



Technical Data Sheet

Dampfix Gold

Water Based Polyurethane Liquid Waterproofing Membrane

DESCRIPTION

One part, highly elastic, Class 3, water-based polyurethane waterproofing membrane system that meets the requirements of AS3740 by complying with AS/NZ 4858.

This Technical Data Sheet may be revised, as appropriate, to comply with changes to relevant Australian and New Zealand Standards, reflect changes in Industry best practice in waterproofing procedures or include improvements to current technologies.

The Applicator is advised to reference the latest Technical Data Sheet issue, before commencing application, by visiting www.bostik.co.nz and following the Technical Data sheet links or by contacting Bostik Customer Service on 0508 222 272.

The **Bostik Dampfix Gold** waterproofing membrane system is specifically formulated for application on graded substrates that provide positive falls to drainage outlets. Overlaying tiling systems must comply with 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 applications (such as pools or spas)



FEATURES

- ✓ Class 3, high elasticity.
- ✓ Fast drying.
- ✓ Recoat in 2 hours @ 20° C & 50% RH
- ✓ Early access for following trades.
- ✓ Tile next day in most conditions.
- ✓ May be tiled directly onto with approved ASA adhesives
- ✓ Reinforced with clump free fibres.
- ✓ No mixing.
- ✓ High resistance to detergents & bleach.
- ✓ Will not re-emulsify after curing.
- ✓ Does not embrittle with age.
- ✓ Excellent adhesion to concrete; rendered masonry; wet area plasterboard; FC sheet & plywood.
- ✓ Can be applied to damp substrates, i.e. no free water
- ✓ Brush, roller or trowel applied.
- ✓ Flood Test in 72 hours.

RECOMMENDED USES

- ✓ 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, rooftops & podium levels to AS/NZ 4654.2.
- ✓ All applications to be covered by 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) substrates.



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APPLICATION INSTRUCTIONS

IMPORTANT NOTES

- The following instruction steps as detailed in this Technical Data Sheet may not be applicable in every application. They are provided as a guide to meet the requirements of AS/NZ3740 and AS/NZ4654.2.
- It is recommended that the installation should be carried out by a Bostik ASA trained Dampfix waterproofing course applicator.
- Bostik Technical Division must approve any modification or variances to this technical data sheet in writing followed by the issuance of an amended Technical Data Sheet.
- Wherever appropriate, the application must comply with AS/NZ 3740 'Waterproofing of Internal Wet Areas in residential buildings' & AS/NZ 4654.2 "Waterproofing membrane systems for exterior use – Above ground level".
- This product is specially formulated for brush, roller or trowel 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.
- Apply bond breaker joint to all horizontal/vertical junctions, e.g. wall/floor, wall/wall, hob/ floor, hob/wall & shower set downs etc., prior to all membrane applications (see note on suitable sealants).
- Allow 72 hours before flood testing the installed **Dampfix Gold** system.

Suitable Sealants

ASA silicones or Bostik Industrial Silicone are suitable sealants for use as bond breakers.

Correct bond breaker selection and installation is vital to overall membrane performance. Using an unsuitable sealant can increase the risk of failure and must be avoided. **Contact Bostik for advice if unsure or if considering products not listed above.**

SUBSTRATE PREPARATION

- Read precautions prior to applying any component of the waterproofing 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 coated are: structurally sound, clean, dry or damp with no free surface water, 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 platform floor sheeting, in particular particleboard, is installed check manufacturer's specification for suitability in wet area applications and ensure that protective coatings do not impair membrane adhesion.
- New concrete and render must have cured for a minimum 28 days.
- Sand & cement screeds and polymer modified renders must have cured for a minimum 7 days.
- 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 UL-Ultrafine**, making sure to follow instructions for preparation, application and curing time. Refer to **Bostik UL-Ultrafine** Technical Data Sheet
- **Bostik Multiprime** must be applied as a primer coat on all applications to porous substrates, e.g. concrete, screeds, renders. Refer **Bostik Multiprime** Technical Data Sheet.
- **Bostik N40** primer must be applied using "2 cloth method" on all applications to dry rigid plastic & metallic non-porous substrates, e.g., UPVC drainage outlets and penetrations; aluminium angle water stops, brass, copper and galvanised penetrations, stainless steel drains and gutters etc. Refer **Bostik N40** Technical Data Sheet.
- 2 coats of **Bostik Moisture Seal** must be used to seal concrete slabs subject to a hydrostatic head of pressure from the negative side. **Bostik Moisture Seal** must be clean, dry and smooth immediately prior to the application of **Bostik Dampfix Gold**. Refer **Bostik Moisture Seal** Technical Data Sheet.





