



DR/DFW 01
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Waterproof plus

The complete waterproofing kit for walls & floors

DESCRIPTION

Two-part, quick-drying, highly polymer-modified, waterproof cementitious based system for walls and floors.

Use for

- Providing a complete and easy to use waterproofing kit for the protection of substrates (when used as part of tanking system) prior to fixing wall and floor tiles in dry or wet interior and exterior environments.
 - NOTE: Corners/edges must be reinforced with scrim tape.
- Suitable for areas where/limited movement may occur (e.g. around drainage channels, junctions between walls/floors), and for preventing water penetration through suspended floors.
- The kit will fully seal walls and floors and is ideal in association with an approved design for:
- Showers / Power Showers
- Wet Rooms
- Swimming Pools*
- Hydrotherapy Pools*
- Spa Pools*
- Fountains*
- Water Features*
- Terraces*
- Balconies*

USAGE: Bed Thickness / Time at 20°C

Bed Thickness	Pot Life	Setting Time**
0.5mm per coat (1mm max)	45 minutes	90 minutes

^{**} Setting time will be extended in colder temperatures, when applied to impervious backgrounds or when fixing tiles of low porosity.

COVERAGE

Pack size	Coverage ^^
2 x 2.5kg Powder	0.73m²/kg (per 1mm
2 x 2.5L Liquid	thickness)

^{^^} May vary dependent on nature and flatness of surface, and on trowel used.

Restrictions: NOT suitable for

Do NOT uses as a DPM (Damp Proof Membrane), Do NOT use as a wearing surface.

BAL WATERPROOF PLUS should not be exposed / submerged to water without a suitable covering such as tiles.

PRODUCT INFORMATION

Composition: Two Part highly polymer-modified cementitious based powder.

Colours: Dark Grey.

Type/Classification: Exceeds BS EN 14891:2012

Pack sizes: Kit

- 1 x Applicator Tool/Spreader.
- 2 x BAL WATERPROOF PLUS POWDER (2.5kg).
- 2 x BAL WATERPROOF PLUS LIQUID (2.5L).
- 1 x BAL TAPE (20 M)

Key Features:

- Complete waterproofing kit in one bucket.
- Simple, easy to apply two-part mix.
- Total waterproof protection.
- Ideal for power showers, wet rooms, total immersion areas or external areas.
- Rapid setting; allows tiling in less than 2 hours.
- No weight restriction from use of product: weight allowance for tiling dependent on weight tolerance of background/substrate.
- tolerance of background/substrate.

Tile After: 90 minutes (at 20°C).

^{*}Further technical guidance may be required prior to the use in these installations to ensure they are incorporated as part of an approved construction. Please contact the BAL TECHNICAL ADVISORY SERVICE for free advice.

SURFACE PREPARATION

General

Ensure surfaces to be tiled are flat, clean, dry, sound and free from contamination.

Surface regularity:

Surface regularity is required to SR1 or better. Surface Regularity is defined as the deviation in height of the surface of a flooring layer over short distances in a local area. In simpler terms, it is the 'flatness' or 'measure of unevenness' of the surface.

Class	MAXIMUM PERMISSABLE DEVIATION FROM a 2M STRAIGHT EDGE (MM)	APPLICATION
SR1	3mm	Recommended for direct fixing of tiles and slabs with a tile adhesive

Falls & Drainage

The floor substrate must be laid to the correct falls as recommended in BS 5385: Part 4. Gradients between 1:80 and 1:35 are recommended Falls of 1:80 should be the minimum; gradients steeper than 1:35 might be inconvenient and even dangerous. The drainage rate of the gulley/drain must exceed the flow rate of the water source i.e. shower head.

If tiling externally, provide protection against inclement weather during fixing and grouting and for as long as possible afterwards. It is recommended that all direct to earth sub floors include a DPM or, if required a surface DPM can be applied prior to tiling (e.g. BAL DPM). See BAL TECHNICAL DATA SHEET for further details.

SUITABLE SURFACES include:

Concrete; cement:sand screeds and rendering

Before tiling, ensure that the substrate is flat (SR1 or better), free from efflorescence, laitance, dirt, polished concrete and other loose materials. Remove using suitable mechanical methods.

Allow the following minimum drying times:

- Concrete/concrete block walls/clay brickwork: 6 weeks
- Cement:sand screed: 3 weeks
- Cement:sand rendering: 2 weeks (3 weeks for swimming pools)

BAL QUICKSET CEMENT:sand screeds and rendering

- Bonded screeds: 4 hours

- Unbonded/floating screeds: 48 hours

Rendering (bonded): 4 hoursBAL QUICKSET RENDER: 2 hours

Dense concrete/blockwork walling

Allow new block mortar to dry for minimum 6 weeks before rendering /plastering. If direct fixing tiles, wall must be smooth-faced and sufficiently flat (SR1).

