

# MOISTURE SEAL

## Epoxy Water Vapour Barrier

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 Page: Page 1  
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A two part, high performance, water based epoxy moisture and vapour barrier formulated to prevent water seepage and permeation in building and construction substrates.

### RECOMMENDED SUBSTRATES:

In-situ concrete  
 Brick, block and stone work  
 Fibre cement and AAC systems  
 Pre cast and tilt up panels

### FEATURES AND BENEFITS:

Easy water clean up  
 Withstands high levels of hydrostatic head of water pressure (up to 25 metres or 250 kPa)  
 Excellent adhesion to recommended substrates  
 Convenient equal part mixing ratio by volume or weight  
 Approved for use with potable (drinking) water, conforms to AS4020 (1992)  
 Tested to ASTM E96 for water vapour transmission  
 Australian made  
 Environmentally friendly  
 Non flammable, negligible odour and toxicity

### PERFORMANCE PROPERTIES

(Not to be used as a specification)

TEST	RESULT
Appearance	Brushable/rollable uniform paste with
Colour	Grey (light)
Finish	Matt
Mixing Ratio	1:1 (component A:B) by volume or 1:1 by weight (A:B)
Pot life	45 - 60 minutes @ 25° C
Re-coat time	4 hours @ 25° C & 50% RH
Water vapour barrier permeance	0.12g/24 hrs/M <sup>2</sup> mmHg @ 32° C and 50% RH
Application of adhesive/coverings	24 hours @ 25°C and 50% RH
Full Cure	5 – 7 days at 25° C and 50% RH
Specific gravity (mixed)	Approx. 1.25 at 25° C and 50% RH
Dry film thickness	200 µm (microns)

### AGING

Moisture Seal is available in 8 and 20 litre units

### COVERAGE

Moisture Seal is designed to be applied in two coats to achieve a minimum, finished, dry film thickness of 200 µm (microns). Apply the first coat at 4/5M<sup>2</sup>/litre (square metres per litre). Second coat at 4/5M<sup>2</sup>/litre (square metres per litre). Coverage dependent on surface porosity and substrate conditions.

### RECOMMENDED USES :

#### Timber Flooring Installation

As a low vapour transmission barrier on concrete floor slabs to prevent moisture migration and subsequent swelling of timber flooring systems

Highly recommended for use prior to any application of the Bostik Ultraset Timber Flooring Adhesive range

#### Building and Construction:

As a low pressure head, water transmission vapour barrier coating to prevent moisture vapour penetration through ground floor slabs

To prevent water seepage and permeation through exterior walls  
 As a highly tolerant moisture and vapour barrier in water storage tanks, tanking applications, reservoirs and swimming pools

As a curing compound coating over freshly laid (green) concrete  
 As an excellent vapour barrier coating prior to the application of the Bostik Building Products range of cementitious repairs, screeds, epoxy floor toppings and coatings.

Also suitable for use with commercial paints, tiling systems, soft and hard floor coverings

May be used as part of a waterproofing system prior to the application of any of the Bostik liquid waterproof membrane range , Ultraseal, Boscoseal AC or Boscoseal PU

Safe to use in sensitive locations (eg, around food or habitable areas).

### APPLICATION INSTRUCTIONS

#### Surface Preparation:

All surfaces to be treated must be structurally sound and all previous coatings, adhesives, efflorescence or laitance should be removed by chipping, abrasive blast cleaning, high pressure water washing, mechanical scrubbing or other suitable means. All surfaces must be cleaned free from dirt, grease, oil or other surface contaminants.

Holes, non-structural cracks and other surface deformities should be repaired using Bostik Patchfix in accordance with the technical data sheets.

Very porous or "boney" concrete may require 3 coats of Moisture Seal. The first coat acting as a primer, penetrating into the pores of the concrete.

Ensure recoat times are adhered to between applications (refer

to precautions). A minimum of 4 hours is required between coats, preferably overnight if temperature is below 20°C.

### Mixing

- Mixing should be by means of a mechanical forced action mixer with a high shear stirrer
- First, premix each individual component to form a homogeneous paste
- Second, join the two components by equal volume or weight, mixing thoroughly for a minimum of 5 minutes until a homogeneous blended paste is obtained
- Avoid trapping air during mixing, this may cause later pin-holing in the coating during application
- Only mix as much as may be used within the pot life of the product
- Coating Procedure
- Moisture Seal is a minimum two-coat system. The coverage rate as specified must be achieved to ensure transmission barrier and low permeability is obtained
- In all applications of Moisture Seal, it is critical that a final, dry film coating thickness of 200 microns (approximately the thickness of a business card) is achieved
- Applying with a brush or roller, ensure to work the material into the substrate surface to fill voids and eliminate pin-holing
- During the curing process, Moisture Seal will experience 50% evaporation loss from each coating application. (Wet 200 microns will dry to 100 microns).
- As application progresses, test the coating depth at random points with a wet film gauge/comb to 200 microns
- Applying the two coats with this method, and allowing for the evaporation loss, the final dry film thickness should be achieved as specified
- Extreme care is necessary, and if required, protection should be provided to ensure Moisture Seal is not damaged in any way between or after final coating.

