



ASA DAMPFIX 3

WATERPROOFING

04 March 2020

YOUR SMART ADVANTAGES

- Exposed external membrane to light pedestrian traffic areas.
- Suitable for immersed applications in pools, ponds and spas.
- Class 2, medium elasticity.
- Fast drying.
- Recoat in 1-2 hours @ 20° C & 50% RH
- Early access for following trades.
- Tile same day in most conditions.
- May be tiled directly onto with approved ASA adhesives
- Flood Test in 72 hours.
- Easy to mix
- Reinforced with clump free fibres.
- 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.

DESCRIPTION

A 2-Part, water-based, acrylic modified cement, Class 2 waterproofing membrane system that meets the requirements of AS3740 by complying with AS/NZ 4858.

This 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).

Bostik Dampfix 3 is a 2-coat system, applied over primed porous & non-porous substrates, that requires mixing immediately prior to application.

Bostik Dampfix 3 is suitable for use in immersed applications (such as pools and spas).

USES

- As a waterproofing membrane under tile to internal wet area shower, bathroom, kitchen, laundry & toilet areas when installed to AS/NZ 3740.
- As a waterproofing membrane under tile or other wearing surface systems to external balconies, rooftops & podium levels when installed to AS/NZ 4654.2.
- As an exposed waterproofing membrane to external applications subjected to light pedestrian traffic only.
- 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.
- Exposed external membrane to light pedestrian traffic areas.
- Suitable for immersed applications in pools, ponds and spas.
- Class 2, medium elasticity.

PRODUCT CHARACTERISTICS

Colour	White Liquid + Cementitious grey powder.
Appearance when mixed	Smooth, brush/roller grade, cement grey paste
Shore "A" Hardness	Approx. 60
Elongation	>110%
Minimum Dry Film Thickness	1.2 mm after 2 coats.
2mm Crack Bridging	Pass

ASA DAMPFIX 3 - WATERPROOFING

Pot Life	4 hours
Yield	33m²/coat (20L + 20kg kit)
Volume Solids When mixed @ 1:1 x volume	Approx. 75%
Packaging	2 x 20L pails – Liquid + Powder
Tensile Strength	1.0 MPa
Dry Time per coat	2-4 hours @ 23°C / 50% RH (min 2 coats)
Dry time following Trades	24 hours @ 23°C / 50% RH
SG	Approx. 1.4 kg/litre when mixed
Minimum Wet Film	0.9 mm / coat Minimum 2 coats
Membrane Rating	Class 2
Mix ratio by Weight	1.0 part powder to 1.0 part liquid
Water Absorption	1.8%
Moisture Vapour Transmission Rate	2.8 gms / m ² / 24hours
Flammability	Non-flammable
VOC	3 g/Lt (mixed)

SURFACE PREPARATION

- Read precautions 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 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, Ultrafine Finish, making sure to follow instructions for preparation, application and curing time. Refer to Ultrafine Finish Technical Data Sheet

- Multiprime must be applied as a primer coat on all applications to porous substrates, e.g. concrete, screeds, renders. Refer Multiprime Technical Data Sheet.
- 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 tap bodies, copper and galvanised penetrations, stainless steel drains & gutters etc. Refer Bostik N40 Technical Data Sheet.
- 2 coats of Moisture Seal must be used to seal concrete slabs subject to a hydrostatic head of pressure from the negative side. As soon as the final coat of Moisture Seal can accept foot traffic, apply Multiprime. Refer Multiprime and Moisture Seal Technical Data Sheets'.
- Membranes should not be applied until all preparation steps have been completed.
- Dampfix 3 is recommended for use in swimming pools, ponds and spas when covered by suitable tiled finishes bonded with suitable ASA tile adhesives.

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 Dampfix 3 or appropriate repair mortar. Finish after substrate priming and prior to the first full coat of membrane.
- 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 Ultrafine Finish 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 V70 Silicone 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 Multiprime.
- Internal or external sheet floor systems, suitable for wet area applications, require sealant/adhesive application to seal sheet

ASA DAMPFIX 3 - WATERPROOFING

joins at the time of installation to comply with manufacturer's instructions. Where appropriate, the Water proofer must confirm that the sealant used is compatible with all membrane system components.

