AQUASEAL

WATER BASED POLYURETHANE SEALER

Introduction

Aquaseal is a single pack, water-based polyurethane dispersion with an acrylic mix.

Aquaseal is non-hazardous and as such is suitable for application in both internal and external applications and in small confined areas as well as larger, more exposed areas.

Aquaseal will adhere to most substrates and form to give a high gloss film. Once fully cured Aquaseal is hard wearing and offers good chemical resistance against a large number of aggressive chemicals.

Aquaseal can be used on concrete, stone, brickwork, wood and most traditional building materials, as well as on aluminium, brass, copper brightwork and some plastics. On previously painted surfaces, it is advisable to test a small area to see that the coating is not attacked. Previously painted surfaces should be lightly abraded, where possible, to improve adhesion.

USES

Aquaseal is an economical, fast drying, hard wearing varnish for many surfaces where colour retention is not critical (for uses where colour is crucial, Crystal Seal should be considered as an aliphatic version).

The benefits of using a water-based emulsion are numerous, and the following details the specific features of Aquaseal.

- Once cured Aquaseal provides a clear membrane for new and old concrete, wood, stone etc.,
- Seals all surfaces providing a high quality finish.
- Guards new concrete by promoting a proper cure for improved abrasion resistance.
- Dust proofs concrete by impregnating surface pores with a tough durable film.
- Acts as concrete and wood primer, to which additional coats of Aquaseal or Crystal Seal can be applied.
- Compatible with many paints, adhesives and floor coverings.

FILM FORMATION

Under typical ambient conditions the coating will dry in approx 2 – 3 hours and will be ready for use in 12 – 24 hours. A second coat if required should be applied within 24 hours to achieve good adhesion, providing the surfaces remain clean. This process may be repeated if necessary.

TYPICAL DEVELOPMENT PROPERTIES

Cure film properties of Aquaseal (Dry film thickness of 0.1mm).

Tacky	1.0 hours.
Tack free	2.5 hours
Hard	4.0 hours
Light Traffic	24 hours.

GENERAL

Surfaces must be clean and dry, (free water on the surface to be coated will give a weak film, lacking in adhesion). Substrates must also be in sound condition; a weak powdery substrate will not give the film sufficient support. Aquaseal will not adhere well to glossy surfaces. With previously painted surfaces, all matter not fully bonded to the substrate must be removed.

SPECIFIC SURFACES

Concrete

All concrete must be at least 28 days old, clean dry and sound and free from the potential threat of water contamination.

Dense, smooth concrete must be opened by scarify, grinding or sand blasting (acid etching should be treated with caution; it may weaken the surface by demineralisation).

Superficial contamination by oils etc. can be removed by detergent or solvent washing followed by drying.

Heavy soiling will require grinding or flaming. In either case this must be cleared before coating starts.

Wood, including chipboard and plywood.

The surface must first be examined for gaps, cracks, warping etc. It must be remember however that atmospheric changes can cause wood to change shape, and this movement may cause fillers and coatings to crack at the joints.

A significant difference between wood and concrete is that the coating will raise the grain of wood. If a snag-free surface for flooring, furniture or fittings is required, it is necessary to rub down again after the first coat has dried.

Subsequent coatings of undiluted Aquaseal or Crystal Seal may be applied to wood or board to achieve the degree of gloss and wear properties required.

APPLICATION

Application can be by brush, spray or roller. Re-coating can take place as soon as the surface is tack free. Although Aquaseal will develop rain-resistance faster than many other systems, it can be damaged if the substrate is allowed to freeze. Coatings can however still be applied to temperatures down to 2 degrees C. It is not advisable to attempt external coating during periods of unsettled weather.

Anti-dusting Sealer

A coat of undiluted Aquaseal at 4 m² / litre will give an easy-cleaning, non-dusting surface for concrete.

Decorative Flake Coatings

Attractive effects can be produced by using a pigmented coating, or by broadcasting coloured plastic flakes over the wet first coat. When the surface is tack free, the excess flake can be removed and additional coats applied, until the desired appearance/wear properties have been achieved. A more colour stable effect will be obtained if the later coatings are of Crystal Seal.

Health and Safety

Similar products have been used safely when they have been handled correctly. Users should refer to our Material Safety Data Sheet before starting work with Aquaseal.

Packaging

Aquaseal is supplied in 1lt, 5lt & 25lt plastic containers.

Note:
Recommendations are given in this Data Sheet in good faith, to assist users with application of products for various purposes. However, users must undertake their own trials to establish suitability as no liability can be accepted by ABL should materials or methods prove to be unsuitable for such purposes.