### PRECAUTIONS

#### 1. General Use

- Moisture Seal cure rates will be dramatically reduced if relative humidity is above 85%.
- Moisture Seal should never be diluted.
- Do not apply to steel or metal surfaces as corrosion will occur.
- Do not add cementitious products to Moisture Seal.
- Moisture Seal is a vapour barrier and not a waterproof membrane. A dedicated membrane from the Bostik range should be used if a waterproof membrane in conjunction with a vapour barrier is required.
- Moisture Seal is not trafficable and must be covered with floor toppings, coatings or conventional coverings prior to foot or vehicle traffic introduction.
- In enclosed areas, such as water tanks or reservoirs, ventilation should be provided during curing cycle to enable adequate evaporation of the coating.
- Allow to cure for a minimum of 24 hours at 25°C/50% R.H. before applying adhesives, mortars, decorative coatings or other surface treatments.
- Moisture Seal will tend to yellow when exposed to UV light.
- Discard any material that has exceeded the pot life or working time of the product.
- Do not apply over any substrates that have been previously treated or coated with curing compounds, PVA concrete bonding agents or acrylic coatings. These areas must be mechanically cleaned by grinding or shot blasting to produce a contamination free surface.

ation free surface.

#### 2. Floor Levelling

Where a floor levelling compound is to be used over Moisture Seal, allow the two (2) coats of Moisture Seal to dry for a minimum of 24 hours at 25°C/50% R.H. Prime with a non porous primer such as Bostik Ultra NP Primer as per specifications (refer Technical Data Sheet) and allow to dry for 2-3 hours before applying the selected product from the Bostik Ultralevel range.

#### 3. Cold Substrates and Cool Climatic Conditions

- Moisture Seal cure rates will be dramatically reduced if substrate surface or ambient temperature is below +10°C.
- If Moisture Seal is applied in cold or cooler climatic conditions, substrate temperatures can produce amine blush, resulting in an oily residue and/or areas of uncured tacky discoloration (usually off white or yellow).
- If amine blush or any other form of surface contamination or discoloration appears on the coating, Moisture Seal should be allowed to cure and then be washed with clean fresh water.
- Ensure thorough removal of contamination prior to the application of any further coating.
- Failure to perform this procedure will result in de-lamination between coatings.
- Follow the mixing instructions exactly. Mixing slightly longer (eg, extra 1 minute) after homogeneous paste is obtained is better than under mixing.
- Allowing the product to stand for approximately 5 minutes after mixing will assist in accelerating the drying reaction.
- Never apply thin coats as the rapid moisture loss will arrest or slow the drying reaction.
- Thin coats can result in amine blush presence on the surface producing uncured or tacky areas.
- If possible store the Moisture Seal in a 20°C environment 24 hours prior to use.
- If possible warm the substrate surface area where Moisture Seal is to be applied by air blower or use a blower after application.
- Always provide adequate ventilation during the curing cycle.

### PAINTABILITY

Compatible with most conventional, commercially available paints, industrial surface coatings such as epoxy, acrylic, polyurethane and polyester. To ensure compatibility of any coating, it is recommended that the P.A.T.S. Programme is followed.

#### P.A.T.S (Pretested Adhesion To Substrate) Programme:

Bostik offer a service in which a program has been established to eliminate potential field problems by pre-testing Bostik adhesives and coatings with samples of building materials to which the products will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.

### HEALTH AND SAFETY

- On contact, Moisture Seal may cause irritation.
- Gloves and protective goggles must be worn during application and use.
- Avoid contact with skin, eyes and avoid breathing in vapour.
- Wear protective gloves when mixing or using
- If poisoning occurs, contact a doctor or Poisons Information Centre.

- If swallowed, do not induce vomiting. Give a glass of water and see a doctor.
- If skin contact occurs, remove contaminated clothing and wash skin thoroughly for a minimum of 15 minutes.
- For more detailed information refer to Material Safety Data Sheet.

#### **CLEAN-UP**

Wash all equipment in water or water/detergent immediately on completion of application and mixing.

Moisture Seal will cure under water, hence ensure dirty equipment is not left soaking in water.

#### **STORAGE**

Store between 10°C and 30°C away from direct sunlight. Shelf life is 12 months in original unopened container. Partly used containers must be sealed tight when not in use.

#### **FIRE**

Product is non-flammable and poses no fire risk.

#### **WARRANTY**

Bostik offer a 10 year warranty on the Bostik Engineered Flooring System incorporating the full range of Ultraset adhesives, Moisture Seal and the Ultralevel range of products when applied in accordance with the current Technical Data Sheet.