

DL/DFW
Date Issued: 2<sup>nd</sup> November 2017

# dpm

# Multi-Purpose Damp Proof Membrane, Waterproof Coating and Primer

# **DESCRIPTION**

Multi-purpose two component, solvent free, low viscosity epoxy coating for use as a primer, DPM and waterproof coating prior to the application of ceramic tiles or natural stone.

# Use for

Multi-purpose Primer/DPM/Waterproof coating. Ideal for raised access floors, wet rooms, ground floor slabs, marine, plant rooms, sewage plants and swimming pools. May also be used on internal and external vertical surfaces.

- Specifically formulated to be used as a 1-coat DPM for concrete slabs and cement sand screeds that are dense, well compacted and sound, where readings of up to 98% RH can be accommodated (measured using a hygrometer).
- Ideal to be used as a primer layer to screeds, concrete, renders or masonry surfaces, steel and other vertical and horizontal surfaces. N.B. sand-blinding e.g. using BAL SAND is required to provide a mechanical key before tiling or rendering.

 Ideal to be used as a waterproof coating. N.B. sand blinding is required e.g. using BAL SAND to provide a mechanical key before tiling or rendering. May also, be used with a suitable aggregate, to provide a reduced slip wearing surface for pedestrian traffic.

# **Restrictions: NOT suitable for**

Direct food contact. Should not be used in contact with potable water.

# PRODUCT INFORMATION

**Composition:** Epoxy resin paste + epoxy hardener.

**Colour:** Light Grey **Pack sizes:** 5 litre

**Key features:** Chemical-resistant. Solvent free. Waterproof.

Durable and abrasion-resistant.

# **USAGE & SERVICE CONDITIONS**

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Walls	✓	Floors	✓	
Interior	✓	Exterior	✓	
Dry	✓	Wet	✓	
Wet Rooms (1)	✓	Raised	✓	
		Access		
		Floors (1)		
Swimming	✓	Plant Rooms	✓	
Pools (1)		(1)		
Hydrotherapy	✓	Limited	✓	
Pools (1)		Movement /		
		Vibration		
		Chemical	✓	
		Resistance		

(1) When sand blinded can be used as a waterproof key for tiling bedding or renders.

# **APPLICATION AREAS**

✓
✓
✓
✓

# COVERAGE

Coverage
٨
24m²
13.5m²
25m²
10 meters

#### COVERAGE

^ May vary dependent on nature and flatness of the substrate, and on spreader used.

# MIX/USAGE DATA

Pot Life	Initial cure	Specific Gravity
20 minutes	8 hours	1.2

# **APPLICATION DATA**

Use for	Thickness^	Sand/aggregate required
Damp proof membrane	1 coat of 350 microns	Not applicable
Waterproof coating	2 coats of 200 microns	Sand blind second coat when tiling
Primer	1 coat of 200 microns	Sand blind when tiling

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# **SURFACE PREPARATION**

#### General

Before applying to the wall and floor, ensure that:
Surfaces are hard, sound and free of dust, laitance, dirt and other barrier materials such as paint, lime coatings, plaster and adhesive residues. Any existing renders, screeds or levelling/smoothing compounds not resistant to moisture must also be removed. Use a suitable degreaser to remove polish, wax, grease, oil and similar contaminating substances, followed by thorough mechanical preparation. Concrete curing agents, admixtures and surface hardeners and the residues of these products can impair adhesion. These should be removed by scrabbling, grinding, or shot blasting, as appropriate. If any doubt exists with compatibility with any other surface, a trial adhesion test with BAL DPM should be carried out before work commences. Please consult the BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Steel should be suitably mechanically prepared back to bright steel e.g. S A 2%. In wet locations the steel must be protected with a suitable anticorrosion primer.

# Application over underfloor heating

The cementitious levelling screed should have been laid in accordance with BS8204 Part 1. The underfloor heating system should have been commissioned in accordance with the manufacturer's instruction manual and in accordance with BS 8204 Part 1. Once thermally cycled and commissioned the underfloor heating system should be turned off for 48 hours prior to, and 48 hours after, the installation of the BAL DPM, smoothing compound and final floor covering. The underfloor heating system should then be gradually recommissioned to avoid rapid thermal shock and temperature variation. NOTE: For further information on other backgrounds and preparation, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

# **Anhydrite Screeds**

**IMPORTANT NOTE:** Obtain screed manufacturer's confirmation that the screed is compatible with a DPM and does not contain any additives that may reduce the adhesion between the screed and the DPM. BAL DPM is suitable for use on Anhydrite Screeds up to 87% RH, however this may vary depending on the screed manufacturer's recommendation. Always follow the screed manufacturer's recommendation for maximum R.H before application. The R.H measured must be below the defined maximum across all areas of the floor before application of the DPM.

Suitable screeds must be well-prepared and laitance-free.

Should the screed have underfloor heating, the underfloor heating system should have been commissioned in accordance with the manufacturer's instruction manual and in accordance with BS 8204 Part 1. Once thermally cycled and commissioned the underfloor heating system should be turned off for 48 hours prior to, and 48 hours after, the installation of the BAL DPM. The underfloor heating system should then be gradually recommissioned to avoid rapid thermal shock and temperature variation.

#### MIXING

- 1. The individual components should be thoroughly stirred before being mixed together.
- 2. The entire contents of the hardener container should be poured into the resin container and the two materials mixed thoroughly for at least 3 minutes using a heavy duty slow speed drill and spiral paddle.
- 3. Some of the mixed components should be re-introduced back into the hardener container in order to activate any residue and then pour back into the large mixing vessel and remix for 30 seconds.

