# Technical Data Sheet Dampshield PU

Polyurethane Liquid Waterproofing Membrane

#### **DESCRIPTION**

One-part bitumen modified (coal tar free), moisture curing, polyurethane membrane. When cured it provides a tough highly elastomeric, impervious barrier to moisture. Suitable for application by brush, roller or trowel. Bitumen modified membranes may bleed over time and cause staining. Therefore it is not recommended for use under tiles or any area where bitumen bleed may discolour the finished surface appearance.

# **FEATURES**

- √ Coal tar free
- √ No mixing
- √ Early access for following trades
- √ Brush, roller or trowel applied
- √ Does not brittle with age
- √ Excellent adhesion to masonry surfaces
- √ Non re-emulsifying
- √ High elasticity

# **RECOMMENDED USES**

As a positive side membrane on:

- √ Below grade concrete & masonry walls and footings.
- Concrete & masonry basement walls and footings.
- √ Concrete & masonry retaining walls and footings.
- √ Internal Planter box walls and floors graded to drainage



### **APPLICATION INSTRUCTIONS**

- 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 recommended procedures to achieve the stated performance properties of the membrane system.
- It is recommended that the membrane installation be carried out by professional applicators of waterproofing membranes holding a Certificate 3 in Waterproofing. Installation shall be strictly in accordance with the manufacturer's written instructions.
- Provide adequate mechanical ventilation in enclosed & confined spaces.
- Commencement of membrane system application shall be taken as acceptance of the substrate suitability and preparation by the applicator.
- Before applying any component of the membrane system, ensure that all requirements of "Substrate Preparation" instructions above have been carried out.
- Saw cut and chase out all static cracks over 1.5 mm in width. Remove all dust and/or wet cut slurry from chasings, then prime, fill and seal with **Dampfix Fillet Joint** before application of the membrane.
- All cement based concrete or masonry repair must be fully cured before applying any component of the membrane system.
- Where expansion joints in the structure are unavoidable, caulk all joints with Seal N Flex FC. Refer to Seal N Flex FC Technical data sheet for application instructions.
- Before applying primers to all substrate types as per the "Priming" instructions above, ensure that substrate meets requirements of "Substrate Preparation" instructions.
- Moisture Seal primer coats must be dry before the application of Dampfix Fillet Joint or Dampshield.
- Apply Dampfix Fillet Joint to all internal angles at all footing/wall, wall/wall & graded floor/wall junctions.



- Membrane can be applied using a brush, roller, trowel or squeegee.
- an be applied over Dampfix Fillet Joint sealant after initial set (approximately 45 minutes at 25°C & 50% RH). The sealant should be able to accept the 1<sup>st</sup> coat without deformation of the sealant profile.
- Apply evenly to avoid thin spots, air entrapment or pin holes.
- Each coat should have nominal wet film coverage of 1lt / m2 or 1mm thick. A wet film gauge should be used regularly to check coverage rate of each coat (1mm = 1000 microns).
- Apply second coat after the first coat has cured for a minimum 24 hours without delay.
- Install protection board as soon as membrane is cured without delay.
- Use appropriate barricading to protect installed membrane surfaces from following trades. Avoid long exposure to UV before recoat or covering with protection board.
- If membrane must not be left exposed for prolonged periods before the 2<sup>nd</sup> coat is applied,
- A protection board or other suitable cover must be installed to protect the membrane surface from damage and contamination until the second coat can be applied.

#### **SURFACE PREPARATION**

The substrate must be surface dry), clean, smooth and free of voids & protrusions, curing compounds, loose materials, oil, grease, sealers and any other coating or contaminant that will affect the adhesion. The substrate must be determined to be structurally sound before application. Commencement of membrane installation shall be taken as acceptance of the substrate suitability and preparation by the applicator

- New concrete must have cured for minimum 28 days.
- Render must have cured for a minimum 28 days.
- Core filled blockwork must have cured a minimum 28 days
- Exposed brickwork & blockwork must be laid as face work with joints struck flush or rendered. Bagging
  is not an acceptable surface preparation.
- All concrete and masonry must be smooth, uniform and free of voids and protrusions.
- Repairs to concrete and masonry imperfections must include compatible patch repair compounds applied in accordance with ACRA Handbook 84. Contact Bostik Technical Division for appropriate patch repair solutions.
- Excavation should be below the height of the wall/footing junction to allow drainage away from wall/footing, minimise substrate contamination by excavation spoilage and adequate access to apply the membrane system to a clean and dry substrate.

