



tank-it

The complete fast-track system for waterproofing walls & floors

DESCRIPTION

Rapid-setting, rapid-drying, two-part, highly polymer-modified, waterproof cementitious based system for walls and floors. Tile after 90 minutes

Use for

- Providing a complete and easy to use waterproofing system for the protection of substrates (when used powder mixed with liquid) prior to fixing wall and floor tiles in dry or wet interior and exterior environments.
NOTE: Corners/edges must be reinforced with BAL TANK-IT TAPE.
- Suitable for areas of total immersion such as swimming pools.
- 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 system will fully seal walls and floors and is ideal in association with an approved design for:

- Heavy Duty Showers and Power Showers
- Wet Rooms
- Swimming Pools*
- Hydrotherapy Pools*
- Spa Pools*
- Fountains*
- Water Features*
- Terraces*
- Balconies*

**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.*

Restrictions: NOT suitable for

Do NOT use as a DPM (Damp Proof Membrane), Do NOT use as a wearing surface.
BAL TANK-IT should not be exposed / submerged to water without a suitable covering such as tiles.

PRODUCT INFORMATION

Composition: Rapid setting cement-based powder with liquid polymer.

Colours: Dark grey.

Type/Classification: Exceeds BS EN 14891:2012

Pack sizes: 5kg Powder and 5ltr Liquid. 20m Tape.

Key Features:

- 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 90 minutes.
- Weight allowance for tiling dependent on weight tolerance of background/substrate.

Tile After: 90 minutes (at 20°C).

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 ^^
5kg Powder Used with 5L Liquid	0.73m ² /kg (per 1mm thickness)

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

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 hours

BAL 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	✓	Plasterboard	✓
Tile Backer/Fibre Cement Boards (5)(7)	✓	Unglazed Ceramic Tiles / Hard Natural Stone (7)	✓
Cement:Sand Screed (3)(11&4)	✓	Lightweight Blockwork (3)	✓
Anhydrite/Calcium Sulfate Screeds (7)	✓	Overlaid Timber Floors – 15mm min. (8)	✓
Glazed Tiles (7)	✓	Timber Floors (6)	✓
BAL RAPID-MAT	✓	BAL BOARD	✓

USAGE & SERVICE CONDITIONS

Walls	✓	Floor	✓
Interior	✓	External (8)	✓
Dry	✓	Wet Areas (a)	✓
Worktops (1)	✓	Showers (a)	✓
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 BOND SBR

(5) Check suitability for the intended purpose with the manufacturer

(6) When used with BAL RAPID-MAT/BAL FLEXBONE VARied

(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

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

Lightweight blockwork/walling

Allow new block mortar to dry for minimum 6 weeks before rendering (such as BAL QUICKSET RENDER)/plastering or BAL BOARD for internal areas (*see BAL TECHNICAL DATA SHEET on BAL BOARD 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 BOND SBR 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 such as BAL BOARD and screwed to seasoned timber or suitable proprietary framework at maximum 300mm centres vertically and horizontally or as per the board manufacturer's recommendations (*see BAL TECHNICAL DATA SHEET on BAL BOARD for further information*).

Ensure no fixings protrude.

Some boards may require priming, prior to tiling with a cementitious based tile adhesive. Use a suitable primer from the BAL range such as BAL PRIME APD diluted 1:1 with water by volume. *Please refer to the BAL TECHNICAL DATA SHEETS for further information.*

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 or BAL LEVEL FAST.

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 BOND SBR. 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/BAL FLEXBONE VARIED

Ensure boards are flat (SR1) dry, rigid and securely fixed (screwed to joints at 300mm centres, including any cross-noggins, 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 or BAL LEVEL FAST and allow drying before installing BAL RAPID-MAT/BAL FLEXBONE VARIED.

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. NOTE: To improve the weight restrictions use BAL BOARD (maximum 100kg/m²)

MIXING

Use a BAL MIXING BUCKET or other suitable bucket.

The full system requires two separate mixes as stated below.
For each mix:

1. Pour a quarter bottle of BAL TANK-IT LIQUID 5L into the empty bucket (1.25L of liquid), using the measuring indicators on the bottle for assistance.
2. Add half a bag of BAL TANK-IT POWDER 5KG (2.5kg of powder) to the liquid.
3. Mix until a lump free consistency is achieved.
4. Once mixed add a further quarter bottle (1.25L) from the opened bottle to the mixed product and mix for a further 1 minute.
5. Leave to stand for 2 minutes before re-mixing for 30 seconds.

Repeat the above step when mixing the remaining 2.5kg powder and 2.5L liquid for the second coat.

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

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)
4mm x 4mm Notched Trowel	Floating Trowel
Floating Trowel	Floating Trowel
Brush Applied (more than one coat maybe required)	Brush Applied (more than one coat maybe required)
Roller Applied (more than one coat maybe required)	Roller Applied (more than 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 wet to BS EN 14891 2012 i.e. 1mm thickness when both coats are dry.

Application procedure

1. Before mixing apply the self-adhesive BAL TANK-IT 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.
2. Apply the first mixed product to the walls and floor using the 4mm x 4mm notched trowel or other tool recommendations (see table above), consider the pot life when using the product.
3. Before the surface is dry, using the floating trowel (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.
4. Repeat the mixing and application 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.
7. 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

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. While products may be suitable for installations internally or externally, products when used externally are exempt from cover under the BAL 25 Year Guarantee. Terms and conditions apply. Full details are available for your review at www.bal-adhesives.com

CONDITIONS OF SALE

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

For sales and technical queries, contact:

BUILDING ADHESIVES LTD

Longton Road, Trentham, Stoke-on-Trent, ST4 8JB, England
www.bal-adhesives.com

Sales

Tel: +44 (0) 1782 591160

Fax: +44 (0) 1782 591131

Technical

Tel: +44 (0) 1782 591120 or

+44 (0) 3330 030160

Email: info@building-adhesives.com

Ireland

Unit 622, Phase III

Northwest Business Park

Ballycoolin, Dublin 15, Ireland

Tel: +353 (0) 1 880 9210

Fax: +353 (0) 1 880 9211

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