

quickset cement

Fast-setting, low shrinkage cement for screeds and renders

DESCRIPTION

Fast-setting, low shrinkage cement for use in internal and external screeds and renders.

Use for

Screeding or rendering to prepare wall and floor surfaces prior to installing most tile types.

- Suitable for use in dry and wet installations including swimming pools.
- Can be pumped for fast application.
- Rapid strength development.
- Low shrinkage.

Restrictions: NOT suitable for

- Wearing surfaces

PRODUCT INFORMATION

Composition: Fast setting specially formulated cement for mixing with sand and water.

Colour: Grey

USAGE: BED THICKNESS / TIME

Background type	Bed Thickness	Pot Life	Tiling can be started after: ^
Bonded screed (1)	25 - 40mm	60 mins	4 hours
Un-bonded screed	50mm minimum	60 mins	48 hours
Floating screed	65mm – 75mm	60 mins	48 hours
Render (1)(2)	10mm	60 mins	4 hours

^ Setting time will be extended in colder temperatures.

Type/Classification: EN 13813:2002 CT-C40-F7

Pack size: 20kg

Key features:

Water/frost-resistant when set.

Low shrinkage.

Fast-setting: sets in 3 hours.

Screeds can accept foot traffic after 3 hours.

Bonded screeds and renders can be tiled with ceramic tiles after 4 hours.

MIXING GUIDANCE

(1) Slurry Bonding Coat required.

(2) Recommended application tool: General wood float.

Product Use	Application Thickness	Mix	Quantity of Cement / m ²	Coverage (kg cement / m ² / mm thickness)
Screed	50 mm	1:4 mix with sand	21 kg	0.42 *
Screed	50 mm	1:5 mix with sand	17.5 kg	0.35 *
Screed	50 mm	1:7 mix with sand (6)/aggregate (1)	13.5 kg	0.26 *
Render (1)(2)	10 mm	1:4 mix with sand	3.6 kg	0.36 *
Slurry Bonding Coat		1 part Quickset/1 part sand/ BAL Bond (diluted 1:1 with water)	Approx. 1.0 kg	Approx. 1.0
Drainage Mortar	50 mm	1:5 with BAL 3-6mm AGGREGATE	13.0 kg & 65.5 kg Aggregate	0.26kg *

* May vary dependent on nature and flatness of surface.

TEMPERATURE RESISTANCE

-30°C to 100°C

SURFACE PREPARATION

General

Provide construction joints in accordance with normal practice. Ensure surfaces are dry, sound, clean and free from grease, dust and any other contamination.

SUITABLE SURFACES include:

Concrete, brickwork and blockwork: Allow to dry for 6 weeks.

Non-porous substrates: Apply slurry bonding coat (By weight mix 1 part BAL QUICKSET CEMENT with 1 part sand and add BAL BOND SBR diluted 1:1 by volume with water to achieve a creamy consistency). Apply screed/render to wet slurry coat. Contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE for further advice.

Porous substrates: Always apply slurry bonding coat prior to application of render.

NOTE: For information on anchored mesh reinforcement, contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE.

MIXING

Mix mechanically, using pan, trough or other forced paddle type of mixer. Quantity of water required will depend on grading and moisture content of sand, and mixing method used.

NOTE: DO NOT use a free fall drum mixer for this product.

For screeds :-

Mix	Quickset Cement	Sand / Aggregate	Water
1:4	20 kg	80 kg clean screeding sand to BS8204	Total water content (incl. water contained in sand not to exceed 8.4 litres)
1:5	20 kg	100 kg clean screeding sand	Total water content (incl. water contained in sand not to exceed 10.4 litres)
1:7*	20 kg	120 kg clean screeding sand + 20 kg 6mm aggregate	Total water content (incl. water contained in sand not to exceed 13.6 litres)

* For 1:7 screed mixes contact BAL TECHNICAL ADVISORY AND SPECIFICATION SERVICE for further advice.

NOTE: Mix to a semi dry consistency so that, when squeezed in gloved hand, it retains shape/doesn't crumble and no excess water can be squeezed out.

