max-flex fibre

Flexible cementitious wall & floor tile adhesive with FST

DESCRIPTION

High strength, highly flexible, non-slip, water/frost-resistant cementitious tile adhesive for walls and floors.

Use for

- Suitable for a wide range of tile types including ceramics, mosaics, glass tiles (except types with water-sensitive coating on back), porcelain and fully vitrified tiles, large format, natural stone (including marble) and terrazzo
- Can be used in dry or wet, interior and exterior environments.
- NOTE: Certain types of natural stone (i.e. limestone, travertine and some granite) may be susceptible to staining. In this case, use of a BAL rapid-setting white adhesive is recommended.
- Recommended for large format tiles
- Recommended for swimming pools/total immersion areas.

Restrictions: NOT suitable for

- Glass/metal tiles with water-sensitive coating on back.

PRODUCT INFORMATION

Composition: Highly polymer-modified cement-based powder with BAL Fibre Strand Technology (FST).
Colours: White & Grey.
Type/Classification: Exceeds BS EN 12004 C2TES1 – Cementitious adhesive with improved / additional characteristics, reduced slip, extended open time and deformable.
Pack sizes: 20kg, 10kg & 5kg – White. 20kg only - Grey
Key Features:
Adhesive suitable for a large range of tile types and most substrates. Lightweight rheology for improved consistency and smoother formulation that is easier and quicker to trowel out; less gritty for highly polished and glass tiles. Higher grab, improved strength and flexibility to improve adhesive performance. Extended open-time (over 40mins) to allow much greater areas of application and speed up installation time.

USAGE & SERVICE CONDITIONS

Walls	✓	Floor	✓
Interior	✓	Exterior	✓
Dry	✓	Wet	✓
Worktops (1)	✓	Showers	✓
Swimming Pools	✓	Heated Screeds	✓
Hydrotherapy Pools	✓	Limited Movement / Vibration	✓

(1) Tiles must be grouted with a BAL Epoxy grout e.g. BAL EASYPOXY.
(2) In wet conditions tank out with the BAL WP1 TANKING SYSTEM.
(3) Seal reverse side and edges with BAL BOND SBR. Do not seal or prime surfaces to be tiled.
(4) Prime with BAL PRIME APD or BAL PRIMER.
(5) Check suitability of the grade of asphalt.
(6) Where waterproofing is required, apply BAL WP1 Tanking System.

BACKGROUNDS / BASES

Concrete	✓
Rendering	✓
Cement:Sand Screed	✓
Plaster (2) (4)	✓
Plasterboard (2) (4)	✓
Tile Backer Boards (6)	✓
Existing Ceramic Tiles / Hard Natural Stone	✓
Vinyl Tiles	✓
Overlaid Timber Floors 15mm min. (3)	✓
Plywood / Chipboard (Walls) (3)	✓
MDF (Internal Dry Areas) (3)	✓
Mastic Asphalt (5)	✓
Glazed Wall / Bricks	✓
Glazed Tiles / Brickwork	✓

USAGE: Bed Thickness / Time at 20°C

Bed Thickness	Open Time	Pot Life	Setting Time*
Up to 6mm	>40 mins	5 hours	16 hours

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

COVERAGE

Area	Trowel	Coverage ^
Dry Wall	Mosaic	0.6m^2 per kg
Dry Wall	Round Notched	0.5m^2 per kg
Wet Wall	Thin Bed Solid Bed	0.4m^2 per kg
Exteriors / Floors	Thick Bed Solid Bed	0.3m^2 per kg

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

TEMPERATURE RESISTANCE**

-30°C to 100°C

** Cured adhesive.

SURFACE PREPARATION

General
Ensure surfaces to be tiled are flat, clean, dry, sound and free from contamination.
In shower areas: waterproof background with BAL WP1 Tanking System or BAL Waterproofing Kit for Showers.

SUITABLE SURFACES include:

Asphalt (suitable grade e.g. flooring)
Must be of a suitable grade, be clean, in sound condition (without brittleness, softening. etc.) and have adequate cohesive strength, a natural float finish and laid on a firm rigid base.
Ensure that surface is sufficiently regular to suit bedding depths of adhesive.
Clean thoroughly to remove surface dirt using warm water and a suitable detergent. Remove all detergent residues with clean water.

Concrete; cement:sand screeds and rendering
Before tiling, 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 renderings and screeds: 24 hours
– BAL QUICKSET RENDER: 2 hours

Existing unglazed ceramic tiles, quarry tiles, terrazzo and natural stone
Ensure existing tiles/bricks are soundly bonded to a stable background that is sufficiently strong enough to support the weight of the new tiling.
If areas are loose or hollow-sounding, remove and make good with 1:3 cement:sand mortar over a slurry bonding coat (2:1 cement:BAL BOND SBR by weight).

Existing vinyl tiles
Ensure these are in good sound condition and securely bonded to their base.
Remove loose or damaged tiles/areas of sheet along with any loose or soft adhesive.
Remove any polishes, wax, grease etc. with a suitable proprietary cleaner.
NOTE: Cushioned types of flooring are not suitable and must be completely removed along with the adhesive residue prior to tiling.