- Floor sheet joins that use Polyurethane sealants at installation must have cured for a minimum 7 days prior to the application of the membrane.
- All sheet joins must be isolated from the membrane by a min 25mm wide bond breaker tape that covers the entire width & length of the sheet join.
- As floor sheet joins are more prone to movement over joist supports, apply an extra 900-micron (0.9 mm) wet coat extending a minimum 35mm either side of the bond breaker tape. A further 2 full coats, at 900 microns each, must be applied over the entire area to be waterproofed.

Expansion Joints

- All expansion joints must be isolated from the membrane by a minimum 25mm wide bond breaker tape that covers the entire width & length of the joint.
- An extra 900-micron (0.9 mm) wet coat extending a minimum 35mm either side of the bond breaker tape must be applied as an extra coat. A further 2 full coats, at 900 microns wet coat each, is required to the entire 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 Multiprime must be stirred and not shaken if colour separation is evident. Colour separation will not affect the performance of Multiprime.
- Multiprime must be applied as a primer coat on all applications to porous substrates.
- 2 coats of Moisture Seal must be used to seal concrete slabs subject to a hydrostatic head of pressure from the negative side.
- As soon as the final coat of Moisture Seal can accept foot traffic, apply Multiprime. Refer Multiprime and Moisture Seal Technical Data Sheets.

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 Multiprime primer.
- 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 tap bodies, 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 V70 Silicone sealant and/or Dampfix 3 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 contaminates before sealant or membrane can be applied.

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

MIXING

- This is a 2-part waterproofing membrane that must be mixed prior to application.
- The 20kg powder Pt A (2 x 10kg bags) requires 20litres of Pt B liquid.
- Stir PT B liquid component to ensure uniform consistency before use.
- The Mixing Ratio is 1:1 by weight.
- Add powder into the liquid while mixing liquid with a mechanically powered high shear stirrer.
- Always add powder to liquid to avoid lumps and incomplete mixing.
- Continue mixing until uniform and lump free.
- Allow the mix to stand for 10 minutes then remix for 1 minute before using.
- Do not mix by hand.

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.

ASA DAMPFIX 3 - WATERPROOFING

- 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.

APPLICATION

Application of the Membrane

- This is a 2-coat system.
- Can be applied using a brush, roller or trowel.
- Each coat must be applied at a uniform min 0.9 mm thickness for a total wet film thickness of 1.8 mm.
- Should not be applied in excess of 2mm thick per coat.
- A wet film gauge should be used to regulate adequate coverage of each coat. (Refer table on page 5.).

Moisture or Damp Surfaces

- Multiprime must be used as a primer coat to porous substrates, e.g., concrete, renders, FC sheet, water resistant plasterboard & external grade plywood.
- 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.
- Dampfix 3 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. As soon as the final coat of Moisture Seal can accept foot traffic, apply Multiprime. Refer Multiprime and Moisture Seal Technical Data Sheets.

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.
- V70 Silicone 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 and the like.
- Bond breaker joints must be a minimum 12mm x 12mm coved 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 V70 Silicone sealant prior to Dampfix 3 membrane application.
- Where applied, V70 Silicone must be spatula tooled smooth around fittings and at all changes of substrate plane to a minimum 12mm x 12mm coved 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 Dampfix 3 as soon as the bond breaker joint can be over coated without deformation of the coved sealant profile.

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 membrane surface must be washed down with diluted Bostik Sugar Soap, thoroughly rinsed and allowed to dry.

Repairing

- The adjacent 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 Dampfix 3 as per "Coverage" instructions.
- Ensure that the membrane repair overlaps the existing membrane by a minimum 100mm.
- A consistent minimum 1.2 mm dry film thickness is required over both previously coated and uncoated repair areas. (Refer "Coverage" table below)

PAINTABILITY

Dampfix 3 is paintable. Refer paint supplier recommendations.