For renders:-

Use fine aggregate sand to BS EN 13139 O/2 (CP or MP) category 2 fines. Blend 1 part BAL QUICKSET CEMENT with 4 parts sand by weight. Mix with cold water. (Depending on moisture content of sand, this 20kg bag, plus 80kg sand, requires approx. 12-16 litres of water). Avoid excess water.

Rendering

1. Apply slurry bonding coat and apply render onto wet slurry coat.
2. Typical render thickness: 6-12mm. If greater thickness required: Comb or scratch first coat, before it hardens, to provide key for second coat.

NOTE: DO NOT add other cements, lime or additives to the mix. Use immediately. Pot life at 20°C: approx. 60 minutes.

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

Discard any unused mix once it has begun to set.

BACKGROUNDS / BASES

Concrete / Brickwork / Blockwork	✓
Lightweight Concrete Blocks (1)(2)	✓
Concrete Bases	✓
AquaDrain® EK (3)	

USAGE & SERVICE CONDITIONS

Walls (1)(2)	✓	Floor	✓
Interior	✓	Exterior (1)	✓
Dry	✓	Wet (a)	✓
Movement	x	Chemical Resistance	x
Vibration			
Swimming Pools (1)(b)	✓	Heated screeds	✓

- (1) Slurry Bonding Coat required.
- (2) Recommended application tool: General wood float.
- (3) Drainage mortar required with AquaDrain® EK drainage mat.

Note:

(a) Do not use shower for at least 2 weeks after completion of tiling & grouting – BS 5385:Part 4 2015.

(b) Do not fill swimming pools for at least 3 weeks after completion of tiling & grouting – BS 5385:Part 4 2015.

Mixing Drainage Mortar

(when used with BAL EXTERNAL TILING SYSTEMS)

Mix mechanically, using pan, trough or other forced paddle type of mixer. Mix with cold water to a semi dry consistency so that, when squeezed in gloved hand, it retains shape/doesn't crumble and no excess water can be squeezed out. The ratio 1 x 20kg BAL QUICKSET CEMENT to 4 x 25kg BAL 3-6MM AGGREGATE (1:5 by weight), or standard OPC (1:5 by weight). Approx. 9.75kg of clean cold water required.

NOTE: DO NOT use a free fall drum mixer for this product. Coverage 1 x 20kg BAL QUICKSET CEMENT or OPC with cover 1.5m² at 50mm thickness.

TILE FIXING

Surfaces to be tiled should have a wood float finish

Heated screeds (reinforced with mesh)

When a BAL Quickset screed has been laid on a hot water floor system, 6 days should be allowed to elapse before heating up the screed slowly at a maximum rate of 5°C to the maximum operating water temperature of 45°C (i.e. approx. 25 °C screed temperature) or as recommended by the heating manufacturer and maintained at this temperature for 3 days. The maximum floor temperature should then be used and maintained for a further 4 days. In doing so draughts must be avoided. The floor should then be allowed to cool down to room temperature (approx 15°C) before laying floor coverings.

Bonded screeds/renders:

At 20°C BAL Quickset Cement screeds and rendering will be ready to receive ceramic tiles after 4 hours. Stone products can be fixed after 4 days. Tiles and stone may be laid directly onto the screed or rendering using an appropriate BAL tile adhesive.

APPLICATION/USAGE

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

Trowel recommendations; General wood float.

Provide construction joints in accordance with normal screeding / rendering practice.

Screed

Use mortar in accordance with recommendations of

– BRE Digest No.104

– BS 8203

– BS 8204-1

1. Spread mortar over an area of floor.
2. Within working life of mortar mix, tamp, compact, level and trowel it off.
3. Treat all day joints, and adjoining bays that have been allowed to stand for more than 60 minutes, with a slurry coat (see bonded screeds) before laying next area.
4. Incorporate bay divisions and construction joints as for normal cement/sand screeds.
5. Protect new screeds from other building operations until suitable floor covering laid.

