



SL C500 ULTIMATE

TWO-COMPONENT SMOOTHING COMPOUND

TECHNICAL SHEET NO: TDS00842 08/05/2024

SMART ADVANTAGES

- Moisture tolerant
- Protein-free and low-odour
- Can be used under a surface DPM

DESCRIPTION

Bostik SL C500 ULTIMATE is a two-component, cementitious smoothing compound for smoothing floors. It is a free flowing, highly workable smoothing compound ideal for most application environments.

It can be laid over most common substrates including concrete subfloors, sand/cement screeds, stone, calcium sulphate-based screeds, mastic asphalt, rigid metal and firmly bonded unglazed ceramic, terrazzo & quarry tiles. It is not suitable for use over existing adhesive or water-soluble residues.

Bostik SL C500 ULTIMATE is protein-free, making it suitable for use in biologically sensitive areas. The low-odour formulation makes Bostik SL C500 ULTIMATE ideal for use in occupied buildings.

The moisture tolerant formula enables Bostik SL C500 ULTIMATE to be used to smooth rough, textured subfloors prior to the application of Bostik damp proof membranes.

It is suitable for use with warm water underfloor heating systems, provided a surface temperature of +27°C is not exceeded. It is not to be used as a wearing surface and should always be covered with a floor covering. For interior use only.



TECHNICAL CHARACTERISTICS

Colour	Grey
Form	Powder and liquid
Composition	Blend of cement and latex liquid
Application temperature	+5°C to +27°C
Gauging liquid	Bostik SL C500 ULTIMATE liquid
Application thickness	3mm to 10mm Bulked: 10mm to 20mm
Working times	Up to 15 minutes after mixing (depending on ambient temperature and humidity)
Drying times	Light foot traffic: approx. 90 minutes Loose lay floor coverings: approx. 8 hours Bonded floor coverings: approx. 12 hours Resilient floor coverings: approx. 12 hours Ceramic tiles: approx. 12 hours Textile coverings: approx. 12 hours Over truly non-absorbent subfloors allow 24 hours before laying floor coverings

	(3mm thickness at +20°C, depending on application thickness, ambient temperature and humidity)
Compressive strength	Typically, 25N/mm ² after 28 days
Flexural strength	Typically, 7N/mm ² after 28 days

COVERAGE

- Approx. 5m² per bag at 3mm thickness (depending on the smoothness and absorbency of the floor surface)

APPLICATION

IMPORTANT: Before using Bostik SL C500 ULTIMATE, refer to the relevant Health & Safety Data Sheet, available at www.bostik.com/uk.

All phases of the application should comply with the current editions of:

- BS 8102 Code of practice for protection of below ground structures against water ingress.
- BS 5325 Code of practice for installation of textile floor coverings.
- BS 8203 Code of practice for installation of resilient floor coverings.
- BS 8201 Code of practice for installation of flooring of wood and wood-based panels.

Ensure the correct PPE is worn during use.

PREPARATION

- Ensure the subfloor is clean, sound and dry (<75%RH), of adequate tensile & compressive strength, free from laitance, cracks, structural defects and contaminants that may prevent adhesion (e.g., dust, oil, grease, paint, plaster, polish, some curing compounds, surface hardeners, additives and adhesive residues must be completely removed), and conforms to BS 8204 code of practice.
- Any deep depressions in the floor should be filled with Bostik Rapid Repair Mortar and allowed to dry.
- The temperature of the floor and application environment must be stable and maintained between +5°C and +27°C throughout the application and drying of the smoothing compound.

UNDERFLOOR HEATING

- Bostik SL C500 ULTIMATE can be used on substrates containing warm water underfloor heating systems. The system must be switched off 48 hours prior to, during and for 48 hours post application. To prevent rapid dehydration, wait 48 hours after installation before gradually turning up underfloor heating.
- For electrical radiant underfloor heating systems, please contact Technical Services.

GYPSUM (ANHYDRITE SCREEDS)

- Non-cementitious screeds based on anhydrite or hemihydrate (generally referred to as calcium sulphate-based screeds) must be tested for moisture content in accordance

with BS 8203 : 2017 Installation of Resilient Floor Coverings prior to applying Bostik products. Removal of surface laitance must be carried out before moisture testing and application of the smoothing compound.

- For screeds reading below 75%RH, a primer must be applied to prevent reaction between the screed and the cementitious smoothing compound. Bostik GRIP A256 UNIVERSAL (diluted 1 : 3 with water) is recommended.
- Non-cementitious screeds based on anhydrite or hemihydrate (generally referred to as calcium sulphate-based screeds) that contain underfloor heating systems, must be fully dry (reading 75%RH or lower) prior to the application of Bostik primers and smoothing compounds.

PRIMING

- When applying Bostik SL C500 ULTIMATE, the subfloor must be primed prior to the application of the smoothing compound. See table below, refer to separate technical data sheets for primer application and drying times.
- Priming will minimise preferential absorption and will reduce the risk of pin holing and extend the working time to result in the ideal surface finish.
- When using Bostik SL C500 ULTIMATE over Bostik HYTEC A370 RAPID, no priming is required. Refer to Bostik HYTEC A370 RAPID technical data sheet for application instructions.

