

DAMPFIX PU

WATERPROOFING

23 June 2021

YOUR SMART ADVANTAGES

- Provides a tough elastomeric waterproofing membrane when fully cured.
- Minimum Dry film thickness achievable in 2 coats
- Does not contain bitumen
- Will not bleed through porous materials such as marble, natural stone and slate tiles.
- Will not re-emulsify when immersed, after full cure.
- One component, ready to use
- Easy to apply
- Excellent bond strength to most primed common building substrates.
- Reaches sufficient cure in 72 hours allowing for fast placement of mortar beds & screeds

DESCRIPTION

Bostik Dampfix PU is a one component, highly elastic, class 3, polyurethane waterproofing membrane system that contains no bitumen and complies with AS/NZ 4858

Bostik Dampfix PU polyurethane waterproofing membrane is specifically formulated for applications where the waterproofing membrane is to be covered by tiling systems laid on an un-bonded reinforced screed in both internal & external applications (ref: Guide to the Installation of Ceramic Tiles - AS3958.1)

This is a 2-coat system applied over primed porous & non-porous substrates. It is not recommended as a membrane system in immersed areas (such as pools or spas)

USES

- As a waterproof membrane between the structural substrate & the reinforced un-bonded tile screed in both internal & external applications

- As a waterproofing membrane to internal wet area shower, bathroom, kitchen, laundry & toilet areas to AS/NZ 3740
- As a waterproofing membrane to external balconies & podium levels to AS/NZ 4654.2
- All horizontal applications to be covered by a reinforced un-bonded screed to falls prior to the application of tile or other surface wearing and protective systems by following trades
- Suitable for concrete; cement rendered masonry; FC sheeting; water resistant plasterboard; and structural plywood (Type A Stamped "PAA JAS-ANZ" to AS/NZS2269-2004)

PRODUCT CHARACTERISTICS

Membrane Classification	Class 3 – high extensibility
AS/NZ4858	Complies
Elongation at break	> 600%
Colour	Grey
Appearance	Thick paste
Tack-Free Time	Approx. 4hrs @ 25°C and 50% RH
Cure System	Moisture cure
Volume Solids	Approx. 80%
Full Cure	7 Days @ 25°C and 50% RH
Flammability	Non-flammable
Recoat time	24 hours @ 25°C and 50% RH
Following trades	72 hours @ 25°C and 50% RH
Minimum Wet Film Thickness	750 microns per coat Minimum 2 coats
Minimum Dry Film Thickness	1.2mm after 2 coats

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SURFACE PREPARATION

- Read “Precautions” and “Important Notes” prior to applying any component of the membrane system
- Commencement of membrane system installation shall be taken as acceptance of the substrate suitability and preparation by the applicator
- Check that the surface of all substrates to be membraned are: structurally sound; clean; dry; smooth and free of voids & protrusions; oils, grease, curing compounds; coatings; adhesive residues and are uncontaminated by preceding trade activities
- Check that all composite substrates, such as wall & floor sheets are fully supported and installed to the manufacturer’s instructions
- Where particle board, platform floor sheeting is installed, check manufacturer’s specification for suitability in wet area applications and that protective coatings do not impair membrane adhesion
- New concrete, mortar beds, screeds and render must have cured for 28 days
- Moisture Seal must be applied as a primer coat on all applications to porous substrates, e.g. concrete, screeds, renders. Refer Moisture Seal Technical Data Sheet
- N40 primer must be applied using “2 cloth method” on all applications to rigid plastic & metallic non-porous substrates, e.g., UPVC drainage outlets and penetrations; aluminum angle water stops, brass, copper and galvanized penetrations, stainless steel drains & gutters etc. Refer N40 Technical Data Sheet
- 2 coats of Moisture Seal must be used to seal concrete slabs subject to a negative hydrostatic head of pressure. Refer Moisture Seal Technical Data Sheet
- Substrates that are not smooth or free of voids and protrusions must be ground and vacuumed clean. All remaining voids must be repaired using, “Bostik Ultrafine Finish”, making sure to follow instructions for preparation, application and curing time. Refer to Ultrafine Finish Technical Data Sheet
- Membranes should not be applied until all preparation steps have been completed
- Dampfix PU is not recommended for use in chlorine environments