BACKGROUNDS / BASES

Brick/Concrete (2)(3)	✓	Plaster	✓
Rendering	\checkmark	Plasterboard	\checkmark
Tile Backer/Fibre	✓	Unglazed Ceramic	✓
Cement Boards (5)(7)		Tiles / Hard Natural	
		Stone (7)	
Cement:Sand Screed	\checkmark	Lightweight	\checkmark
		Blockwork (3)	
Anhydrite/Calcium	✓	Overlaid Timber	\checkmark
Sulfate Screeds (7)		Floors – 15mm min.	
		(4)(8)	
Glazed Tiles (7)	\checkmark	Timber Floors (6)	\checkmark
BAL RAPID-MAT	✓	BAL BOARD	✓

USAGE & SERVICE CONDITIONS

Walls	✓	Floor	✓
Interior	✓	External (8)	\checkmark
Dry	✓	Wet Areas (a)	✓
Worktops (1)	✓	Showers (a)	\checkmark
Swimming Pools (b)(8)	✓	Hydrotherapy Pools (b)(1)(8)	✓
Underfloor Heating Systems (5)(7)	✓	Limited Movement/Vibration (7)(8)	✓

- (1) Tiles must be grouted using BAL ABSOLUTE GROUT.
- (2) Provided the surface is sufficiently flat.
- (3) Apply a cement: sand render e.g. BAL QUICKSET RENDER or a suitable tile backing board prior to tiling
- (4) Seal back face and edges with undiluted BAL ALL IN ONE PLUS
- (5) Check suitability for the intended purpose with the manufacturer
- (6) When used with BAL RAPID-MAT.
- (7) Contact BAL TECHNICAL ADVISORY SERVICE for guidance
- (8) Further technical guidance may be required. Contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Note

- (a) Do not use shower for at least 2 weeks after completion of grouting BS 5385:Part 4 2015
- (b) Do not fill pool for at least 3 weeks after completion of grouting BS 5385:Part 4 2015

Lightweight blockwork/walling

Allow new block mortar to dry for minimum 6 weeks before rendering (such as BAL QUICKSET RENDER)/plastering or a suitable board. BAL TECHNICAL DATA SHEET for further information).

NOTE: Direct fixing of tiles to lightweight blockwork is NOT recommended.

Glazed/Unglazed ceramic tiles, quarry tiles, terrazzo and natural stone

For walls ensure that existing tiles/stone are soundly bonded to a stable background and are sufficiently strong enough to support the weight of the new tiling.

For floors ensure that the existing finish is firmly adhered to the base.

If areas are loose or hollow-sounding, remove and make good with BAL QUICKSET RENDER or BAL QUICKSET CEMENT, 1:3 cement:sand mortar over a slurry bonding coat (1 part sand to 1 part cement by weight, mixed with appropriate amount of BAL ALL IN ONE PLUS pre-diluted 1:1 with clean cold water by volume to achieve desired consistency).

Fibre reinforced cement boards and lightweight tile backer boards

Install boards to BS 5385 – i.e. moisture-resistant boards and screwed to seasoned timber or suitable proprietary framework at maximum 300mm centres vertically and horizontally or as per the board manufacturer's recommendations.

IMPORTANT NOTE: Obtain manufacturer's confirmation that boards are suitable for the tiling application and for relevant fixing instructions.

Undertile electrical heating systems

Can be used onto electrical undertile heating systems encased within a suitable BAL leveller such as BAL LEVEL MAX.

Heated Screeds

Suitable for sand/cement screeds with water fed underfloor heating encased within.

NOTE: For further information on other backgrounds and preparation, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Important information: the use of wooden substrates in wet areas should be avoided. Ideally, wood-based sheets or boards should be replaced or over boarded using a suitable tile backing board before applying BAL TANK-IT. Timber-based sheets and boards are not recommended for use in commercial showers etc.

Overlaid timber floors (min. 15mm) – Internal Please refer to section on falls and Drainage for required falls

Ensure timber floor (i) is sufficiently rigid and stable to receive tiles; (ii) can carry the additional static and dynamic load without excessive deflection; and (iii) has adequate ventilation under the timber.

Overlay existing timber floor with e.g. a suitable water-resistant grade plywood, min. 15mm thick, screwed (not nailed) at 300mm centres.

Alternatively overlay using a suitable tile backing board of a minimum thickness of 10mm or as per the board manufacturer's recommendations

Seal timber surface on the underside and edges with undiluted BAL ALL IN ONE PLUS. Allow to dry. For further advice or for application in external areas, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Tongued and grooved floorboards with BAL RAPID - MAT - Internal only

Ensure boards are flat (SR1) dry, rigid and securely fixed (screwed to joints at 300mm centres, including any crossnoggins, if necessary). Sand (abrade) surface and ensure any surface coatings removed, e.g. varnish, lacquers, etc. before priming with 2 coats of (second coat applied at 90° to the first):

- BAL PRIME APD (undiluted) or
- BAL BOND SBR (diluted 1:2 by volume with clean water)
 Allow each coat of primer to dry.