Bonded screeds (minimum 20mm to maximum 40mm)

1. Prepare slurry bonding coat: by weight, mix 1 part BAL QUICKSET CEMENT with 1 part sand and add BAL BOND SBR (diluted 1:1 by volume with water) to achieve a creamy consistency
2. Brush slurry coat onto concrete surface.
3. While this is still wet (within 10 minutes of application), lay screed. Screed design thickness: 40mm.
4. Tiling with ceramic tiles can commence after 4 hours.

Unbonded screeds (minimum 50mm)

1. Lay a separating layer of building paper or polythene sheeting over floor surface, with 100mm overlap joints.
2. Apply screed direct over separating layer. Minimum screed thickness: 50mm.
3. Tiling with ceramic tiles can commence after 48 hours

Floating screeds (minimum 65mm for domestic applications, 75mm for commercial applications)

1. Lay screed on compressible layer of thermal or sound insulating material (e.g. polystyrene over concrete base). Minimum screed thickness: 65mm for domestic application.
2. Tiling with ceramic tiles can commence after 48 hours

Drainage Mortar (BAL EXTERNAL TILING SYSTEMS)

1. Lay a separating layer of PE Foil/ polythene sheeting over prepared BAL TANK-IT waterproofing coating or BAL DPM, with 100mm overlap joints. Roll out the AquaDrain® EK drainage mat (see BAL TECHNICAL DATA SHHET for further information).

2. Apply drainage mortar direct over the AquaDrain® EK drainage mat (mesh side up). Min. screed thickness: 50mm.

3. Tiling can commence straight away (wet on wet).

NOTE: Applied a 10mm notched trowel across the whole back of the tile (Backbuttered) using BAL RAPID-FLEX ONE or POURABLE ONE. Do not trowel on the drainage mortar.

Unbonded screeds

At 20°C unbonded BAL Quickset Cement screeds can receive ceramic tiles after 48 hours.

Drainage Mortar (BAL EXTERNAL TILING SYSTEMS)

Tiles and Natural stone laid on single grain mortar and on screeds must be bonded with a suitable tile adhesive such as BAL RAPID-FLEX ONE or BAL POURABLE ONE. Applied a 10mm notched trowel across the whole back of the tile (Backbuttered). Place straight onto the drainage mortar (wet on wet). Using a rubber mallet gently tap the tiles/stone/paver into the bed.

IMPORTANT NOTE: Do not trowel on the drainage mortar.

Resilient and wood floor finishes

BAL Quickset cement screeds will be ready to receive resilient or wood floor coverings once the screed has dried to less than 2% moisture (carbide method), approx. 4–6 days at 20°C. If a very smooth finish is required a suitable BAL Levelling compound can be used, e.g. BAL LEVEL MAX or BAL LEVEL FAST

TECHNICAL DATA

Density fresh mortar	2.1kgs/litre
Working time at 20°C	60 minutes
Setting time at 20°C	3 hours

Compressive strength (EN13892)

Time	1:4 Ratio	1:5 Ratio
3 hours		7.5 N/mm ²
8 hours		10.1 N/mm ²
24 hours		15.5 N/mm ²
28 days	53.5N/mm ²	44.6 N/mm ²

Flexural strength (EN13892)

Time	1:4 Ratio	1:5 Ratio
3 hours		2.4 N/mm ²
8 hours		3.3 N/mm ²
24 hours		4.3 N/mm ²
28 days	9.7N/mm ²	9.3 N/mm ²

Moisture test (Carbide bomb)

Tested on a 40mm thick 5:1 sand:quickset cement screed (0.52 water/cement ratio) at 23°C/50% RH

- 2% moisture after 4 days

- 1.5% moisture after 6 days

Soundness (BRE screed test)

BRE screed testing may be carried out 24 hours after installation of BAL Quickset screeds. The depth of an indentation of a correctly mixed and compacted screed should comply with the requirements of the floor finish and category of use. (BS5385 Part 3 2007). e.g.

Category	Acceptance limits after dropping the weight 4 times – max depth of indentation		
A	3 mm		
B	4 mm		
C	5 mm		
D	6 mm		
	Light Duty (Domestic)	Medium Duty	Heavy Duty
Bonded	C/D	B/C	A
Unbonded	C	B	A
Floating	C	B	A

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.

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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