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 and ensure no fixings protrude.
Do NOT seal or prime surfaces to be tiled.
IMPORTANT NOTE: Obtain manufacturer's confirmation that boards are suitable for tiling and for relevant fixing instructions.

Plywood, Chipboard and MDF on walls (internal dry areas only)
Ensure boards (i) can carry expected load without excessive deflection; (ii) are dry, rigid and securely fixed, with no protruding fixings.
Insert noggings to support all board edges and to allow screw fixing at 300mm centres.
Seal side and edges on back of boards with neat BAL BOND SBR priming agent.
Do NOT seal or prime surfaces to be tiled.

Overlaid timber floors (min. 15mm)
Ensure timber floor (i) is sufficiently rigid and stable to receive tiles; (ii) can carry the additional load without excessive deflection; and (iii) has adequate ventilation under the timber.
Overlay existing timber floor with exterior (marine or WBP) grade plywood, min. 15mm thick, screwed (not nailed) at 300mm centres.
Prime timber on back face and edges with neat BAL BOND SBR priming agent. Allow to dry.

Plaster (finish coat only)
Must be at least 4 weeks old before tiling. Ensure that the plaster is free from dust, efflorescence and friable material.
If *plaster is shiny or polished*, brush thoroughly with a stiff bristled brush before priming with 2 coats of:
– BAL PRIME APD or BAL PRIMER (neat) or
– BAL BOND SBR (diluted 1:2 by volume with water)
Allow each coat of primer to dry.

Plasterboard (If required)
Ensure boards are dry, securely fixed and rigid.
Prime with 2 coats of:
– BAL PRIME APD or BAL PRIMER (neat) or
– BAL BOND SBR (diluted 1:2 with water)
Allow each coat of primer to dry.

Undertile electrical heating systems
Can be used onto electrical undertile heating systems encased within an appropriate leveller. Over suitable boards/exterior grade plywood overlays (minimum 15mm thickness).

Underfloor heating
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 SERVICE.

MIXING
Use a BAL MIXING BUCKET or other suitable bucket.
1. Add approximately 3.6 parts powder to 1 part clean cold water by weight.
2. Mix until lump-free mortar achieved.

NOTE: *If using electric drill mixer*, blend at slow speed (i.e. under 300rpm).
Ready for immediate use. Pot life at 20°C: approx. 5 hours.
NOTE: Working time/setting time will vary slightly with temperature: higher temperatures = shorter; lower temperatures = longer.

APPLICATION/USAGE

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

Trowel recommendations

For mosaics/tiles up to 100x100mm:
BAL MOSAIC TROWEL
For larger tiles up to 300x300mm:
(Dry areas) BAL ROUND NOTCHED TROWEL
(Wet areas) BAL THIN BED SOLID BED TROWEL
For exteriors and floors:
BAL THICK BED SOLID BED TROWEL

Fixing procedure

1. Apply adhesive to wall or floor surface and comb to required bed thickness depth of 2-6mm. Ensure ribs in adhesive all run in one direction.
If fixing large/heavily-patterned tiles, apply additional adhesive to tile reverse.
2. *For mosaic pieces*: using a rubber tile float, press mosaics into adhesive and beat into required position.
For tiles: press tile firmly into the ribs of the adhesive and into position, with slight twisting/sliding action to ensure optimum adhesive contact.
3. Fix mosaics/tiles before adhesive forms skin (typically over 40 minutes at 20°C, depending on surface porosity/atmospheric conditions).
If skin has formed, remove adhesive and apply fresh layer.
4. Occasionally lift a mosaic/tile to check adhesive contact area. When solid-bed fixing, leave no voids behind tiles.
5. Leave adequate joints between individual tiles. Install movement joints to BS 5385, Parts 1-5.
6. Clean off surplus adhesive from tile face and between tile joints.

Grouting

7. Wait minimum 16 hours (at 20°C) after tile fixing. Select a BAL cementitious or Epoxy grout such as BAL MICROMAX2 GROUT or BAL EASYPOXY GROUT.
If using paper-faced mosaic: Pre-grout sheet and remove surplus. Place in position and tap down to achieve full contact with adhesive. Ensure joints between sheets match joints between mosaic tesserae (i.e. staggered). Wet paper and carefully remove before adhesive fully hardens. Clean off surplus adhesive and grout from mosaic face. Finish grouting.
8. Fill movement joints with suitable sealant i.e. BAL MICROMAX2 SILICONE SEALANT. *However*, do NOT use on sensitive surfaces that could react to acetic acids released during cure.
For intermediate movement joints, a more durable hard wearing material may be needed (e.g. an Epoxy polysulphide sealant).
NOTE:
If completing a swimming pool, do NOT fill pool for at least 3 weeks after grouting (contact BAL Technical Advisory Service for further advice).
If completing a shower, do NOT use shower for at least 2 weeks (as required by BS 5385: Part 4, clause 7.2.1).

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.

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 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
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) 845 600 1 222
Fax: +44 (0) 1782 591121

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