

MAKPROOF MOISTURE BARRIER

TECHNICAL DATA SHEET

Two-Component Epoxy for Priming Under Flooring and Waterproofing Membranes

Makproof Moisture Barrier is suitable for use under flooring and waterproofing membranes. It is an approved moisture and vapour barrier suitable for direct contact with drinking water. It does not contain solvent and is compatible with a wide range of **Makrete** Waterproofing products.

RECOMMENDED USES

- Concrete, Brick, Metal,
- Pre-cast and tilt up panels
- Masonry, Stone
- Water Tanks Potable Water
- Curing compound over green freshly laid concrete
- As a moisture barrier preventing water seepage or dampness through floors and walls
- Structural Plywood
- Fibre Cement/AAC systems
- Storage Tanks
- Swimming Pools

FEATURES AND BENEFITS

- Excellent adhesion to concrete, rendered masonry, wet area plasterboard, FC sheet and plywood.
- Can be used with a wide variety of substrates
- Easy to mix with 1:1 mixing ratio by volume
- Conforms to ASTM E96 water vapour transmission(negative pressure) tests
- Approved for direct contact with potable (drinking) water (AS 4020:2005)

- Withstands hydrostatic water pressure up to 25m or 250kPa
- Water Clean Up
- Tested to ASTM E96 for water vapour transmission
- Environmentally Friendly
- Nonflammable, negligible odour and toxicity
- Prevents rising damp and the formation of efflorescence
- Can be overcoated with majority of decorative or industrial coatings such as epoxy
- Australian Made and Australian Owned

SURFACE PREPARATION

Ensure that all the surfaces are structurally sound, clean, dry or damp with no free surface water.

Must be smooth and free of voids & protrusions, oils, grease, curing compounds, coatings, adhesive residues. If there is any contamination it must be physically removed by methods such as shot blasting or grinding away the contaminants.

Repair any voids and defects with **Makrete** Patch Repair Mortars.

Porous concrete may require 3 coats of Makproof Moisture Barrier. The first coat absorbs into the concrete while the second and third coat will form a visible film on the concrete surface.

For recoating a minimum of 2-3 hours is required between coats, preferably overnight or a minimum of 24 hours if temperature is below 20°C.

MAIN AREAS OF APPLICATION

TIMBER FLOORS

- Apply to concrete floor if moisture content of slab is >5% or > 70% humidity.
- Apply **Makproof Moisture Barrier** prior to application of timber flooring.
- Always apply 2 coats 24 hours apart.

RESILIENT/SOFT FLOOR COVERINGS

- Apply to concrete floor if moisture content is greater than 95% relative humidity (using probe – in situ method)
- Always apply 2 coats 24 hours apart

GENERAL BUILDING APPLICATIONS

- **Makproof Moisture Barrier** is ideal for use in the negative side below ground substrates such as retaining walls, car parks, basements, lift shafts, swimming pools etc
- As a high-performance curing compound or “green” freshly applied concrete
- **Makproof Moisture Barrier** can be used as a moisture barrier/primer prior to application of **Makrete** Repair Mortars or Epoxies
- Use in any areas subjected to hydrostatic pressure
- Can be painted over with proprietary paint and coatings such as acrylic paints, epoxy flooring, render textures

CEMENTITIOUS AND EPOXY FLOORING, COATINGS, & LEVELLING APPLICATIONS

- Makproof Moisture Barrier is applied to the concrete slab if moisture reading is >5% or >75% relative humidity prior to application of flooring compounds.
- Apply minimum 2 coats of Makproof Moisture Barrier and allow to dry for 24 hours
- Apply on cured Makproof Moisture Barrier

- Apply a coat of **Makprime MP** (as per Technical Data Sheet) and allow to reach a tacky consistency then apply levelling compound or Epoxy Screed/Coating

MIXING

Makproof Moisture Barrier is a two-component system.

- Part A must only be used with Part B in a 1:1 ratio.
- The mixing must be done with a mechanical mixer and high shear paddle. Do not mix by hand.
- Open Part A and mix the contents. Open Part B pail and mix briefly.
- Combine Part B into Part A with continuous mixing.
- Mix until a uniform colour and consistency has been achieved. Mix thoroughly for at least 5 minutes.
- Avoid entrapping air while mixing. This can result in pin holes in the applied coat.
- Remember to scrape the sides and bottom of the container during mixing to ensure the **Makproof Moisture Barrier** Part A and Part B has been well combined.

Do not dilute the product.

