

SOLSEAL Aqua Barrier



Water Vapour Barrier

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.

- Marine Concrete
- Bund Walls & Floors
- Plant Rooms
- Computer Room Floors
- Anti Skid Walkways Traffic Decks.
- Water Features and Roof Gardens

Colour	Product Code	Container Size
Clear / White	SOLSEALAQB5	4 Kg (3kg + 1Kg)
	SOLSEALAQB10	10 Kg (7.5kg + 2.5kg)
	SOLSEALAQB20	20 Kg (15kg + 5kg)



SOLSEAL - Liquid Applied Systems

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Product Description

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 and coating for chemical plant bund walls and floors.

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.

Typical Uses

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

Features & Benefits

- Can be applied to most substrates, without primer, even on damp or green concrete. Also on iron, galvanized steel, aluminium, glass, wood & masonry
- Highly effective water/humidity barrier.
- Easy application (water based).
- Low-odour, safe, 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)

Substrates

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 wire brush or mechanical means. Solseal Aqua Barrier is compatible with most metal primers.

Application

Solseal Aqua Barrier is supplied in pre-weighed units consisting of individually packed base and reactor.

Units should never be split or divided. Ensure that the entire contents of both units are mixed thoroughly, add water 10-30% 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, once the colour on the current coat goes from milky white to transparent. Also check that the current coat has hardened to the degree where it can no longer be punctured by finger nail. Apply using a 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

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Application

- Do not exceed the stated consumption numbers as this will affect adversely its adhesion and durability.
- Pot life of 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 primer – Apply in one or two thin coats with total consumption of 150 gr/m²
- As water/humidity barrier – Apply in three coats with total consumption of 600 gr/m²

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

Equipment Cleaning

Clean equipment with Solklens.

Packaging

Solseal Aqua Barrier (transparent) is supplied in 4kg (3kg + 1Kg), 10 Kg (7.5kg + 2.5kg) & 20kg (15kg + 5kg) containers

Storage and 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 contact with skin should occur wash with a suitable antiseptic cleaner and then soap and water.

If splashes should affect eyes, bathe immediately with copious quantities of clean water and immediately seek medical advice.

Technical Data			
Property (Liquid Form)	Units	Method	Specification
Viscosity (BROOKFIELD)	cP	ASTM D2196-86, @ 25°C	3500
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20°C	1.0
Mixing ratio of transparent Solseal Aqua Barrier	A:B (by weight)	-	1:3
Mixing ratio of coloured Solseal Aqua Barrier	A:B (by weight)	-	1:4
Tack free time, @ 77°F (25°C) & 55% RH	hours	-	5-6
Full Cure	Days		7
Recoat time	hours	-	Recoat once the colour on the current coat goes from milky white to transparent. Also check that the current coat has hardened to the degree where it can no longer be punctured by finger nail
Pot Life	hours	-	1 @ 25°C
Property (Cured Membrane)	Units	Method	Specification
Service temperature	°C	-	+10° to +40°
Water vapour transmission	gr/m ² .hr	EN ISO 7783-2	3.9 Class III (low < 15)
Water vapour transmission	kg/m ² .hr ^{0.5}	NF EN 1062-3	0.003 - 0.006 Class III (low < 0.1)
Adhesion to concrete	Kg/cm ² (N/mm ²)	ASTM D4541	> 30 (> 3)
Resistance to friction	Gr	ASTM D4541 (Taber 503, CS17, 1.0kg, 1,000 revs)	120 x 10 ⁻³