

technical data sheet

ULTRALEVEL BULKOUT

Polymer Modified Self Levelling Cementitious Underlay

PRODUCT

Ultralevel Bulkout is a self-levelling polymer modified high build cementitious underlay.

DESCRIPTION

Ultralevel Bulkout is a high build, rapid hardening self-levelling polymer modified cementitious bulk fill. Ultralevel Bulkout has been formulated for maximum flow and easy application to achieve a flat surface without any shrinkage or cracking.

RECOMMENDED USES

- Underlayment of floor coverings such as carpet, ceramic tiles.
- Fast repairs of uneven concrete floors where thickness of greater than 10mm is required.
- Residential, commercial and medium industrial application.
- Application thickness from 10mm edge to 120mm in a single application.
- New construction and refurbishment projects.
- Flat smooth surfaces over existing concrete slabs.
- Levelling existing uneven concrete floors.
- New construction and refurbishment projects.
- Economical reinstatement of uneven concrete requiring high builds.

FEATURES & BENEFITS

- Accepts foot traffic in 2 hours.
- Reinstating large areas in relative short time periods.
- Very fast application.
- Dimensionally stable.
- Single component product, just add water.
- Installation can be carried out in a single application.
- Rapid curing.
- Can be applied directly onto prepared concrete surfaces.
- Eliminates the need for sand and cement screeds.
- Floor covering may be applied next day.
- Economical reinstatement of uneven concrete floors requiring a high build up.

PERFORMANCE PROPERTIES

COMPRESSIVE STRENGTH

Tested in accordance to AS10129.9, AS2073 at 20°C.

Age	Compressive Strength
1 day	15Mpa
3 days	20Mpa
7 days	24Mpa
28 days	40Mpa

FLEXURAL STRENGTH

Tested in accordance with ASTM C348-86 at 20°C

Age	Flexural Strength
1 day	3.2Mpa
3 days	4.1Mpa
7 days	7.5Mpa
28 days	8.8Mpa

FLOWABILITY

Tested in accordance to BS890 Flow cone at 20°C

Initial Flow	280 – 300mm
Flow after 10 min	260 – 280mm

BOND STRENGTH

Tested in accordance to ASTM C882 –1987 Slant/Shear method.

Age	Strength
7 days	> 5Mpa
28 days	> 7Mpa

SETTING TIMES

Vicat setting times at 20°C

Initial Set	20°C	40 – 50 minutes
	30°C	30 – 40 minutes
Final Set	20°C	50 – 60 minutes
	30°C	40 - 50 minutes

WORKING TIMES

Temperature	Times (minutes)
10°C	50 – 60 minutes
20°C	30 – 40 minutes
30°C	40 – 50 minutes

APPLICATION THICKNESS

Minimum	10mm
Maximum	120mm

COEFFICIENT OF THERMAL EXPANSION

10 – 12 x 10⁻⁶ mm/°C

FRESH WET DENSITY

1950 kg/m³ approx. (tested in accordance to AS1012.5)

TRAFFIC TIME 20°C

Foot Traffic	2 hours
Light Vehicle Traffic	12 hours
Time to cover with floor covering (overlay)	< 30mm 24 hours > 30mm 36-48 hours

APPLICATION TEMPERATURE

Minimum	5°C
Maximum	30°C

DRYING/SHRINKAGE

Tested in accordance to AS1012.13

Time (days)	Shrinkage (Microstrain)
7 days	< 150 Microstrain
28 days	< 400 Microstrain
56 days	< 600 Microstrain

PACKAGING

Ultralevel Bulkout is supplied in a 20kg polylined bag.

COVERAGE

A 20kg bag of Ultralevel Bulkout mixed with 3 litres of clean water will yield approximately 12 litres. This quantity will cover approximately 1.2m² @ 10mm thick.

Thickness	Area m ² per 20kg bag
5mm	2.4
10mm	1.20
12mm	1.00
20mm	0.65
30mm	0.43
40mm	0.32
50mm	0.240
100mm	0.120

APPLICATION INSTRUCTIONS

Surface Preparation

Ensure substrate is clean, dry and free from oil, grease, sealers, curing compounds, paints, polymer coatings, dust or any other contaminant or coating that may affect the bonding of Ultralevel Bulkout onto the substrate. All foreign material, e.g. bitumen, adhesive or laitance must be removed by mechanical means such as scabbling, capture shot blasting or grinding. The substrate must be primed prior to carrying out the application of Ultralevel Bulkout.

PRIMING

Concrete Floors

Prime the clean, dry and dust free concrete substrate with Ultralevel Primer using a brush or broom. Allow primer to reach a tacky consistency before applying Ultralevel Bulkout. Approximate drying time for the primer is 40-60 minutes @25°C & 50% RH.

Apply the Ultralevel Bulkout as soon as possible after the primer has dried or re-priming maybe required.

Extremely porous substrates, such as damaged slabs and aerated or lightweight concrete etc may require a second coat of Ultralevel Primer to avoid pinholes and bubbles in the Ultralevel Bulkout. The first coat of primer must be dry before the application of the second coat. Apply Ultralevel Primer at 8-10m²/litre per coat, after 2:1 dilution with water (2 parts water, 1 part Ultralevel Primer). Brush out ponded primer to allow for even and complete drying of the Ultralevel Primer prior to the application of Ultralevel Bulkout.

