Cempolay Deep

DEEP APPLICATION SELF-LEVELLING COMPOUND

TECHNICAL SHEET NO: TDS01647 13/03/2025

SMART ADVANTAGES

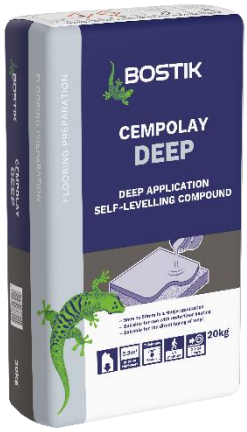
- 5mm to 50mm in a single application
- Suitable for use with underfloor heating
- Suitable for the direct laying of vinyl

DESCRIPTION

Bostik Cempolay Deep is a protein-free, high-strength, high-performance, deep application smoothing and levelling compound, based on a blend of cements and organic binders. It is suitable for raising floor levels and levelling uneven subfloors in light to heavy-duty internal applications. The versatility of Bostik Cempolay Deep allows for application thicknesses between 5mm to 50mm in a single step.

It is ideal for smoothing and levelling prepared concrete subfloors, sand/cement screeds, stone, calcium sulphate-based screeds and firmly bonded unglazed ceramic, terrazzo & quarry tiles. It is also ideal for filling uneven floors and forming sloping screeds. It is not suitable for use over existing adhesive or water-soluble residues, wooden floors or mastic asphalt.

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	Dry, free flowing powder
Composition	Blend of cement, organic binders and fillers
Application temperature	+5°C to +27°C
Gauging liquid	Water
Application thickness	5mm to 50mm
Working times	Up to 20 minutes after mixing (depending on ambient temperature and humidity)
Drying times	Light foot traffic: approx. 90 minutes Loose lay floor coverings: approx. 4 hours Bonded floor coverings: approx. 24 hours per 5mm thickness Ceramic tiles: approx. 3 to 4 hours (<10mm thickness) or minimum 24 hours >10mm thickness Textile coverings: approx. 24 hours per 10mm thickness (5mm thickness at +20°C, depending on application thickness, ambient temperature and humidity)

Compressive strength	Typically, 35N/mm² after 28 days
Flexural strength	Typically, 5N/mm² after 28 days

COVERAGE

- Approx. 2.3m² per bag at 5mm thickness
- Approx. 1.2m² per bag at 10mm thickness
- Approx. 0.6m² per bag at 20mm thickness
- Approx. 0.25m² per bag at 50mm thickness (depending on the smoothness and absorbency of the floor surface)

APPLICATION

IMPORTANT: Before using Bostik Cempolay Deep, 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 cracks or holes in the floor must be cleaned out and filled with Bostik Rapid Repair Mortar. Allow to completely dry before applying Bostik Cempolay Deep.
- 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 compound.

UNDERFLOOR HEATING

- Bostik Cempolay Deep 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.

PRIMING

- When applying Bostik Cempolay Deep, the subfloor must be primed prior to the application of the compound. See table below, refer to separate technical data sheets for primer application and drying times.
- Priming will minimise rapid absorption and will reduce the risk of pin holing and extend the working time to result in the ideal surface finish.

Porous substrates	Bostik Cempolay Universal Primer (diluted 1 : 2 with water)
Dense/non-porous substrates, including epoxy membranes	Undiluted Bostik Cempolay Universal Primer (for applications above 10mm contact Technical Services) Apply Bostik Cempolay Deep while it is still tacky, usually about 30 minutes
Calcium sulphate-based screeds	Bostik Cempolay Universal Primer (diluted 1 : 3 with water) Once dry, apply a second coat of primer (diluted 1 : 1 with water) (for applications up to 10mm max)

MIXING & APPLICATION THICKNESS

- Pour 3.5 litres of clean, cold water into a clean mixing bucket.
- Gradually add the 20kg bag of Bostik Cempolay Deep powder to the water, 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.
- Make sure the mixing bucket is free from any unmixed material on the sides and the base.
- Note: the addition of too much water may result in separation of the compound.
- Bostik Cempolay Deep can be applied from 5mm to 50mm in a single application - 10mm maximum total thickness on sound & primed calcium sulphate-based screeds. Contact Technical Services for further details.
- 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.

APPLICATION

- Pour the mixed material onto the prepared subfloor in a continuous operation. Bostik Cempolay Deep can also be applied by pump.
- Using a steel trowel, apply Bostik Cempolay Deep evenly to the required thickness.
- Use a spiked roller to deaerate the compound and smooth out any trowel lines whilst the compound is still fluid.
- Protect surface from traffic prior to laying a floor covering. Ensure the 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 5mm thickness, the compound can be laid directly over after the following times:

Light foot traffic	90 minutes approx.
Loose lay floor coverings	4 hours approx.
Bonded floor coverings	24 hours approx. per 5mm thickness
Ceramic tiles	3 to 4 hours approx. (<10mm thickness) or minimum 24 hours (>10mm thickness)
Textile coverings	24 hours approx. per 10mm thickness
Other floor coverings	Contact Technical Services

- The working and drying times of the 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 compound from surfaces whilst it is still wet. Dried and hardened can only be removed mechanically.

STORAGE

- Store and transport securely. Store for up to 9 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 draughts, frost, damp, condensation and dew.

PRECAUTIONS IN USE

It is suitable for use under parquet/wood flooring >5mm thickness.

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 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 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 Cempolay Deep, available at www.bostik.com/uk.

PACKAGING

Product codes	30812527	20kg bag

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