

# wp1 tanking system

## The complete ready-mixed system for waterproofing

### DESCRIPTION

Ready-mixed, flexible, seamless tanking system comprising an acrylic-based primer, an acrylic-based coating, polyester tape and matting.

### Use for

A complete and easy to use waterproofing system for the protection of water-sensitive backgrounds/bases (when used as part of tanking system). Suitable for use in internal domestic and commercial situations prior to fixing wall and floor tiles.

**NOTE:** Corners/edges must be reinforced with BAL POLYESTER TAPE and all floors reinforced with BAL POLYESTER MATTING.

- Suitable for areas where movement may occur (e.g. around drainage channels, junctions between walls/floors), and for preventing water penetration through suspended floors.
- Recommended for showers/bathrooms/kitchens/laundry and utility rooms, and around drainage/upstands/pipes/floor wastes.

### Restrictions: NOT suitable for

- Do NOT use as a DPM (Damp Proof Membrane), Do NOT use as a wearing surface.
- BAL WP1 TANKING SYSTEM should not be exposed / submerged to water without a suitable covering such as tiles.
- Exterior use.

- Total immersion
- **Note: the use of timber sheets and boards in wet areas is not recommended. For information, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.**

### PRODUCT INFORMATION

**Composition:** Acrylic-based primer and coating, with polyester tape and matting..

**Colours:** Light Grey.

**Type:** Internal use only

**Pack sizes:** WP1 TANKING SYSTEM

8 kg WP1 COATING

2.5L BAL PRIMER APD

5m and 50m BAL POLYESTER TAPE

1m<sup>2</sup> and 50m<sup>2</sup> BAL POLYESTER MATTING

### Key Features:

- Simple, easy to apply ready-mixed coating.
- Total waterproof protection for internal locations.
- Ideal for small and large power showers, wet rooms.

**Tile after:** Minimum 24 hours (depending on thickness and site conditions).

### USAGE & SERVICE CONDITIONS

Walls	✓	Floor	✓
Interior	✓	Exterior	✗
Dry	✓	Wet (1)(8)	✗
Swimming Pools	✗	Showers (a)	✓
Internal Domestic	✓	Internal Commercial	✓

### BACKGROUNDS / BASES

Brick/Concrete (2)(3)	✓
Rendering	✓
Lightweight Blockwork (2)(3)(8)	✓
Cement:Sand Screed (7)	✓
Plaster	✓
Plasterboard	✓
Tile Backer/Fibre Cement Boards (5)(7)	✓
Glazed/Unglazed Ceramic Tiles / Hard Natural Stone (10)	✓
Timber Floors (6)(8)	✓
Overlaid Timber Floors (8)(9)	✓
Plywood (Walls) (4)(8)(9)	✓

### USAGE: Bed Thickness / Time at 20°C

Bed Thickness	Setting Time**
1mm max per coat	24 hours min.

\*\* Setting time will be extended in colder temperatures, when applied to impervious backgrounds.

### COVERAGE

Pack size	Coverage ^^
1 x 8kg BAL WP1 COATING	4.8 m <sup>2</sup> – 5.6 m <sup>2</sup>

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

### COVERAGE

Usage (primer)	2.5 L Bottle ^^^
Undiluted	12.5m <sup>2</sup> - 25m <sup>2</sup>

^^^ May vary dependent on the porosity of surface, and on application.

(1) Tiles may be grouted using BAL EASYPOXY AG.  
 (2) Provided the surface is sufficiently flat.  
 (3) Must be skimmed using adhesive or rendered in wet areas.  
 (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 RAPIDMAT, NO primer required.  
 (7) May be used with BAL RAPIDMAT and no primer required.  
 (8) Further technical guidance may be required.  
 (9) Overlay with suitable tile backing board as recommended by the board manufacturer.  
 (10) Must be skimmed using BAL MAX FLEX FIBRE and left to dry.

**Note:**  
 (a) Do not use shower for at least 2 weeks after completion of grouting  
 – BS 5385:Part 4

## SURFACE PREPARATION

### General

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

Before tanking, make good any uneven areas in the background/base.

Fill voids or gaps with suitable filler/adhesive or sealant, and allow to cure.

Bridge static gaps up to 1.5mm with BAL POLYESTER MATTING or TAPE.

### Surface regularity:

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
SR2	5mm	For tiles & slabs bedded in a cement: sand mortar or a suitable tile adhesive (see the manufacturer's recommendations)
SR3	10mm	For tiles & slabs bedded in a cement:sand semi-dry mix.

### 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 gully/drain must exceed the flow rate of the water source i.e. shower head.