Non Absorbent Floors

For application of Ultralevel Bulkout to non-porous substrates prime the entire area with Ultra NP Primer in accordance with Technical Data Sheet.

DO NOT APPLY ULTRALEVEL BULKOUT TO AN UNPRIMED SURFACE.

MIXING

Ultralevel Bulkout requires 3.0 litres of clean water per 20kg bag and is best mixed with a forced action, high shear stirrer, powered by a heavy duty electric mixing drill at approx. 600 r.p.m. Add pre-measured water to a clean mixing bucket. Gradually add Ultralevel Bulkout into the water whilst continuously mixing the contents of the bucket. When the entire contents of the bag have been added to the water, mix for a further two (2) minutes to produce a smooth homogenous consistency.

DO NOT MIX BY HAND

DO NOT ADD EXCESS WATER

Discard any Ultralevel Bulkout that has hardened or stiffened in the mixing bucket. Further addition of water will NOT reconstitute a useable mixture.

PLACING

Pour the fully mixed Ultralevel Bulkout onto the primed substrate and allow it to seek its own level. Ultralevel Bulkout may be spread with a steel trowel, spreader or squeegee. Keep the trowel blade slightly inclined to achieve the desired thickness of cover. To ensure uniform consistency and continuous flow of the fluid Ultralevel Bulkout, it is advised that subsequent mixes are ready to enable continuous pouring until the entire area to be levelled is complete.

CURING

No special curing is required.

Typical Application: Dual Layer System for Smooth Finishing.

- Thoroughly prepare the floor surface.
- Prime the surface with appropriate primer depending on substrate and allow to dry.
- Apply Ultralevel Bulkout to the required minimum 10mm thickness onto the dry primed surface.
- After 24 hours prime hardened Ultralevel Bulkout with Ultralevel Primer at Primer at 8-10m²/litre per coat, after 2:1 dilution with water (2 parts water, 1 part Ultralevel Primer) and allow to dry.
- Apply Ultralevel SL onto primed Ultralevel Bulkout.

PRECAUTION

- Concrete substrates must be at least 21 days old.
- Do not over water.
- Do not hand mix.
- Can be walked on after 2-4 hours.
- Do not use in external applications.
- Protect from direct sunlight or drying winds during cure.
- Do not use in areas subject to hydrostatic head of pressure.
- Do not use in areas subject to constant contact with moisture.
- Not recommended as a finished floor coating or wearing surface.
- Not recommended for application on floor coatings such as acrylic or epoxy.

P.A.T.S (Pretested Adhesion To Substrate) Programme

Bostik offer a service in which a program has been established to eliminate potential field problems by pre-testing Bostik adhesives with samples of building materials to which the adhesive will be applied. This service is available on large projects where pre-application testing will aid in determining the proper surface preparation method to achieve optimum adhesion. Consult a Bostik representative for further information.

SUBSTRATES

Concrete substrates that have a moisture content greater than 5.5% subject to rising damp or moisture, require a moisture vapour barrier prior to installation of Ultralevel Bulkout . Contact your nearest Bostik office for application instructions on Bostik Moisture Seal to overcome damp substrate conditions.

HEALTH AND SAFETY

Cement products are classified as hazardous under General Health and Safety guidelines and materials containing Portland cement are alkaline in nature.

- Avoid contact with skin, eyes and avoid breathing in dust.
- Wear suitable protective clothing, dust masks, gloves and eye protection.
- Continual or extended contact with cement products can cause skin irritation.
- If poisoning occurs, contact a doctor or Poisons Information Centre.
- If swallowed, do not induce vomiting. Give a glass of water.
- If skin contact occurs, remove contaminated clothing and flush skin thoroughly for a minimum of 15 minutes and see a doctor.
- For more detailed information refer to MATERIAL SAFETY DATA SHEET.

CLEAN-UP

Ultralevel Bulkout should be removed from tools and equipment with clean water immediately after use.

STORAGE

Ultralevel Bulkout has a shelf life of approximately 12 months if kept in a dry environment away from moisture. For further information consult Bostik TECHNICAL DATA SHEET.

FIRE

Ultralevel Bulkout is non flammable.

ITEM NO.	STOCK SIZE	COLOUR
ULTRALEVEL BULKOUT		
272558	20kg Bag	Grey
ULTRALEVEL SL		
267805	20kg Bag	Grey
ULTRA FEATHER FINISH		
272450	5kg Pail	Grey
ULTRALEVEL PRIMER		
269514	5 Litre Bottle	Blue
ULTRA NP PRIMER		
287032	4 Litre Kit	Green
MOISTURE SEAL		
263362	8 Litre Kite	Grey
263370	20 Litre Kit	Grey

The representations and recommendations regarding the products are based on tests which we believe to be reliable. However, no guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with a limited warranty only, and on the condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Bostik Findley Australia Pty Ltd be liable to anyone except for replacement of the products or refund of the purchase price.

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