27°C)	5000 ± 2000 cps	3500 ± 200 cps	3000 ± 200 cps	170 ± 50 cps
Volatile Organic Compounds, ASTM D-2369-81	<0.50 lb/gal, <100 gm/liter	<0.42 lb/gal, <50 gm/liter	<0.42 lb/gal, <50 gm/liter	<0.42 lb/gal, <50 gm/liter
Service Temperature	-25°F to 150°F -31.7°C to 65°C	-25°F to 150°F -31.7°C to 65°C	-25°F to 150°F -31.7°C to 65°C	-25°F to 150°F -31.7°C to 65°C

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

Mixing

Before application, Polycoat-Aquaseal® 5000 WC/GC should be thoroughly mixed using a mechanical mixer at slow speed to ensure a homogeneous material. Mix Polycoat-Aquaseal® 5000 WC/GC with water (water must be added) at a ratio of one quart of water to five gallons of Polycoat-Aquaseal® 5000 WC/GC. The mixing ratio is 20 parts Polycoat-Aquaseal® 5000 WC/GC to 1 part water ratio mix by volume. This will yield 5 1/4 gallons (19.87 liters) of coating. Take care not to allow entrapment of air into the material. Do not mix in an up and down motion.

Application

Polycoat-Aquaseal® 5000 WC/GC may be applied directly by spray, brush, squeegee, trowel or phenolic-core roller. Apply Polycoat-Aquaseal® 5000 WC/GC evenly over the primed surface in 60 mil+ (1524 microns) application thicknesses.

When reinforcing with Tie-Tex 326 Fabric; specified mils of base membrane is applied followed by the application of Tie-Tex 326 Fabric (or approved equal fabric) by broomed or spike roller into place saturating the fabric into the wet membrane. Overlap fabric 6" (15.24 cm) and apply coating over the laps and adjacent areas. An additional membrane as a topcoat is applied over the fabric.

The fabric installation should be wrinkle and air-pocket free before applying topcoat. Tie-Tex 326 Fabric should be applied after the first application of Polycoat-Aquaseal® 5000 WC/GC is firm in approximately 2 hours.

Primer is optional on plywood and CMU. Polyprime 21 is acceptable on concrete surfaces. Allow primer to become "thumbprint tacky" before coating application. Consult Polycoat before choosing primer on single-ply membrane surfaces.

Membrane Protection

As soon as possible after completion of a successful water test or visual inspection and/or repairs, cover membrane with approved protection board or geotextile drainage composite. All horizontal and vertical membrane must be protected.

Curing

At 75°F (24°C) and 50% relative humidity, allow each coat of Polycoat-Aquaseal® 5000 WC/GC to cure 2-4 hours minimum between subsequent coats.

Cure time will vary depending on temperature and humidity. If more than 48 hours pass between coats the surface must be recoated with Polyprime U. If more than 48 hours have passed between coats then solvent wipe surface and prime with Polyprime 172 or Polyprime U.

Cleanup

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

Storage

Polycoat-Aquaseal® 5000 WC/GC has a shelf life of one 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 Products deck coating systems or products: on grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, swimming pools, magnesite, lightweight concrete. Asphalt surfaces and asphalt overlays may be coated with Polycoat coating systems if first coated with the Polycoat-Aquaseal® 5000 WC/GC.

Surfaces must be dry, clean and area 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.

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

May not be exposed to Ultraviolet rays.

Warning

This product contains Aromatic Hydrocarbons, Isocyanates and Solvent.

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 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. All rights reserved.