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- Membranes should not be applied until all preparation steps have been completed.
- **Dampfix Gold** is not recommended for use in swimming pools, ponds or spas.

CRACKS & JOINT SEALING

CONCRETE & MASONRY SUBSTRATES

- Static cracks up to 2mm in width, i.e. cracks that do not move or continue to propagate, must be filled with **Bostik Dampfix Gold** or **Bostik UL-Ultrafine** after substrate priming and prior to the first full coat of **Bostik Dampfix Gold**.
- Static cracks greater than 2mm and less than 4 mm in width, i.e., cracks that do not move or continue to propagate, must be filled with **Bostik UL-Ultrafine** after substrate priming and prior to the first full coat of membrane.
- Cracks greater than 2mm that are subject to movement or propagation must be referred to the builder or engineer for structural assessment and method of rectification to perform as an expansion joint.
- Expansion joints must be a minimum 6mm in width and require a backer rod installed prior to the installation of a suitable sealant (see note on page 2) at a width: depth ratio of 2:1. See "Expansion Joints" below.

FLOOR & WALL SHEET JOINS

- All floor and wall sheets must be installed to sheet manufacturer's specification and primed with **Bostik Multiprime**.
- Internal or external sheet floor systems, suitable for wet area applications, require sealant application to seal sheet joints at the time of installation to comply with manufacturer's instructions. The Waterproofer must confirm that the sealant used is compatible with all **Bostik Dampfix Gold membrane** system components.
- Floor sheet joints that use Polyurethane sealants at installation must have cured for a minimum 7 days prior to the application of the membrane.
- All sheet joints that use Polyurethane sealants must be isolated from the membrane by a bond breaker tape that covers the entire width & length of the sheet join.
- As floor sheet joints are more prone to movement over joist supports, apply an extra 1000-micron (1.0 mm) wet coat of **Bostik Dampfix Gold** extending a minimum 35mm either side of the bond breaker. A further 2 full coats, at 1000 microns each, must be applied to the remaining area to be waterproofed.

EXPANSION JOINTS

- All expansion joints must be isolated from the membrane by a minimum 25mm wide bond breaker either by extending the silicone on either side of the joint or using bond breaker tape. This must cover the entire width & length of the joint.
- An extra 1000-micron (1.0 mm) wet coat of membrane extending a minimum 35mm either side of the bond breaker must be applied as an extra coat. A further 2 full coats, at 1000 microns wet coat each, is required to the remaining area to be waterproofed.

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.
- To avoid pin holing **Bostik Multiprime** must be stirred and not shaken if colour separation is evident. Colour separation will not affect the performance of **Bostik Multiprime**.
- **Bostik Multiprime** must be applied as a primer coat on all **Bostik Dampfix Gold** applications to porous substrates.
- Refer **Bostik Multiprime** 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





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shot blasting or vacuumed grinding is required to open substrate pores prior to the application of **Multiprime** primer.

- **Rigid plastic and metallic substrates** require **Bostik 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 **Bostik 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 a suitable sealant (see note on page 2) and/or **Bostik Dampfix Gold** 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.

NB: For pre-treated surfaces, contact Bostik Technical Division for P.A.T.S. Service.

APPLICATION

MOIST OR DAMP SURFACES

- Membrane must be applied to a primed substrate.
- **Multiprime** can be applied to damp porous substrates, i.e. with no free water on the surface.
- **N40 Primer** must **not** be applied to a damp non-porous substrate.
- **Multiprime** must be used as a primer coat to porous substrates, e.g., concrete, renders, FC sheet, water resistant plasterboard & external grade plywood.
- **Dampfix Gold** is not a vapour barrier and is not designed to stop a negative hydrostatic head of pressure. Where a substrate is subject to a hydrostatic head of pressure from the negative side **Moisture Seal** must be applied and allowed to fully cure before the application of **Dampfix Gold** system. Refer **Moisture Seal** Technical Data Sheet.