APPLICATION

- It is recommended that the installation be carried out by professional, licensed applicators holding a current Certificate 3 in Waterproofing.
- Application must comply with the Trade Licensing requirements of AS/NZ 3740 ‘Waterproofing of Internal Wet Areas in residential buildings’ or AS/NZ 4654.2 ‘Waterproofing membrane systems for exterior use – Above ground level’, as appropriate.
- Apply Bostik Seal N Flex FC or Bostik Seal N Flex 1 to all horizontal/vertical junctions, e.g. wall/floor, hob/ floor & shower set downs etc, prior to all membrane applications.

- Dampfix PU is specially formulated for brush and roller application to both small and large areas.
- A wet film gauge must be used regularly to ensure that minimum wet film builds are achieved for each coat.
- All vertical terminations, including perimeter walls, hobs and penetrations etc must be of adequate height to satisfy AS/NZ 3740 for internal applications & AS/NZ 4654.2 for external applications.
- The minimum film build requirements are identical for horizontal applications and must be applied without slump or deformation when cured.
- All external vertical membrane up stands must be covered by an appropriate cross cavity flashing, compatible coating or other appropriate flashing system to ensure that surface water is prevented from bypassing the membrane system above the required termination height.
- Bostik Technical Division must approve any modification to this technical data sheet in writing.

Priming

Porous Substrate

- A porous or absorbent substrate will allow a bead of water to easily soak into, and wet out, the surface of the substrate
- Moisture seal must be applied as a primer coat on all Dampfix PU applications to porous substrates, e.g. concrete, screeds & renders, refer Moisture Seal Technical Data Sheet.

Non-Porous Substrate

- A non-porous or impervious substrate will cause a bead of water to be retained on the surface of the substrate as a raised droplet. The droplet does not easily soak into the surface of the substrate.
- Concrete that is overworked or burnished at the time of placement can present, when cured, as a non-porous substrate that will not easily absorb a bead of water. Mechanical abrasion, such as captive shot blasting or vacuumed grinding is required to open substrate pores prior to the application of Moisture Seal primer.
- Dry rigid plastic and metallic substrates require N40 primer applied using the “2 cloth method” e.g., uPVC drainage outlets & penetrations, aluminium angle water stops, brass, copper or galvanised penetrations, stainless steel drains & gutters etc. Refer N40 Technical Data Sheet.

“Two Cloth Method”

- Dampen a clean & dry cloth with N40 primer and spread evenly over the non-porous substrate using a cleaning/rubbing action
- With a second clean & dry cloth, immediately wipe all primer residues off with a buffing action
- Allow the substrate to dry for a minimum of 5 minutes before installing Bostik Seal N Flex FC or

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Seal N Flex 1 joint sealant and/or Dampfix PU membrane

- Do not leave the primer longer than 4 hours before applying sealant/membrane
 - Re-prime if 4 hours has elapsed without applying sealant/membrane
- Clean & Re-prime if the primed surface is contaminated with excavation spoil, water, condensation, dust or other Contaminants before sealant or membrane can be applied

Bostik Moisture Seal

- Substrates subject to a negative head of hydrostatic pressure and treated with 2 coats of Moisture Seal must be clean, smooth and dry immediately prior to the application of Dampfix PU membrane.

Moist or Damp Surfaces

- New concrete, screed or render must be cured for 28 days.
- Membrane must be applied to a primed substrate.
- Substrates that are damp or wet at the time of Dampfix PU application may cause bubbling, pin holing or adhesion loss of primer and/or membrane.
- Moisture Seal must be used as a primer coat to all porous substrates, e.g., concrete, render, FC sheet, water resistant plaster board & external grade Plywood. Moisture Seal can be applied to damp substrates where there is no free water on the surface.
- Membrane is not a vapour barrier and is not designed to stop a hydrostatic head of pressure from the negative side. Where a substrate is subject to a negative hydrostatic head of pressure, two coats of Moisture Seal must be applied and allowed to fully cure before Bostik Seal N Flex FC or Bostik Seal N Flex 1 and Dampfix PU. Refer Moisture Seal Technical Data Sheet.