Porous substrates	Bostik GRIP A526 UNIVERSAL (diluted 1 : 2 with water)
Dense/non-porous substrates, including epoxy membranes	Undiluted Bostik GRIP A526 UNIVERSAL or Bostik GRIP A936 XPRESS (for applications above 10mm)
Calcium sulphate-based screeds	Bostik GRIP A526 UNIVERSAL (diluted 1 : 3 with water) Once dry, apply a second coat of primer (diluted 1 : 1 with water) (for applications up to 10mm max)
Applications in excess of 10mm of smoothing compound	Bostik GRIP A936 XPRESS
Mastic asphalt	Undiluted Bostik GRIP A526 UNIVERSAL (for applications up to 5mm max)

PRE-SMOOTHING

- When pre-smoothing a rough floor, prior to the application of Bostik HYTEC E570 ONE COAT, prime the subfloor with diluted Bostik GRIP A526 UNIVERSAL (4 parts water to 1 part primer). Allow primer to fully dry and then apply Bostik SL C500 ULTIMATE at a minimum thickness of 3mm and allow to fully dry.

MIXING & APPLICATION THICKNESS

- Mix only 4.3L Bostik SL C500 ULTIMATE liquid with 20kg Bostik SL C500 ULTIMATE powder.
- Gently shake the Bostik SL C500 ULTIMATE liquid and pour the 4.3 litres into a clean mixing bucket.
- Gradually add the 20kg bag of Bostik SL C500 ULTIMATE powder to the liquid, whilst continually mixing with an

electric drill and mixing paddle until a smooth, lump-free mixture is obtained. This will normally be achieved after 2 minutes. Do not under mix. Optimal results can be achieved by allowing the mixed material to stand/mature for 1 minute and then mixing again for 1 minute.

- Note: adding additional liquid may result in separation of the smoothing compound.
- Bostik SL C500 ULTIMATE can be applied from 3mm to 10mm in a single application - 10mm maximum total thickness on sound & primed calcium sulphate-based screeds and 5mm maximum total thickness on sound & primed mastic asphalt.
- Where thicker applications are required (a thickness of 10mm up to 20mm), the product should be bulked out with 3mm granite chippings. To the mixed unit add 12.5kg of chippings, whilst continuing to mix.
- The unbulked mixture will remain workable for approximately 15 minutes under normal conditions. If the mix begins to stiffen before it has been spread, it must be discarded. Do not add further liquid.

APPLICATION

- Pour the mixed material onto the prepared subfloor in a continuous operation.
- Using a steel trowel, apply Bostik SL C500 ULTIMATE evenly to the required thickness.
- Use a spiked roller to deaerate the smoothing compound and smooth out any trowel lines whilst the smoothing compound is still fluid.
- Protect surface from traffic prior to laying a floor covering. Ensure the smoothing compound is fully dry before applying a floor covering.

DRYING TIMES

- Drying times may vary depending upon site conditions, substrate type and installation environment.
- The drying time depends on how absorbent the subfloor is, the air humidity and both the ambient & floor temperatures.
- Thicker applications will prolong overall drying times.
- Based on good ambient conditions of +20°C and 3mm thickness, the smoothing compound can be laid directly over after the following times:

Light foot traffic	90 minutes approx.
Loose lay floor coverings	8 hours approx.
Bonded floor coverings	12 hours approx.
Resilient floor coverings	12 hours approx.
Ceramic tiles	12 hours approx.
Textile coverings	12 hours approx.
Over truly non-absorbent subfloors, before laying floor coverings	24 hours approx.
Other floor coverings	Contact Technical Services

- The working and drying times of the smoothing compound will be reduced in higher temperatures and increased in lower temperatures.

CLEANING

- Clean tools and equipment with warm, soapy water immediately after use. Remove surplus smoothing compound from surfaces whilst it is still wet. Dried and hardened smoothing compound can only be removed mechanically.

STORAGE

- Store and transport securely. Store for up to 6 months from date of manufacture in original, unopened packaging, clear of the ground, in cool, dry conditions within the temperature range +5°C to +25°C and out of direct sunlight. Protect from excessive drafts, frost, damp, condensation and dew.

PRECAUTIONS IN USE

Do not use as a substitute for a DPM. An effective membrane is required to prevent water entering the system. Protect surface from foot traffic prior to installing a floor covering. Ensure the smoothing compound is fully dry before installing a floor covering. During drying, protect the freshly applied product from strong sunlight and through draughts. Protect from rain and frost. Do not force dry the smoothing compound. Application in high temperatures may result in rapid setting and poor flow. The rapid loss of water may increase the risk of cracking.

The mix ratios and temperatures need to be followed accurately. Changing the mix ratios will disrupt the system and risk product failure.

For any application not covered, please contact Technical Services on +44 (0)1785 272625 or visit www.bostik.com/uk for advice.

Recommendations and suggestions are for guidance only, since conditions of use are completely beyond our control.

For health and safety instruction, first aid measures and spillage and disposal instructions, see separate Health and Safety Data sheet for Bostik SL C500 ULTIMATE, available at www.bostik.com/uk.

PACKAGING

Product codes	30620337	20kg bag
	30620338	4.3L polyjerries x 4

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