BOND BREAKER & 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.
- 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.
- When installing bond breakers only use sealants that have been approved for use in writing by Bostik. See the note on suitable sealants on pg 2 for more details or if unsure, contact Bostik before work commences.
- Bond breaker is to be installed over the dry primer coat where a bond breaker 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, drainage outlets or similar.
- Bond breaker 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 bond breaker joint sealant profiles must be a minimum 6mm in depth at the mid point of the joint.
- Substrate gaps at drainage outlets, flashings, and water stops, nail/screw holes etc must also be sealed using sealant prior to membrane application.
- Applied, sealant must be spatula tooled smooth around fittings and at all changes of substrate plane to a minimum 12mm x 12mm covered joint. The sealant must be a minimum 6mm in depth at the mid point of the bond breaker joint and extend a minimum 6mm on either side of the joint or gap.
- Apply membrane as soon as the bond breaker joint can be over coated without deformation of the covered sealant profile.





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APPLICATION OF THE MEMBRANE

- Can be applied using a brush, roller or trowel.
- Should not be applied in excess of 2mm thick per coat.
- This is a 2-coat system.
- The 2nd coat should be applied perpendicular to the 1st coat.
- Each coat must be applied at a uniform minimum 1000 microns in thickness to achieve a total wet film thickness of 2.0mm.
- A wet film gauge should be used to regulate adequate membrane coverage during application of each coat. **(Refer table on page 5.)**
- As a further guide a 15Lt pail, applied at 1.0 litre/m² (1000 microns) will cover approx. 15m² per coat.
- A 15Lt pail will cover approx.7.5m² in 2 coats.

MEMBRANE PROTECTION

- Membrane should be protected throughout the application process and during the initial 24-hour cure period by the placement of signs and barriers to deny access by following trades.
- Further temporary protection sheets must be installed securely, to protect the cured dry film from damage by following trades, until a protective screed or finished floor system is installed.

MEMBRANE RECOATING AND/OR REPAIR

RECOATING

- The surface must be cleaned free of all tile adhesive residue, surface dust and any form of contamination or substrate irregularity.
- The surface of membrane must be washed down with diluted **Bostik Sugar Soap**, thoroughly rinsed and allowed to dry.

REPAIRING

- The adjacent **Dampfix Gold** membrane must be sound with minimum dry film thickness of 1.2mm that is fully adhered to the substrate.
- Membrane must be thoroughly cleaned of all foreign material and left free of all cleaning agent residue, dust or contamination.
- Ensure that any exposed porous and non-porous substrates are correctly prepared, primed and sealed.
- Apply 2 coats of membrane as per “Coverage” instructions.
- Ensure that the membrane repair overlaps the existing membrane by a minimum 100mm.
- A consistent minimum 1.2mm dry film thickness is required over both previously coated and uncoated repair areas. **(Refer “Coverage” table below)**

COVERAGE

- **Bostik Dampfix Gold** is a min 2-coat system
- Each coat must be applied at 1.0 litre / m² or 1000-microns (1.0mm) thick resulting in a total wet film thickness of 2.0mm after 2 coats.
- A minimum of 2 hours should be allowed between coats.
- The 2nd coat should be applied perpendicular to the 1st coat.
- Extra coats may be applied if required at the same rate of 1000 microns (1mm thick) per coat.
- Do not thin with water or add fillers.
- The regular use of a wet film gauge during application is recommended to ensure correct wet film build per coat.
- The dry film thickness, after 2 coats should be a minimum of 1200-microns (1.2mm thick).

- Each 15Lt pail will cover depending on substrate conditions:
 - 15m² / coat.
 - 7.5 m² / 2 coats.

