



Cempolay Ultra Strong

A STRONG, FAST SETTING RESURFACING & SELF-LEVELLING COMPOUND

TECHNICAL SHEET NO: TDS02226 24/03/2023

SMART ADVANTAGES

- Water and frost resistant once cured
- Suitable for use as a final wear layer when over painted
- Interior and exterior use

DESCRIPTION

Bostik Cempolay Ultra Strong is a strong, fast setting, protein-free, resurfacing & self-levelling compound for levelling interior subfloors prior to laying decorative floor coverings, or painting. It is also suitable for some exterior applications, prior to laying ceramic tiles, slabs & natural stone, and can also be used on domestic garage floors prior to over coating with a suitable floor paint.

It is ideal for smoothing and levelling prepared concrete subfloors, sand/cement screeds and unglazed ceramic tiles. It can be extended for filling holes and forming sloping screeds (5% downward gradients).

It is suitable for use with warm water underfloor heating systems, provided a surface temperature of +27°C is not exceeded. It is not suitable for use on tarmac, vinyl, or floors prone to structural movement.



TECHNICAL CHARACTERISTICS

Colour	Grey
Form	Dry, free-flowing powder
Specific Gravity	1.6 approx.
Composition	Blend of cement and fillers
Application Temperature	+5°C to +25°C
Gauging Liquid	Water
Application Thickness	2mm to 20mm
Working Times	Up to 15 to 20 minutes after mixing (Depending on ambient temperatures)
Drying Times	Foot traffic: approx. 2 to 3 hours at +20°C Ceramic tiles: approx. 3 hours at +20°C Impervious floor coverings: approx. 24 hours per 10mm depth at +20°C

*Depending on temperature, humidity, coating weight and substrate.

COVERAGE

- Approx. 5.8m² per bag at 2mm depth
 - Approx. 0.6m² per bag at 20mm depth
- (Depending on the smoothness of the floor surface & application technique)

APPLICATION

IMPORTANT: Before using Bostik Cempolay Ultra Strong, refer to the relevant Health & Safety Data Sheet, available at www.bostik.com/uk.

All phases of installation should comply with the latest editions of:

- BS 8102 Code of Practice for protection of structures against water from the ground.
- 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 installations of for flooring of timber, timber products and wood-based panel products.

PREPARATION

Subfloor:

- Ensure the subfloor is sound, clean, dry and of adequate tensile and compressive strength, free from loose material, laitance, cracks and structural defects. Ensure there is an effective damp-proof membrane, which conforms to BS 8203.
- The subfloor should be tested in accordance with British Standards, using a properly calibrated and insulated hygrometer. A reading of 75% RH or less confirms that the subfloor is satisfactorily dry.
- Any contaminants that may hinder adhesion, such as grease, oil, dirt, dust, plaster, some curing compounds, surface hardeners, additives and adhesive residues must be completely removed. Bostik Cempolay Ultra Strong does not tolerate any contamination.
- Any cracks or holes in the floor must be cleaned out and filled with Bostik Rapid Repair Mortar. Allow to dry before applying Bostik Cempolay Ultra Strong.
- For optimum performance, a room temperature of +13°C to +18°C should be maintained for at least 24 hours prior to application. The temperature of the subfloor must be at least +5°C throughout the application and drying of the self-levelling compound. Ensure that a maximum room temperature of +25°C is not exceeded during application. Do not apply externally if temperatures are likely to drop below freezing within 7 days of application. The temperature must remain above +5°C.

Underfloor heating systems:

- Warm water underfloor heating systems must be switched off for 48 hours before installation. Wait 48 hours after installation before gradually turning up underfloor heating.

PRIMING

- Prime porous surfaces with Bostik Cempolay Universal Primer, diluted 1:2 with water. Allow to dry before applying Bostik Cempolay Ultra Strong.
- Prime non-porous surfaces/unglazed ceramic tiles with undiluted Bostik Cempolay Universal Primer.

MIX RATIOS

Self-levelling compound:

- 4 litres of water to 20kg Bostik Cempolay Ultra Strong.

Bulked out compound:

- 3.2 litres of water to 20kg Bostik Cempolay Ultra Strong + 12.5kg of dry, sharp sand (0mm to 4mm).
- Or 3.2 litres of water to 20kg Bostik Cempolay Ultra Strong + 10kg of granite chippings (3mm).

MIXING & APPLICATION DEPTH

- According to the mix ratios above, pour clean, cold water into a clean mixing bucket. Gradually add Bostik Cempolay Ultra Strong powder to the water, whilst continually mixing with an electric drill and mixing paddle until a smooth, lump-free mixture is obtained.
 - Do not mix more compound than you can use in 15 to 20 minutes. The mixture will remain workable for approximately 20 minutes under normal conditions. If the mix begins to stiffen before it has been spread, it must be discarded. Do not re-temper or add further water.
- Note: the addition of too much water may result in separation of the compound.
- Bostik Cempolay Ultra Strong can be applied from a minimum depth of 2mm, up to 20mm in a single application. However, when applying at depths greater than 10mm it may be beneficial to bulk out the compound with dry, sharp sand or granite chippings.

Bulked out compound:

- The sand or chippings must be dry and added after mixing the water and powder together. Use the mix ratios and mixing process detailed above.

NOTE: Bulk out compound is not suitable for use with underfloor heating systems.

APPLICATION

- Pour the mixed material onto the prepared subfloor in a continuous operation and allow to flow.
- Using a steel screeding trowel, spread evenly to the required depth and smoothness.
- Protect surface from foot traffic prior to laying a floor covering. Ensure the compound is fully dry before applying a floor covering.

DRYING TIMES

- Protect freshly applied product from strong sunlight and through draughts, as this can dehydrate the product, resulting in incorrect curing. Also, protect from rain and frost. Do not force dry the self-levelling compound, as this may affect the curing process.
- Application in high temperatures may result in rapid setting and poor flow. The rapid loss of water may increase the risk of cracking.
- The drying time depends on how absorbent the subfloor is, the air humidity and both the ambient & floor temperatures.
- Under good site conditions, Bostik Cempolay Ultra Strong will normally take foot traffic 2 to 3 hours after application. Leave overnight before applying impervious floor coverings, or 24 hours for every 10mm. Ceramic tiles may be laid in as little as 3 hours, when a cement-based adhesive is used. The walk on time and setting time will be delayed if the powder has been stored in temperatures below +10°C, or has been applied in temperatures below +20°C.

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

FINISHING

- If Bostik Cempolay Ultra Strong is to be left exposed as a wearing surface on domestic garage floors, apply a suitable transparent varnish or paint to protect the compound. Externally, Bostik Cempolay Ultra Strong must be covered by ceramic tiles, slabs or natural stone.

CLEANING

- Clean tools and equipment with warm, soapy water immediately after use. Remove surplus compound from surfaces whilst it is still wet. Cured material 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. 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 Cempolay Ultra Strong, available at www.bostik.com/uk.

PACKAGING

Product codes	30622970	20kg bag
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