Fillet Joint & Membrane Installation

- Internal wet area installation must comply with the minimum requirements of AS/NZ3740, Section 3 "Installation", as a guide; refer pages 12 to 33 as appropriate.
- External wet area installation must comply with the minimum requirements of AS/NZ4654.2, Section 2, "Design and Installation", as a guide, refer pages 7 to 30 as appropriate.
- Bostik Seal N Flex 1 or Bostik Seal N Flex FC is to be installed where a fillet joint is required, e.g. to internal corners and changes in direction of substrate plane, such as wall/floor; wall/wall; hob/wall junctions, pipe penetrations, tap bodies, water stops and the like.
- Fillet joints must be a minimum 12mm x 12mm covered bead of sealant applied by caulking gun continuously into all changes of substrate plane, such as, wall/floor, hob/floor, hob/wall and wall/wall corners to the minimum termination

height required by AS/NZ3740 or AS/NZ4654.2 as applicable.

- The sealant must bridge all gaps and holes with a minimum 6mm contact onto the adjacent substrates.
- All fillet joint sealant profiles must be a minimum 6mm in depth at the mid-point of the joint.
- Substrate gaps at drainage outlets, flashings, water stops, nail/screw holes etc must also be sealed using Bostik Seal N Flex 1 or Bostik Seal N Flex FC polyurethane sealant prior to membrane application.
- Where applied, Bostik Seal N Flex 1 or Bostik Seal N Flex FC must be spatula tooled smooth around fittings and at all changes of substrate plane a minimum 12mm x 12mm covered fillet joint. The sealant must be a minimum 6mm in depth at the mid-point of the fillet joint and extend a minimum 6mm on either side of the joint or gap.
- Apply membrane as soon as the fillet joint can be over coated without deformation of the covered sealant profile.

Cracks & Joint Sealing

Concrete & Masonry Substrates

- Static cracks greater than 2mm in width, i.e., cracks that do not move or continue to propagate, must be "chased out" to minimum 3mm width and cleaned by vacuuming to remove all dust residues.
- After cleaning, fill all static cracks with a broad spatula application of Dampfix PU Fillet & Seal to minimum depth of 6mm.
- Cracks greater than 3mm or subject to movement or propagation must be referred to the builder or engineer for structural assessment and method of rectification.
- Expansion joints must be a minimum 10mm in width and require a backer rod installed prior to the installation of Bostik Seal N Flex 1 or Bostik Seal N Flex FC at a width: depth ratio of 2:1.

Floor & Wall Sheet Joins

- All floor and wall sheets must be installed to sheet manufacturer's specification and primed with Moisture Seal.
- Internal or external sheet wall & floor systems, suitable for wet area applications, require sealant application to seal sheet joins at the time of installation to comply with manufacturer's instructions. The Water proofer must confirm that the sealant used is compatible with membrane & Bostik Seal N Flex 1 or Bostik Seal N Flex FC joint sealant.
- Sheet joint sealant treatments that use silicone are not compatible with Polyurethane systems and must be waterproofed with a water based membrane system such as Dampfix Gold.
- As sheet joins are more prone to movement over less rigid joist supports, a 750-micron (0.75mm) coat of membrane extending a minimum 35mm either side of the sheet join must be applied as an extra coat. A further 2 full coats,

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at 750microns each, to the remaining area to be waterproofed is required.