### SUITABLE SURFACES include:

#### Concrete; cement:sand screeds and rendering

Before tiling, ensure that the substrate is flat (SR1), free from efflorescence, laitance, dirt, polished concrete and other loose materials. Remove by the use of 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

#### BAL QUICKSET CEMENT:sand screeds and rendering

- Bonded screeds: 4 hours\*\*
- Unbonded/floating screeds: 48 hours
- Rendering (bonded): 4 hours\*\*

#### BAL BOND SBR SLURRY

\*\*1 part dry sand to 1 part BAL QUICKSET CEMENT by weight,

mixed with appropriate amount of BAL BOND SBR pre-diluted 1:1 with clean cold water to achieve desired consistency.

**BAL QUICKSET RENDER:** 2 hours

### Lightweight blockwork/walling

Allow new block mortar to dry for minimum 6 weeks before rendering /plastering. In limited areas apply a skim coat using BAL RAPIDSET FLEXIBLE FIBRE or BAL QUICKSET RENDER for large areas. Ensure the walls are sufficiently flat (SR1).

Allow to dry before applying BAL WP1 TANKING SYSTEM

NOTE: Only suitable for internal environments.

*Important information: the use of timber boards and sheets should be avoided if possible in wet conditions. Ideally, on walls; wood based sheets or boards should be replaced or over boarded using plasterboard or a suitable tile backing board before applying BAL WP1 TANKING SYSTEM.*

**Timber-based sheets and boards are not recommended for use in commercial/ power showers etc.**

### Plywood walls (internal dry areas only) - Internal only See Note\*

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

### Overlaid timber floors (min. 15mm) – Internal See Note\*

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, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.**

### Tongued and grooved floorboards with suitable uncoupling mat - Internal only See Note\*

Ensure boards are flat (SR1) dry, rigid and securely fixed (screwed to joints at 300mm centres, including any cross-noggings, 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 using a suitable BAL leveller such as BAL LEVEL MAX and allow to dry before installing BAL RAPID-MAT, once the mat is applied, BAL WP1 TANKING SYSTEM can be applied over the mat once the adhesive is dry. No priming required when applying onto BAL RAPID-MAT.

### 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).

Weight restrictions for tiling i.e. a maximum weight of 32kg/m<sup>2</sup>.

### 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 walls i.e. a maximum weight of 20kg/m<sup>2</sup>.

### Plasterboard (If required) - 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/m<sup>2</sup>.

### 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 to achieve desired consistency).

Before applying, the surface must be skimmed with BAL MAX-FLEX FIBRE or BAL RAPIDSET FLEXIBLE FIBRE with BAL ADMIX AD1 (1 part BAL ADMIX AD1 to 3 parts clean cold water).

Weight restrictions will depend on the background, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

### Fibre reinforced cement boards and lightweight tile backer boards

Install boards to BS 5385 – i.e. moisture-resistant boards screwed to seasoned timber or suitable proprietary framework at maximum 300mm centres vertically and horizontally or as per the board manufacturer's recommendations. Ensure no fixings protrude.

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

Weight restrictions will depend on the background, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

### Undertile electrical heating systems

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

### 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.

### APPLICATION/USAGE

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

### Tool recommendations

To Apply	To Finish (maximum 1mm per coat)
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)
Steel Floating Trowel	Steel Floating Trowel

### Application procedure

1. Prime all surfaces with BAL PRIME APD and allow to dry (15-30mins), apply second coat 90° to the first. Allow to dry between coats.
2. Using a suitable brush or steel float, apply BAL WATERPROOF COATING at:
  - Internal and external corners of wall/partitions.
  - Wall junctions with bases/upstands/columns.
  - At pipe penetration points/drainage channels/outlets and pipes.
  - Junction of different bases/backgrounds materials.
  - Crack and joints in background/base.
3. Reinforce with BAL POLYESTER TAPE.
4. Apply second coat of BAL WATERPROOF COATING over the BAL POLYESTER TAPE.
5. Using brush or steel float, apply BAL WATERPROOF COATING to primed walls at a max. 1mm thickness.
6. Apply BAL WATERPROOF COATING to primed floor.
7. Floor areas, reinforce with BAL POLYESTER MATTING (may be cut to correct size with scissors).
8. Bed matting into coating and apply a second layer of BAL WATERPROOF COATING over the top.
9. Allow membrane to dry for minimum 24 hours before tiling.

When dry, BAL WATERPROOF COATING is suitable for BAL ready-mixed adhesive such as BAL WHITE STAR PLUS, (walls only) or cementitious powder adhesives. No priming required on to the BAL WATERPROOF COATING.

Note: For further information on drying times, see BAL PRODUCT TECHNICAL DATA SHEET.

**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 0845 600 1 222 or Fax: 01782 591121.

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*Contact BAL Marketing Department for full details.*

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

*For sales and technical queries, contact:*

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