Application	Wet Film Thickness	Dry Film Thickness
1 st Coat	1000 microns (1.0mm)	600 microns (0.6mm)
2 nd Coat	1000 microns (1.0mm)	600 microns (0.6mm)
Total Film Thickness after 2 coats	2000 microns (2.0mm)	1200 microns (1.2mm)





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PRECAUTIONS

- **Must not** be installed directly on wet, contaminated, or friable substrates.
- Minimum dry film thickness after 2 coats is 1.2mm
- Regular checks with a wet film gauge during the application of each coat are advised.
- Do not apply any component of the system when air or substrate temperatures are below 5° C.
- Cold damp conditions will adversely effect application properties and slow rate of curing.
- Do not apply Bostik Dampfix Gold when air and substrate temperature is greater than 35°C or below 5°C.
- Membrane should not be used as an exposed finish or as top coating exterior membrane.
- When used in areas subject to ambient conditions below freezing special installation precautions must be taken. Contact Bostik for advice before commencing work.
- All 4654.1 **external** membrane applications covered with a reinforced tile bed or screed must be separated from the membrane by a minimum one layer of 200um plastic sheet as a separation layer in accordance with AS3958.1 - 3.3.2.3.
- The installation of protection board and ballast, such as river pebbles or similar loose laid unbound coverings, must be isolated from the membrane by a compatible drainage cell and filter fabric system.
- Must not be applied directly over lightweight concrete.
- Hobs constructed of autoclaved aerated blocks, e.g. Hebel, must be saturated with 2 coats of Multiprime 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.
- Autoclaved aerated block walls must be rendered prior to the application of the waterproofing system.
- Should not be used in constantly submerged applications such as swimming pools, ponds & spas.
- Not designed to withstand negative side substrate head of pressure.
- Use only suitable sealants (see note on page 2). Incorrect sealants will significantly increase the risk of failure.
- Any intended application of membrane outside of recommended installation should be referred to Bostik Technical Services for approval.
- Protect contents of pail from excessive heat, and freeze/thaw prior to use.
- Contact Bostik prior to work commencing if there is any uncertainty regarding suitability, installation or any other matters related to the system (including bond breakers).

BOSTIK CO-OPERATIVE TEST PROGRAM

Bostik offers a service in which a programme has been established to eliminate potential field problems by pre-testing Bostik membranes with samples of the building materials to which the membrane will be applied. This service is available on large projects where pre-application testing will aid in determining the proper method to achieve optimum adhesion. Consult a Bostik representative for further information

PAINTABILITY

Bostik Dampfix Gold is paintable. Refer paint supplier recommendations.

PROPERTIES

Colour	Gold or Grey
Appearance	Smooth, brush/roller grade paste
Shore "A" Hardness	Approx 60
Elongation	>900%
Minimum Dry Film Thickness	1.2mm
2mm Crack Bridging	Pass
Volume Solids	Approx 60%
Packaging	15L & 4L pails

Tensile Strength	1.5 – 2.0 MPa
Dry Time per coat	2 hours @ 25° C & 50% RH (min 2 coats)
Dry time following Trades	24 hours @ 25° C & 50% RH
SG	Approx 1.3
Minimum Wet Film	1.0mm / coat
Membrane Rating	Class 3
Moisture Vapour Transmission Rate	1.24 grams / m2 / 24hours
Flammability	Non-flammable





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Complies with AS3740 by meeting all requirements of AS/NZ4858
Wet Area Membranes

STORAGE & SHELF LIFE

Store between 5°C and 30°C. If stored, unopened within these temperature ranges, this product has a shelf life of **12 months**. Protect from excessive heat, moisture and freeze/thaw.

HEALTH & SAFETY

SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

TECHNICAL SERVICES TOLL FREE NUMBER: 0508 222 272 (Land lines only)

MSDS can be downloaded from www.bostik.co.nz

Clean-Up

Warm soapy water will remove **Dampfix Gold** from tools and equipment prior to full cure

PACKAGING

15 Litre & 4 Litre pails

VOC – 23 g/Lt

PRODUCT DETAILS

ITEM NO	ITEM NAME	Colour	SIZE
30804399	DAMPFIX GOLD	Yellow	4L
30804461	DAMPFIX GOLD	Yellow	15L

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