Application of the Membrane

- Before application, the product should be stirred to achieve a smooth, bubble-free consistency. Avoid mixing too vigorously, which may entrain air in the product. Take care not to mix in any cured material which may be around the top of the pail.
- Can be applied using a brush, roller or trowel.
- Should not be applied in excess of 1.5mm thick per coat.
- This is a 2-coat system. Each coat must be applied at a minimum 750microns in thickness to achieve a total wet film thickness of 1.5mm.
- Apply the 2nd coat as soon as possible after the first 24 hours after 1st coat application.
- Delay in 2nd coat application in excess of 72 hours will require surface cleaning of the 1st coat by brush/mop scrubbing using fresh clean water followed by a final rinse by hose with fresh water. Apply 2nd coat when entire surface is dry.
- A wet film gauge should be used to regulate adequate membrane coverage during application.
- As a further guide a 15Lt pail, applied at 0.75L/m² (750 microns) will cover approx. 20m² per coat.
- A 15Lt pail of will cover approx.10.0m² in 2 coats.

Membrane Protection

- Membrane should be protected after application and during the initial 72-hour cure period by the placement of signs and barriers to deny access by following trades.
- If membrane cannot be covered by a screed after 72 hours, further temporary protection sheets must be installed securely, to protect the cured dry film from damage by following trades, until a protective screed and finished floor system is installed

COVERAGE

Each 15L pail will cover 20m² per coat or 10m² per 2 coats. Bostik Dampfix PU is a minimum 2-coat membrane system.

Application	Wet Film Thickness	Dry Film Thickness
1 st Coat	750 microns (0.75mm)	600 microns (0.6mm)
2 nd Coat	750 microns (0.75mm)	600 microns (0.6mm)
Total Film Thickness after 2 coats	1500 microns (1.5mm)	1200 microns (1.2mm)

CLEANING

Bostik Handy Wipes will remove Dampfix PU from tools & equipment before full cure. Do not use solvents on skin.

STORAGE AND SHELF LIFE

Store under cover in dry conditions. 12 Months shelf life when stored unopened, between 5°C and 30°C. Do not allow product to freeze and protect from direct sunlight.

PRECAUTIONS IN USE

- As product literature can be regularly updated please ensure the most up to date information is consulted from the Bostik prior to commencement of application via www.Bostik.com.au and follow the links to Technical Data Sheets or phone Customer Service on 1300 364 710.
- Dampfix PU is not UV stable and must be covered after 72 hours by a reinforced, unbonded screed that supports appropriate floor finishes. Suitable skirting tiles, or other compatible wall finishes, must cover vertical terminations.
- The installation of protection board and ballast, such as corflute & river pebbles etc, is not a suitable method of permanent floor finish over membrane unless over a free draining filter fabric and drainage cell system.
- Exposure of the membrane to chlorine environments, such as spas, saunas, swimming pools & pool surrounds is not recommended and may result in degradation of the membrane.
- Membrane is not a vapour barrier nor is it designed to stop a hydrostatic head of water pressure. (For this application Moisture Seal, a vapour barrier, is recommended).
- This product requires atmospheric moisture (humidity) to cure and should not be used in totally confined or air free spaces.
- Rate of cure will be inhibited when air or substrate temperatures are below +5°C
- Do not apply in temperatures greater than 35°C
- When used in areas subject to ambient conditions below freezing special installation precautions must be taken. Contact Bostik for advice before commencing work.
- Must not be applied greater than 1.5mm in depth in one application.
- A regular check with a wet film gauge during the application of each coat is advised.
- Tile bed screeds (reinforced, unbonded to AS 3958.1) should not be installed until the membrane has cured for a minimum of 72 hours @ 25°C & 50%RH and must be separated by a minimum 200um plastic sheet.
- Membrane should never be used as a wearing surface for foot or vehicle traffic or as an exposed finish or top coating exterior membrane.
- Hobs constructed of autoclaved aerated blocks, e.g. Hebel, must be saturated with 2 coats of Moisture Seal to consolidate and seal the substrate. This is to prevent pin holing of the membrane and provide enough strength to support tiling of the hob.

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- Autoclaved aerated block walls must be rendered prior to the application of the Dampfix PU System.
- For direct stick tile recommendations to Dampfix PU on vertical substrates over internal wet area applications consult Bostik Technical department for priming and tile adhesive options

PRODUCT ITEMS

Code	Name	Size
30603247	DAMPFIX PU	15L

For emergency information contact the Poisons Information Centre, phone 131 126 or the Emergency Response Service, phone 1800 033 111.



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