COVERAGE

ASA DAMPFIX 3 - WATERPROOFING

- This is a min 2-coat system
- Each coat must be applied at 0.9 litre / m² or 900-microns (1.0mm) thick resulting in a total wet film thickness of 1.8 mm after 2 coats.
- A minimum of 1 hour 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 rate of 900 microns (0.9 mm thick) per coat.
- Do not thin with water or add fillers Bostik Dampfix 3.
- 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 must be a minimum of 1200-microns (1.2mm thick).
- Each 20Lt + 20kg Kit will cover, depending on substrate conditions
 - o 33m² / coat.
 - o 16.5 m² / 2 coats.

Application	Wet Film Thickness	Dry Film Thickness
1 st Coat	900 microns (1.0mm)	600 microns (0.75mm)
2 nd Coat	900 microns (1.0mm)	600 microns (0.75mm)
Total Film Thickness after 2 coats	1800microns (1.8mm)	1200 microns (1.2mm)

CLEANING

Warm soapy water will remove product from tools & equipment prior to full cure

STORAGE AND SHELF LIFE

12 Month shelf life when stored unopened between 5°C and 30°C. Protect from excessive heat, direct sunlight, moisture and freeze/thaw.

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 assist in meeting the installation requirements of AS/NZ3740 and AS/NZ4654.2
- It is recommended that the installation be carried out by professional, licensed applicators holding a current Certificate 3 in Waterproofing.
- 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 installation 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 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 V70 Silicone as a 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.
- Allow 72 hours before flood testing the installed system.

PRECAUTIONS IN USE

- This is a two part system and neither component is permitted to be substituted or diluted.
- 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 the system when air or substrate temperatures are below 5o C.
- Cold damp conditions will adversely affect application properties and slow rate of curing.
- Do not apply Bostik Dampfix 3 when air and substrate temperature is greater than 35°C or below 5°C.
- When used in areas subject to ambient conditions below freezing special installation precautions must be taken. Contact Bostik for advice before commencing work.
- Membrane is suitable for use as an exposed finish or as top coating exterior membrane on applications that are subject to light pedestrian, maintenance traffic only.
- All 4654.2 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.

ASA DAMPFIX 3 - WATERPROOFING

- 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 membrane system.
- Dampfix 3 can be used in constantly submerged applications such as swimming pools, ponds and spas when covered by tiles using approved ASA tile adhesive systems.
- Dampfix 3 is not designed to withstand negative side substrate head of pressure.
- 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.

Sap Code	Product	Size
30804119	DAMPFIX 3 LIQUID	20L
30616172	DAMPFIX 3 POWDER	20kg

For emergency information contact the National Poisons Information Centre, phone 0800 764 766 (0800 POISON) or CHEMCALL, phone 0800 243 622.

BOSTIK HOTLINE

Smart help 0508 222 777

This datasheet is for the general help of users. It is provided in good faith. The data is current and accurate to the best of our knowledge. Differing materials, substrates, environments, site conditions, and product storage, handling and application may affect results. Users should carry out tests to decide the product's suitability for purpose. This data sheet and the properties of the product may change without notice. Users, suppliers and retailers should check that the data sheets they have are the latest. To the maximum extent permitted by law, Bostik disclaims all warranties in relation to manufacture and use of the product. Bostik is not liable for representations made by users, suppliers or retailers about the product. Bostik is not liable for any loss or damage resulting from incorrect, careless, or negligent use or storage of the product, including use of out of date product. Any liability arising from use of the product is limited to the replacement or purchase price of the product. Bostik does not exclude rights and remedies that be excluded by legislation, for example under the Consumer Guarantees Act 1993. Sale of the product by Bostik is subject to the Bostik New Zealand Limited Conditions and Terms of Sale. For more information on Bostik, products, and conditions of use and sale visit www.bostik.co.nz.

Technical Advice

Tel: 0508 222 777

nzsales@bostik.com