#### PRIMING

- All below grade structures must be treated as damp substrates that may be subject to intermittent or constant immersion, or submersion, caused by below grade seepage & water table drainage.
- Prime all porous substrates with **Moisture Seal** as per the Technical Data Sheet.
- Prime all non-porous rigid plastic & metallic substrates with N40 primer using the two-cloth method described below, e.g. UPVC outlets & pipe work; brass, copper fittings; stainless steel trays & flashings.
- "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 the fillet joint sealant and/or membrane.
- Do not leave the primer longer than 4 hours before applying sealant/adhesive. (cont page 2)
- Re-prime if 4 hours has elapsed without applying sealant/adhesive.
- 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.
- For pre-treated surfaces, contact Bostik Technical Division for P.A.T.S. Service.

### **COVERAGE**

This is a minimum 2-coat system; each coat should be applied at a rate of 1 m² per litre = 1mm wet film thickness. A minimum of 24 hours should be allowed between coats. To ensure optimum performance, two coats of membrane must be applied to achieve a final, consistent minimum dry film thickness of 1.5mm (approx.10m2 / 18.9Lt pail). The 2<sup>nd</sup> coat should be applied perpendicular to the 1<sup>st</sup>. Do not thin with solvents



or add fillers. The regular use of a wet film gauge during application is recommended to ensure correct film build of approx 1mm per coat during application.

#### **IMPORTANT NOTES**

- Membrane **must not** be installed directly on wet, contaminated, or friable substrates.
- This is not a vapour barrier and will not resist a negative side head of hydrostatic pressure. Apply two coats of Bostik Moisture Seal as per the Technical data sheet.
- Do not thin with solvents or add fillers to Dampshield.
- All below grade applications are to be considered damp, requiring **Moisture Seal** as a primer.
- Rate of membrane cure will be inhibited when air or substrate temperatures are 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.
- Must be applied as a 2 coat system.
- Requires atmospheric moisture to fully cure. It should not be used in totally confined or air free spaces.
- Back filling of drainage media, soil or drainage aggregate should not be carried out until membrane is fully cured and covered with adequate protection board.
- **Dampshield** is <u>not</u> warranted for applications directly under tiles, either direct stick or under reinforced unbonded screeds.
- Membrane must not be used as an exposed finish or as top coating exterior membrane.
- Must not be applied over any form of lightweight concrete.
- Any intended application of membrane outside of recommended installation must be referred to Bostik Technical Services for approval.
- Must not be used in chlorinated water.
- Below grade drainage must be located at a height lower than the membrane termination at the footing.

### **BOSTIK CO-OPERATIVE TEST PROGRAM**

Bostik offers a service in which a programme has been established to eliminate potential field problems by pretesting 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**

Dampshield is not paintable

#### **PROPERTIES**

Typical properties after 7 days cure at 25° C and 50% RH

Colour	Black
Appearance	Smooth, brush/roller grade paste
Shore "A" Hardness	30
Elongation	700%
Solids by volume	Approx 80%

Peel Strength	3-6kg/cm <sup>2</sup>
Moisture Vapour Transmission	1.412 g/hr/ft <sup>2</sup>
Rate	1.412 g/11/10
Cure Time per coat	24 hr
Flammability	Non-flammable

Conforms to ASTM C836.76, ASTM D412, ASTM D2280, ASTM E-96

#### STORAGE & SHELF LIFE

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

#### **SAFETY PRECAUTIONS**

SEE THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

EMERGENCY INFORMATION: 1800 033 111 (ALL HOURS)

MSDS can be downloaded from www.bostik.com.au



#### **PACKAGING**

18.9 Litre (US 5 gal) drums.

#### **CLEAN-UP**

**Bostik Handi-Clean Towels** will remove **Dampshield** from tools & equipment prior to full cure. Wear eye protection and use solvents in well-ventilated area; do not use solvents on skin.

### VOC - 200q/Lt

voccertificates.australia@bostik.com

#### **PRODUCT DETAILS**

ITEM NO	ITEM NAME	SIZE
326933	DAMPSHIELD PU	18.9L



#### **BOSTIK PRODUCT GUARANTEE**

This product comes with consumer guarantees that cannot be excluded under the Australian Consumer Law (ACL). In addition to your rights as a consumer under the ACL or other laws, Bostik guarantees the performance of this product for 10 years if the product is used within its shelf life and in accordance with the usage instructions printed on this packaging or the product's Technical Data Sheet available on our website. This 10 year guarantee specifically excludes any loss or damage caused by incorrect usage and covers the removal and replacement of the affected materials if the failure is proven to be directly related to Bostik products within the warranty period.

If you wish to make a claim under this guarantee you must within 2 weeks after first identification of damage notify us in writing using the details on this packaging.

You must provide evidence of your purchase and specify the batch number printed on the packaging. Bostik reserves the right to inspect any alleged failure and no responsibility will be accepted unless Bostik is given the opportunity to do so.

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Quality SAIGLOBAL

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