APPLICATION INSTRUCTIONS

Two coats of **Makproof Moisture Barrier** are required when using the product as a vapour barrier.

Apply with a brush, roller or airless spray. Ensure a minimum 0.2mm wet film thickness is achieved for each coat (check regularly with a wet film thickness gauge).

Apply the second coat perpendicular to the first. Work into minor voids or defects but do not over work as this can induce pinholes.

A third coat may be required if the substrate is very porous or if pinholes are visible.

Do not use any leftover product that has hardened in the mixing pail.

Note: If applying only one coat this will increase the likelihood of pinholes which will compromise the moisture barrier. Always apply two coats as a minimum.

WORKING AND CURING TIMES

Pot Life	70-90 minutes
Recoat Time	4 hours minimum
Cure Time before covering	24 hours minimum
Full Cure	5-7 Days

*Times are @ 25°C and 50% RH (300g cup)
Curing rates will be affected by temperature and humidity on site.

COVERAGE

Number of Coats	1L	10L
1 coat @ .200mm wet film	4 - 5 m ²	40 - 50m ²
2 coats @ .200mm	2 - 2.5 m ²	20 - 25 m ²

The coverage is an approximate and more Makproof Moisture Barrier may be required if the surface is uneven or has a high porosity. Allow up to 10-15% wastage.

PRECAUTION:

This is a two-part system. Part A must be used with Part B in equal volume.

Read the Safety Data Sheet before use.

Use full kits as much as possible. Otherwise measure parts to maintain correct ratio.

If the ratios are not maintained the performance of **Makproof Moisture Barrier** will be compromised and may affect the result.

DO NOT dilute with water at any stage before cure.

If the two parts are not mixed properly it will affect the performance of the moisture barrier.

Makproof Moisture Barrier loses 50% of its volume when cured so the dry film thickness will be half that of the wet film thickness.

A minimum of two coats must be applied at a minimum of 0.2mm. This can be achieved by applying two coats at a wet film thickness of 0.2mm per coat.

Seal all metal and steel surfaces before application to avoid corrosion.

Makproof Moisture Barrier is not trafficable. It must be protected from traffic until covered.

Only use in ambient conditions between 5-35°C and <85% RH.

In cool environments <10°C it is recommended that air circulation be carried out with the aid of a fan or heater.

Precondition Part A and Part B to at least 20°C prior to application.

It is recommended that the treated surface be covered within 7 days. If longer apply and cure and additional coat before covering.

Makproof Moisture Barrier is a vapour barrier and not a flexible waterproof membrane.

The product may yellow when exposed to UV light.

Do not apply if rain is expected and protect from water for at least 24 hours.

STORAGE AND SHELF LIFE

Makproof Moisture Barrier has a 12-month shelf life when stored unopened between 5°C to 30°C.

Protect from excessive heat, direct sunlight, moisture and freeze/thaw.

PACKAGING

Makproof Moisture Barrier is available in 20 Litre Kits.

CLEAN UP

Makproof Moisture Barrier should be removed with warm soapy water from tools and equipment prior to full cure.

HEALTH AND SAFETY INFORMATION

Please refer to full Safety Data Sheet for this product, which is available from **Makrete Building Solutions**.

PRODUCT CHARACTERISTICS	
Colour	Two Component – Part A – White Liquid and Part B – Grey Liquid
Appearance	Smooth, Brush/Roller Uniform Paste
Finish	Satin/Matt
Flammability	Non-flammable and poses no fire risk
Mixing Ratio	1:1 (Component A:B) by volume
Pot Life	1 Hour @ 35°C 70-90 mins @ 25°C
Re-coat Time	3-4 Hours @ 25°C & 50% RH depending on concrete porosity
Water Vapour Barrier Permeance	0.12g/24 hrs/ M ² mmHg@ 32°C & 50% RH
Full Cure	5-7 Days @ 25°C & 50% RH
Dry Film Thickness	100 microns
Application of adhesive/coverings	24 Hours @ 25°C & 50% RH
Specific Gravity	Approx 1.25 @ 25°C & 50% RH
Wet Film Thickness	200 microns

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Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time.

The TDS should be carefully read and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied.

Our responsibility for products sold is subject to our standard terms and conditions of sale. Makrete does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

The information and any recommendations relating to the application and end-use of all MAKRETE products are provided in good faith based on MAKRETE's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by MAKRETE. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions.

It is recommended that all products be properly stored, handled and applied in accordance with the printed literature (TDS).

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.