If necessary, the floor may require levelling such as BAL LEVEL MAX and allow drying before installing BAL RAPID-MAT.

Plaster (finish coat only) - Internal only

Must be at least 4 weeks old before tiling. Ensure that the plaster is free from dust, laitance and friable material. If *plaster is shiny or polished*, brush thoroughly with a stiff bristled brush and remove any surface dust.

Weight restrictions for tiling onto plaster i.e. a maximum weight of 20kg/m².

Plasterboard - Internal only

Ensure boards are dry, securely fixed and rigid and suitable thickness used.

NOTE if the plasterboard is dot and dabbed at 300mm centres and around the perimeter then leave to dry before fixing tiles.

Weight restrictions for tiling onto plasterboard i.e. a maximum weight of 32kg/m².

MIXING

Use the outer bucket or BAL MIXING BUCKET.

- 1. Add approximately 1.25 (approx. half bottle) BAL WATERPROOF PLUS LIQUID (2.5L) into the empty bucket.
- 2. Add 1 bag of BAL WATERPROOF PLUS POWDER (2.5kg).
- 3. Mix until lump-free consistency.
- 4. Once mixed add the remaining liquid from the open bottle to the mixed product and mix for 1 minute.
- 5. Allow mixed product to stand for 2 minutes before remixing for 30 seconds.

Note: The bucket/applicator tool will always need to be cleaned thoroughly using clean water for further use before the product sets.

10kg Outer bucket kit	Unit mix
2 x BAL WATERPROOF PLUS	1 x 2.5kg BAL WATERPROOF
POWDER	PLUS POWDER to
2 x BAL WATERPROOF PLUS	1 x 2.5L BAL WATERPROOF
LIQUID	PLUS LIQUID

NOTE: *If using electric drill mixer*, blend at slow speed (i.e. under 300rpm).

Ready for immediate use. Pot life at 20°C: approx. 45 minutes.

NOTE: Pot life/setting time will vary slightly with temperature: higher temperatures = shorter; lower temperature=longer.

APPLICATION/USAGE

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

Tool recommendations

To Apply	To Finish (must be 0.5mm thickness per coat)
Plastic Notched Applicator	Applicator Tool/Spreader
Tool (in kit)	(in kit)
4mm x 4mm Notched	Floating Trowel
Trowel	
Floating Trowel	Floating Trowel
Brush Applied (more than	Brush Applied (more than
one coat maybe required)	one coat maybe required)
Roller Applied (more than	Roller Applied (more than
one coat maybe required)	one coat maybe required)

NOTE: ensure you achieve the correct contact over the area and no voids present. It must be applied in two coats at a thickness of 0.5mm when dry to BS EN 14891 2012 i.e. 1mm thickness when both coats are dry.

Application procedure

- Before mixing apply the self-adhesive scrim tape at: Internal and external corners of walls/partitions. Wall junctions with base/upstands/columns. At pipe penetration points/drainage channels/outlets.
 Junctions of different base/background materials.
 Cracks and joints in backgrounds.
- Apply the first mixed product to the walls and floor using the notched side of the Applicator Tool or other tool recommendations (see table above), consider the pot life when using the product.
- 3. Before the surface is dry, using the flat side of the Applicator Tool (see table above), the ribs must be flattened to a thickness of 0.5mm. The product must be applied to the full height of the wet area and to the floor where tiles are used and exposed to water. Leave to dry for approx. 30 minutes until touch dry before applying the second mix.
- Repeat the mixing and application, using the second bag of BAL WATERPROOF PLUS POWDER (2.5kg) with BAL WATERPROOF PLUS LIQUID (2.5L) in the same way (see MIXING instructions).
- 5. Apply the second mixed product to the same areas; spreading to a thickness of 0.5mm (total thickness for both coats 1mm is required for waterproofing).
- 6. Leave until touch dry, for approx. 60 minutes.
- The area will now be ready to begin tiling using the correct BAL Adhesive. See BAL TECHNICAL DATA SHEET for further information or contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

Once the tiling is completed:

If completing a shower, do NOT use shower for at least 2 weeks after completion of the grouting (as required by BS 5385: Part 4).

If completed a swimming pool, do not fill pool for at least 3 weeks after completion of grouting (as required by BS 5385: Part 4).

HEALTH & SAFETY INFORMATION / GOOD PRACTICE ADVICE

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

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 03330 030160 or Email: info@building-adhesives.com

POWERSPEC

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

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SHELF LIFE

12 months 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:

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

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