# Aqualock OneCoat

## Application instructions

### Preparation/Substrate

Surfaces to be coated should be sound and provide adequate strength for the proposed end use (minimum 25 N/mm$^2$ compressive strength). The surface profile and levels should be appropriate for the system to be applied. Substrate humidity must not exceed 97% RH (surface dry); check the relative humidity of floors at ground level in accordance with BS 8203 so that the correct system can be applied.

**Note:** All aspects of the installation must be in accordance with the requirements of BS 8204, BS 8203 (Installation of Resilient Floor Coverings) or BS 5325 (Installations of Textile Floor Coverings).

Concrete curing compounds and highly trowelled concrete will extend the time for the hygrometer to reach equilibrium.

Blasting, scouring or diamond grinding removes laitance. Irregularities, damage and cracks are filled with epoxy filler. All residues must be removed to provide a dry, dust free open textured surface.

**Note**. Concrete curing agents and admixtures and the incorrect use of these products can impair adhesion. If in doubt, or if compatibility is unknown, a trial adhesion test with Aqualock OneCoat should be carried out and the Technical Department must be consulted.

Machine scarifying or shot blasting will be necessary for removal of incompatible curing agents, admixtures or other stubborn surface contamination. Shot blasting is also recommended on lightly polished surfaces.

Contact us for advice if there are impurities, such as oils etc., in the concrete.
Follow our instructions for connections to grid drains, cesspools, pipes and pipe inlets.

**Note:** Aqualock OneCoat is not designed to resist hydrostatic water pressure. In such circumstances external tanking or pressure relief, by e.g. directed drainage, must be provided to the structure.

### Application

**Aqualock OneCoat** is applied in a one coat application at 0.42 - 0.5 kg/m$^2$ depending upon requirements.

**0.42 kg/m2** (60m2 per 25kg unit) system for concrete substrates **up to 92% RH** (thickness approx. 250µ)

**0.5 kg/m2** (50m2 per 25kg unit) system for concrete substrates **up to 97% RH** (thickness approx. 350µ)

Stir the Base A and Hardener B components before adding all of Hardener B to Base A. Mix with slow speed drill and helical spinner, taking care not to entrain air.

**Note**. Mix for 4-5 minutes to obtain a consistent and uniform grey colour. Ensure all materials from the base and sides of the containers are mixed in thoroughly to ensure complete curing.

Do not mix more units that can be applied within the working pot life.

To ensure correct coverage, measure out the area to be applied for each unit (dependent upon system selected). Apply the coating using a notched squeegee or trowel (2 mm x 5 mm notched) to achieve the correct coverage and then finish with a pre-wetted “fluff-free” paint roller.

**Note**. Practical coverage is 50-60m2 per 25kg dependent upon application and porosity of the concrete substrate.

The thickness must be no less than 250-350µ (0.25-0.35mm) to ensure that excess moisture vapour will not permeate the membrane. Check the number of units that were used in each area.

Ensure that the coating is continuous, consistent in thickness and free of pin holes, otherwise a second coating is required to patch these areas.

Leave to harden until a tack free surface is achieved.
The product can be overcoated after 6 hours (14-20 hours at 10°C).
Maximum overcoating time is 24 hours (take into account any accelerating effects of heat from the sun).

Protect the newly laid surface from traffic before the final coating is applied.

**Note**. Aqualock OneCoat can be used for resin rich coatings and primers e.g. Flowcoat SF41, Peran SL, Peran STC.

A sand scatter is required into the final coat for **screed** finishes:

For **resin screeds** topping, scatter dry Silica Sand/Quartz grade 1-2mm @ 0.5 kg/m2 (approx.)

For **self levelling cement** screeds, scatter dry Silica Sand/Quartz grade 1-2mm @ 2 kg/m2 (approx.)

**Note.** Sand scatters must not be used for an impermeable topping/ finish.

Before applying soft flooring adhesive to Aqualock OneCoat, contact the adhesive manufacturer for instructions.

**Note that:**

Concrete is a very porous material; as it warms during the day it “outgases” (expels air).
A coating applied while the concrete is out gassing is likely to develop bubbles and pinholes.

To avoid this, the material should be applied when the temperature of the concrete substrate is static or falling (usually this is from late afternoon into the night).
Stop applying the material well before dawn, so it has time to set up (firm to the touch) before out gassing begins. This may be anywhere from 1 to 6 hours, depending upon the weather conditions and the product applied. In addition, it is a good idea to shade the work area from direct sunlight.

An additional priming process may be required in situations where out gassing could be a problem. Consult Flowcrete for priming recommendations.

Flowcrete products are usually multi-component systems. Poor mixing, or incorrect mixing procedures, can result in irregular and incomplete hardening, which in turn can result in an inferior final result.

The temperature should be over 15°C to achieve the best results during application. The temperature of the substrate should be at least 10°C, although a temperature of 15-20°C is recommended.

The product should be stored in such a way that the temperature is the same as the room temperature where they are to be applied, i.e. within the range 15-25°C.

Normally, the surface will be able to take light traffic after 18 hours at 15-25°C. The surface will be fully hardened after 7 days.

There are often several types of products at a workplace. Sort the products separately to avoid mistakes.

The temperature of the substrate should exceed the “dew point” by more than 3°C during application and hardening.

## Consumption of Materials

| | | |
|---|---|---|
| Aqualock OneCoat | up to 92% RH | approx. 0.42 kg/m² |
| | Up to 97% RH | approx. 0.5 kg/m² |

## Ratio of Components

| | | Weight | Volume |
|---|---|---|---|
| Aqualock OneCoat | A:B | 3.4: 1 | 1.9: 1 |

## Cleaning of Tools

Clean immediately after use in solvent, e.g. Flowsolve Cleaner or Acetone.



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