

# Solseal Aqua Barrier

## Description:

Solseal Aqua Barrier is a two-component liquid applied water based Epoxy Coating, which dries to form a tough, Waterproof / Humidity (Class III) barrier & chemical resistant membrane.

Solseal Aqua Barrier is impervious to water, and when subjected to normal service conditions, will provide an effective barrier to the transmission of liquid water and water vapour, for the design life of the structure in which it is incorporated.

Solseal Aqua Barrier has excellent adhesion to correctly prepared substrates without the need for a primer. Once installed, Solseal Aqua Barrier will provide excellent resistance to mechanical and chemical damage.

Solseal Aqua Barrier is certified as a 'Class III' water and humidity barrier which makes it ideal for applications subject to negative pressure / rising humidity. Solseal Aqua Barrier also complies with the requirements of BS 5908.



## Typical Uses:

- Marine Concrete.
- Bund Walls & Floors.
- Plant Rooms.
- Computer Room Floors.
- Sealing coat for Concrete.
- Humidity Barrier.
- Anti Skid Walkways Traffic Decks.
- Water Features and Roof Gardens.
- Primer in applications with rising humidity/negative pressure (water features/tanks, pools, foundations, etc.).

## Features & Benefits:

- Can be applied to most substrates, without primer, even on damp or green concrete. Can also be applied on iron, galvanized steel, aluminium, glass, wood, and masonry.
- Highly effective water/humidity barrier.
- Easy application (water based).
- Low-odour, safe, and non-flammable (zero VOC).
- Suitable for application in closed spaces.
- Easy clean-up.
- Good mechanical properties & abrasion resistance
- Touch dry in 5 Hrs (ambient temperature).

## Preparation:

- New concrete, screed or render should have a brushed or wood float finish and should be free from contamination by any material which could impair adhesion.
- All surface defects should be repaired by approved methods. Protrusions greater than 3 mm should be removed.
- Existing concrete, screed or render should be well prepared to provide a dense, defect-free substrate.
- Brickwork, blockwork and masonry should be flush pointed.
- All substrates should be free from standing water.
- Metal surfaces should be cleaned using a wire brush or mechanical means. Solseal Aqua Barrier is compatible with most metal primers.

## Application:

- Solseal Aqua Barrier is supplied in preweighed units consisting of an individually packed base and reactor.
- Units should never be split or divided. Ensure that the entire contents of both units are mixed thoroughly.
- Add 10-30% water and mix using a slow speed drill and mixing paddle.
- Clean mixing paddle between each batch. Never attempt mixing at temperatures below 10°C as this will impair or halt the curing process.
- The product is always applied in thin coats. The second coat is applied once the colour on the current coat turns from milky white to transparent. Check that the current coat has hardened to the degree where it can no longer be punctured by finger nail.
- Apply using sheepskin disposable rollers. Clean tools using Solklens.
- Initial curing is complete after 5 hours at 20°C, but this will be extended at lower temperatures.
- Anti-skid wearing surfaces can be obtained by incorporating bauxite or similar hard wearing aggregates into the second/third coat of Solseal Aqua Barrier immediately after the application.
- Do not exceed the stated consumption numbers as this will adversely affect its adhesion and durability.
- Pot life of the mixture is 1 hour maximum at 25°C.
- Do not apply when temperature is below 10°C.
- Hot concrete should be wetted before application.

## Consumption:

- **As a primer:** Apply in one or two thin coats with a total consumption of 150 gr/m<sup>2</sup>.
- **As a water/humidity barrier:** Apply in three coats with a total consumption of 600 gr/m<sup>2</sup>.

## Movement Joints:

The membrane should be reinforced at movement joints using Solsheet self adhesive membrane, and by applying additional layers of product in these areas. Refer to Solco for specific recommendations.

## Storage & Shelf Life:

- Keep containers sealed.
- Store in dry conditions at room temperature and away from direct heat.
- All applicable storage requirements for flammable materials should be observed.

## Health & Safety:

- Avoid physical contact with material and inhalation.
- Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks.
- If material comes into contact with skin, the user should wash the affected area with a suitable antiseptic cleaner and then soap and water.
- If splashes should affect the eyes, bathe immediately with copious quantities of clean water and immediately seek medical advice.

Container Size
8kg (4kg Part A & 4kg Part B)
10kg (7.5kg Part A & 2.5kg Part B)
20kg (15kg Part A & 5kg Part B)

## Technical Data:

Property	Test Method	Value
<b>Property (Liquid Form)</b>		
Viscosity (Brookfield) (At 25C)	ASTM D2196-86	3500 cP
Specific Weight (At 25C)	ASTM D1475 / ISO 2811	
Mixing Ratio of Transparent Liquid		
Mixing Ratio of Coloured Liquid		1:4 (A:B, by weight)
Tack-Free Time (At 25°C & 55% RH)		5-6 hours
Full Cure		7 days
Pot Life (At 25C)		1 hours
<b>Property (Cured Membrane)</b>		
Service Temperature		+10C to +40C
Water Vapour Transmission	EN ISO 7783-2	3.9 gr/m <sup>2</sup> .hr, Class III (low < 15)
Water Vapour Transmission	NF EN 1062-3	0.003 - 0.006 kg/m <sup>2</sup> .hr <sup>0.5</sup> Class III (low < 0.1)
Adhesion to Concrete	ASTM D4541	>3 N/mm <sup>2</sup>
Resistance to Friction	ASTM D4541	120 x 10 <sup>-3</sup> Gr