POLYCOAT PRODUCTS
A Division of American Polymers Corp.

POLYCOAT-AQUASEAL® RESIN

Single Component, Aromatic Urethane Polyurea Resin

SYSTEM DESCRIPTION

Polycoat-Aquaseal® Resin is a single component with catalyst, moisture cured, aromatic urethane polyurea resin. Polycoat-Aquaseal® Resin is mixed with a catalyst and compatible bituminous material such as dehydrated coal tar, asphalt, asphalt emulsion, residue or heavy bituminous cut or tar from manufacturing processes to provide an elastomeric waterproof membrane. It is important that the compatibility of the bituminous material and Polycoat-Aquaseal® Resin is determined by mixing and testing the application on a small area. The mixture of Polycoat-Aquaseal® Resin and bituminous material should form a homogenous mixture and should cure properly. Water permeability tests and physicals of the system should be verified for intended use. The recommended application uses two or three coats of the bituminous material and Polycoat-Aquaseal® Resin mixture, one or two layers of a suitable fabric reinforcement and a final layer of protection fabric or protection board. Total recommended film thickness is 60 to 80 mils.

FEATURES

- ❖Waterproof
- ❖Concrete, Wood and Metal
- ❖Elastomeric
- ❖Seamless

TYPICAL USES

- ❖Plazas
- ❖Planters
- ❖Highway Bridges
- ❖Tunnels
- ❖Between Slabs
- ❖Foundation Walls

FABRIC REINFORCEMENT

- ❖Jute
- ❖Fiber Glass
- ❖Nylon
- ❖Polypropylene

COLORS

Clear or Grey

PACKAGING

5 gallon (19 liter) pail or 55 gallon drum, net 50 gal (189 liters)

MIXING

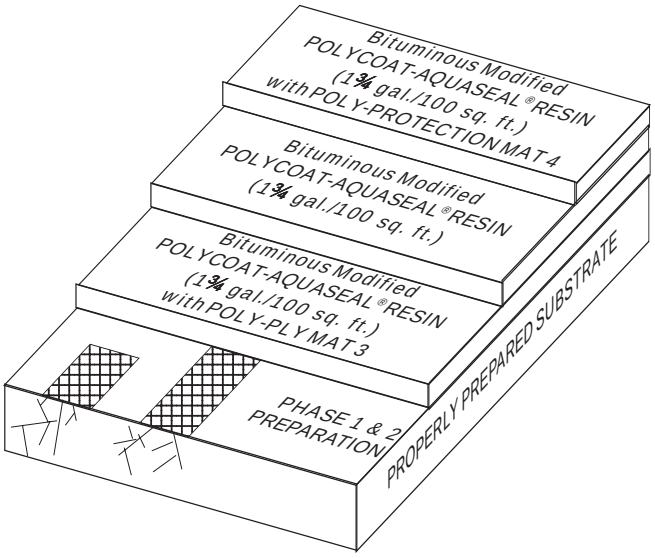
Mix Polycoat-Aquaseal® Resin and bituminous material in separate containers. Add Polycoat-Aquaseal® Resin Catalyst to Polycoat-Aquaseal® Resin and mix at slow speed using a mechanical mixer (Jiffy Mixer) with drum paddle attachment. Combine catalyzed Polycoat-Aquaseal® Resin and bituminous material mix thoroughly to obtain a homogenous mixture.

Note: Do not mix more material than can be used within ½ hour.

VOLUME MIXING RATIO

Standard Application

1 Part catalyzed Polycoat-Aquaseal® Resin and 2 Parts bituminous material**



TECHNICAL DATA (Without Bituminous Material)

Flash Point	150°F 65°C
Hardness, ASTM D-2240	68A
Tear Resistance, Die C, ASTM D-624	231 pli 40.48 kN/m
Tensile Strength, ASTM D-412	2650 psi 18.28 MPa
Ultimate Elongation, ASTM D-412	850%
Specific Gravity	1.03
Total Solids by Weight, ASTM D-2369	88%
Total Solids by Volume, ASTM D-2697	86%
Viscosity at 75°F (24°C)	4500 ± 1000cps
Volatile Organic Compounds, ASTM D-2369-81	1 lb/gal 121 gm/liter

Economical Application or Prime Coat

1 Part catalyzed Polycoat-Aquaseal® Resin and 4 Parts bituminous material**

**Catalyzed Polycoat-Aquaseal® Resin = ½ pint Catalyst per 5 gallons of Polycoat-Aquaseal® Resin or 1 quart Catalyst per 55 gallons of Polycoat-Aquaseal® Resin. The quantity of catalyst may need to be adjusted depending on the quality of the bituminous material.

APPLICATION

Phase 1: If caulking is required a paste mixture can be created by combining Polycoat-Aquaseal® Resin mixture with black rubber granules, sand or cement powder to make a trowelable putty. Apply this paste over all joints, cracks andflashings and bridge with reinforcement tape, pushing it into the Polycoat-Aquaseal® Resin paste mixture with a trowel. Over the rein-

forcement tape apply a thin coat of Polycoat-Aquaseal® Resin mixture and smooth onto adjacent surface.

Phase 2: If a prime coat is necessary, use Polycoat-Aquaseal® Resin mixed with bituminous material at a ratio of 1:4 for the first coat.

Phase 3: Apply the first coat of Polycoat-Aquaseal® Resin mixture at a rate of 1¾ gallons/100 sq. ft. (0.71 liters/m²). Immediately embed reinforcement fabric into the wet coating, butting up the seams tightly. Use a dry roller or wooden roller to press the mat into the coating. Allow 16-48 hours before proceeding to Phase 4.

Phase 4: Apply the second coat of Polycoat-Aquaseal® Resin at a rate of 1¾ gallons/100 sq. ft. (0.71 liters/m²). Allow 16-48 hours before proceeding to Phase 5.

Phase 5: Apply the third coat of Polycoat-Aquaseal® Resin at a rate of 1¾ gallons/100 sq. ft. (0.71 liters/m²). Immediately install the final protection fabric or protection board into the wet final coat of Polycoat-Aquaseal® Resin mixture, making sure seams overlap 2 inches. Back filling may begin 12 hours after the final coat and fabric or protection board are installed.

Polycoat Products strongly recommends that the Polycoat-Aquaseal® Resin be used with a reinforcement fabric and appropriate final protection course.

Completed system may have a very sticky surface, especially if a 1:4 mixing ratio is used. The surface may be dusted with cement powder if desired to help eliminate the stickiness.

CURING
Polycoat-Aquaseal® Resin is very sensitive to heat and moisture. Higher temperatures and/or high humidity will accelerate the cure time. Low temperature and/or low humidity extend the cure time. Use caution in batch sizes and thickness of application.

Test mixing a small batch to ascertain pot life and curing time is recommended.

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

STORAGE
Polycoat-Aquaseal® Resin has a shelf life of six (6) months from date of manufacture in original, factory sealed containers.

LIMITATIONS
Use dehydrated bituminous material with the lowest possible moisture content. High moisture content will reduce the working life of the material.

The substrate must be structurally sound and sloped for proper drainage.

Polycoat Products assumes no responsibility 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 and Solvent.

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.