NOTE: Mixing in this way will ensure product consistency and also that any resin or hardener that remains in the containers after application will cure to allow for easier waste disposal.

# APPLICATION/USAGE

IMPORTANT NOTE: Once mixed, BAL DPM will generate heat and lose pot life/working time if it is left in the mixing container or otherwise kept in bulk. Therefore, BAL DPM should be poured directly into a roller tray or poured in lines over the prepared floor area approx. 1 metre apart to allow access. NOTE: Distribute without delay to the prepared surface.

Do NOT use in temperatures below 5°C or in damp conditions.

# **Trowel recommendations**

Area	Trowel
Priming coat (for tiling) 1 coat	BAL A2 V NOTCHED SPREADER
DPM (Damp Proof Membrane)	BAL B2 V NOTCHED SPREADER
1 coat	
Waterproofing (2 coat	BAL A2 V NOTCHED SPREADER
application)	

NOTE: ensure you achieve the correct contact of coating to the background/base in line with EN ISO 7783 (moisture vapours transmission rating).

# **Application procedure**

# **DPM** coating

- 1. Apply one even coat of the mixed BAL DPM by means of the BAL B2 V NOTCHED SPREADER.
- 2. Whilst the BAL DPM is still wet, the serration ridges should be flattened out with a long handled short pile paint roller initially pre-wetted with the mixed BAL DPM before applying to the serration ridges. The minimum application thickness is 350 microns.

NOTE: If pin holes are showing, a second coat should be applied after a minimum of 8 hours. The second coat should be applied at 90° to the first coat.

If tiling onto the DPM, a priming coat will be required (see following page).

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#### **Priming coat**

- 1. Apply an even coat of the mixed BAL DPM using the BAL A2 V NOTCHED SPREADER over the prepared base or DPM coating (see table for trowel recommendations).
- 2. Whilst the BAL DPM is still wet, the serration ridges should be flattened out with a long handled short pile paint roller initially pre-wetted with the mixed BAL DPM before applying to the serration ridges. The application thickness should be 200 microns.
- 3. Whilst the BAL DPM is still wet, blind with BAL SAND at a rate of 1kg/m<sup>2</sup> and allow to cure for a minimum of 8hr at 20°C. IMPORTANT NOTE: Ensure sufficient sand/aggregate covers the entire area and no BAL DPM is visible.
- 4. The following day, remove the excess BAL SAND from the surface using a vacuum cleaner to provide a suitable key for BAL LEVEL MAX or BAL FLEXIBLE CEMENT BASED ADHESIVE.

# Waterproofing coat

- 1. Fill any gaps of >1mm with a suitable BAL cement based adhesive and allow the adhesive to cure.
- 2. Apply BAL TAPE to all corners and edges, with the centre of the tape fold aligned with corners or edges.
- 3. Apply BAL DPM using the A2 trowel.
- 4. Whilst the BAL DPM is still wet, the serration ridges should be flattened out with a long handled short pile paint roller initially pre-wetted with the mixed BAL DPM before applying to the serration ridges. The application thickness should be 200 microns.
- 5. Allow the first coat to cure for >8 hours.
- 6. Apply the second coat as above. If the installation is to be tiled, the second coat should be blinded with BAL SAND at a rate of  $1 \text{kg/m}^2$ .

IMPORTANT NOTE: Ensure sufficient sand/aggregate covers the entire area and no BAL DPM is visible.

The following day, remove the excess BAL SAND from the surface using a vacuum cleaner to provide a suitable key for a BAL FLEXIBLE CEMENT BASED ADHESIVE.

#### **CLEANING**

Always use appropriate cleaning wipes for removal from tools and work area when still wet.

# HEALTH & SAFETY INFORMATION / GOOD PRACTICE ADVICE

For detailed information and safety guidance, please refer to Material Safety Data Sheet [MSDS] of each component.

# **TECHNICAL ADVISORY SERVICE**

For free expert guidance on use of this product, or any aspect of tiling, contact the BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE on Tel: 01782 591120 or 0845 600 1 222 or Fax: 01782 591121.

# **POWERSPEC**

A unique computerised online specification system for the design and installation of ceramic, mosaic and natural stone tiling.

Visit www.powerspeconline.com

#### SHELF LIFE

12 months in the original unopened container when stored under normal dry conditions. Protect from frost and damp.

# **QUALITY AND ENVIRONMENTAL STANDARDS**

Manufacturing quality assurance standards conform to BS EN ISO 9001. Satisfies the environmental management requirements and operational scope of ISO 14001.

#### **25 YEAR GUARANTEE**

All BAL products are supplied with a 25 year product guarantee to be free from manufacturing defects and to be fit for purpose. The guarantee covers materials replacement costs and labour.

This guarantee is subject to use of product in accordance with BAL's instructions and technical data, and good working practice. No liability can be accepted for any loss or damage arising from incorrect use of products or poor workmanship, over which BAL has no control. 10 year anti-fungal guarantee subject to regular cleaning.

Contact BAL Marketing Department for full details.

# **CONDITIONS OF SALE**

Sold subject to the Company's Conditions of Sale. *Available on request.* 

For sales and technical queries, contact:

# **BUILDING ADHESIVES LTD**

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NOTE: BAL reserves the right to update instructions, technical data and other information at any time without notice.

PorcelBond Plus™ is a trademark of Building Adhesives Ltd

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