

AQUA SEAL

WATER BASED EPOXY VAPOR PRIMER/SEALER Technical Data Sheet

Description:

Aqua Seal Vapor Treatment is the ideal treatment for cured concrete that exhibits excessive moisture vapor transmission. Aqua Seal water-based epoxy primer is designed specifically for green or damp concrete. Aqua Seal is compatible with 100% solids epoxies and membranes.

Product Benefits:

Eliminates the negative effects of moisture vapor transmission under decorative or industrial epoxy flooring systems.
Tolerates Moisture Vapor Transmission (MVT) 80% or greater relative humidity as measured by ASTM F 2170 (determining relative humidity in concrete slabs using in situ probes) & up to 18 lbs. per 1,000 ft² (9 Kg. per 92.9 m²) per 24 hours as measured by ASTM F 1869 (calcium chloride test).
Calcium chloride test should not be used unless building is fully climate controlled per ASTM Standards
Environmentally friendly, zero VOC content.
Low viscosity allows for excellent penetration of concrete substrate
Effective with green or highly alkaline concrete
Allows fast-track construction schedules

ASTM E-96 Test Results:

According to ASTM E-96, Standard Test Method for water Vapor Transmission Materials, Aqua Seal Vapor Treatment measured the following permanence under the testing conditions.

Test Conditions	Test Results
Uncoated concrete over water	2.67 perms
Uncoated concrete with constant 85% RH	1.32 perms
With constant 85% RH, concrete treated with Aqua Seal	0.21 perms

Coverage:

Typical coverage is approximately 200 ft². (18.58 m²) per gallon. Coverage will vary depending on surface porosity and surface profile. When product is applied to soft / chalky concrete, coverage rates will decrease significantly.

Concrete Substrate Preparation:

1. Product applied as soon as water evaporates from concrete surface
2. Apply to fully cured concrete (> 28 days)
3. Concrete surface shall be prepared mechanically by shot blasting. Surface preparation results should achieve a CSP3–CSP5 profile according to ICRI Guideline No. 03732.
4. All surface contaminants must be removed.

Mixing:

Aqua Seal Moisture Vapor Primer / Sealer is a three-component product and must be properly mixed and applied in order to properly perform as described. Substrate and all materials must be maintained at 60–90°F (15.5-32.2°C) a minimum of 24 hours before application of final system. Using clean 3 gallon (minimum) size container, pour Part B (Hardener) into clean pail, then mix Part A (Resin) into Part B. with a slow speed mixer, thoroughly mix Part A & B for a minimum of 2–3 minutes. This will result in a creamy emulsion. Add one gallon of cool water slowly while continuously mixing. Let mix for several minutes to ensure homogenous consistency.

Applications:

Apply Aqua Seal Moisture Vapor Primer at a rate of 200 ft² (18.58 m²) per gallon. Avoid puddles or standing water visible on the concrete substrate surface. Aqua Seal Moisture Vapor Primer can be sprayed, brushed or squeegee and rolled onto the concrete. In order for product to perform as specified it is critical to not exceed the recommended coverage rate of 200 ft² (18.58 m²) per gallon. Avoid leaving any puddles of Aqua Seal.

Cure Time:

Allow 8 hours minimum and 24 hours maximum before applying next coat, must be water clear before coating over.

Additional Considerations:

Do not use in temperatures below 60°F (15.5°C). Do not use where known hydrostatic pressure conditions exist. Where relative humidity exceeds 95% and/or Moisture Vapor Transmission rates exceed 18 lbs. per 1,000 ft² (9 Kg. per 92.9 m²) per 24 hours.

Polygem, Inc. warrants its products to be free of manufacturing defects and that, at the time and place of shipment, our material will meet current physical properties when applied within Polygem's directions and tested in accordance with ASTM and Polygem standards. Polygem, Inc's liability is limited to replacement of material found defective. As Polygem, Inc. has no control over the use to which others may put its products, it is recommended that the product be tested to determine if suitable for a specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Nothing contained herein shall be construed to be a recommendation to use or as a license to operate under or to infringe any existing patents

Polygem Inc. 630-231-5600 polygem.com

Aqua Seal Rev / 1-13-22 Data sheets are subject to change without notice