

# Waterproof 1C

## DESCRIPTION

**Ready to use coating to waterproof substrates**

The complete fast drying one coat ready to use tanking system for all internal wet areas.

### Use for

Providing complete waterproofing protection of substrates prior to fixing Wall and Floor tiles

Suitable for use in internal domestic and commercial situations.

All corner/edges must be reinforced with BAL SCRIM TAPE which is required at:

- Where movement may occur such as around drainage channels, junctions between floor and wall, preventing water penetration through suspended floors.
- Recommended for showers/ wet rooms/ kitchens/ laundry/utility room, and around drainage/ upstands.

### Restrictions: NOT suitable for

External use, total immersion, barrier to prevent water ingress from background/base (e.g. DPM).

### PRODUCT INFORMATION

**Composition:** Ready to use polymer system.

**Colours:** Light Grey.

**Type:** Internal use only.

**Pack sizes:** 5L

### Key Features:

- Brush, roller or trowel applied.
- No mixing required and can be used again.
- Can be used without priming.
- Ability for one coat application.
- Tile after 2 hours.
- Crack bridging up to 3mm without tape or matting on the floor.
- Total waterproofing protection for internal locations.

## USAGE & SERVICE CONDITIONS

Walls	✓	Floor	✓
Interior	✓	Exterior	x
Dry	✓	Wet Rooms	✓
Showers	✓	Internal Domestic	✓
Internal Commercial	✓	Swimming Pools	x
Underfloor Heating Systems (1) (5)	✓	Limited Movement / Vibration (5)	✓

## BACKGROUNDS / BASES

Concrete	✓	(1) When used over a levelling compound or BAL RAPID-MAT uncoupling system.
Rendering	✓	(2) Prime with one coat of BAL PRIMER 1C
Cement:Sand Screed	✓	(3) May be used with BAL RAPID-MAT.
Plaster (2) (8)	✓	(4) Check suitability for the intended purpose with the manufacturer.
Plasterboard (8)	✓	(5) When used with BAL RAPID-MAT.
Tile Backer Boards (2) (4)	✓	(6) When applied on the reverse side (smooth decorating side). Priming not required.
Glazed/Unglazed Ceramic Tiles / Hard Natural Stone (7)	✓	(7) Recommend 2 coats of coating - not primed.
Timber Floors (5)	✓	(8) BS 5385 Part 4 states that in commercial wet rooms and domestic power showers, plaster and plasterboard should be avoided.
Overlaid Timber Floors (3) (4)– 15mm min.	✓	
Anhydrite Screeds (3)	✓	
BAL BOARD (2) or (6)	✓	

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

Bed Thickness*	Setting Time**
Minimum 0.8mm (walls) and 1.6mm (floors)	2 hours

\* It is recommended to use two-coats on the floor to ensure required thickness.

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

## COVERAGE

Area	Thickness	Coverage per unit ^
Wall	0.8 mm	6 m <sup>2</sup>
Floors	1.6 mm	3 m <sup>2</sup>

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

## TEMPERATURE RESISTANCE\*\*\*

-30°C to 70°C

\*\*\* Cured adhesive.

## SURFACE PREPARATION

### General

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

#### 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 PERMISSIBLE 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 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 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
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#### 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/ lightweight blockwork walling

Allow new block mortar to dry for minimum 6 weeks before rendering (such as BAL QUICKSET RENDER) /plastering.

### BAL BOARD

When using BAL Waterproof 1C, always use the decorating smooth side of BAL BOARD, or prime the BAL BOARD on the tiling side with one coat of PRIMER 1C diluted 1:1 with clean cold water (for further information see BAL TECHNICAL DATA SHEET on BAL BOARD).

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

### 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. maximum weight of 20kg/m<sup>2</sup>.

Prime the surface with one undiluted coat of BAL PRIMER 1C  
Note: The use of plaster is not recommended in commercial wet rooms or domestic power showers.

### Plasterboard - Internal only

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

Maximum 32kg/m<sup>2</sup> weight restriction for tiling onto plasterboard. NOTE: For higher weight tolerances use a suitable board. The use of plasterboard is not recommended in commercial wet rooms or domestic power showers.

### 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.

Before applying, the tile surface must be skimmed with BAL MAX-FLEX FIBRE or BAL RAPID-FLEX ONE 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.

Some boards may require priming, prior to tiling with a cementitious based tile adhesive.

Prime the surface with one undiluted coat of BAL PRIMER 1C  
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

Can be used onto electrical undertile heating systems encased within an appropriate BAL leveller.

### Onto BAL RAPID-MAT

Uncoupling matting onto problematic floors

– Protecting floor tiling against reflective cracks, fractures and other damage caused by stresses and lateral movement in the substrate.

– Suitable for most problematic floor substrates including timber floors, new screeds and floors with under-tile heating systems.

– Suitable for most tile types including natural stone and mosaics.

No Primer required when using BAL WATERPROOF 1C

**\*NOTE:** Important information: the use of timber boards and sheets should be avoided if possible in wet conditions. Ideally, wood-based sheets or boards should be replaced by over boarded using a suitable tile backing board such as BAL BOARD before applying BAL WATERPROOF 1C. **Timber-based sheets and boards are not recommended for use in commercial/ power showers floors etc.**

**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 such as BAL BOARD. Seal timber surface on the underside and edges with undiluted BAL BOND SBR or BAL ALL-IN-ONE PLUS. Allow to dry.

**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.  
 The floor will require levelling using a suitable BAL leveller or BAL BOARD before installing BAL RAPID-MAT, once the mat is applied, BAL Waterproof 1C can be applied over the mat once the adhesive is dry. No priming required when applying onto BAL RAPID-MAT.

**Heated Screeds**

Suitable for sand/cement screeds with water fed underfloor heating encased within. Use in conjunction with BAL RAPID-MAT uncoupling matting. *NOTE: For further information on other backgrounds and preparation, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.*

**Tool recommendations**

To Apply	To Finish
Roller Applied	One coat at 0.8mm (walls) Two coats to achieve 1.6mm thickness (floors)
Brush Applied	Brush Applied (more than one coat maybe required to achieve the correct thickness)
4mm Notched Trowel	One coat at 0.8mm (walls) Two coats to achieve 1.6mm thickness (floors)

**APPLICATION/USAGE**

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

**Application procedure**

- BAL Waterproof 1C can be applied without priming onto plasterboard, cement:sand render, screeds, concrete, plywood overlays, BAL BOARD on the decorating smooth side and BAL RAPID-MAT.  
If waterproofing onto plaster, cement boards, BAL BOARD on the tiling side, then prime all surfaces with one coat of neat BAL PRIMER 1C and allow to dry for 15-30mins.
- Before applying BAL WATERPROOF 1C, use the self-adhesive BAL 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 board joints in backgrounds over 3mm wide.
- Using a suitable roller, 4mm notched trowel or brush, apply BAL WATERPROOF 1C over the whole area including over the BAL SCRIM TAPE.
- Wall: Using a roller, 4mm notched trowel or brush, apply one coat of BAL WATERPROOF 1C to walls but ensuring a min. 0.8mm. thickness.
- Floor: Apply BAL WATERPROOF 1C to floor at a min. 1.6mm. thickness. NOTE: two coats maybe required to achieve the thickness. It is recommended to use two coats to ensure the required thickness.
- Allow membrane to dry for minimum 2 hours before tiling.
- Using the correct BAL Adhesive and Grout. See BAL TECHNICAL DATA SHEET for further information or contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

## **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.

### **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](http://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:*

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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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