



# Cempolay Ultra Strong

## A CEMENT BASED SELF-LEVELLING COMPOUND

Date: 25 November 2019

Fact Sheet No.: TDS00001

### YOUR SMART ADVANTAGES

- Water and frost resistant once occurred
- Suitable for use with underfloor heating
- Over paintable

### USES

Bostik Cempolay Ultra Strong is a protein-free self-levelling compound based on a blend of cements and organic binders. It is suitable for smoothing and levelling interior sub-floors prior to laying decorative floor coverings. It is also suitable for some exterior applications prior to laying ceramic tiles, slabs and natural stone and can also be used on domestic garage floors prior to over coating with a suitable floor paint.

Bostik Cempolay Ultra Strong is ideal for smoothing/levelling of concrete, sand/cement screeds, and unglazed ceramic tile. It can be extended for filling holes and forming sloping screeds (5% downward gradients). Bostik Cempolay Ultra Strong is suitable for use with warm water underfloor heating systems provided a surface temperature of 27°C is not exceeded. The heating must be switched off at least 48 hours before and after the installation of the floor covering.

Bostik Cempolay Ultra Strong is not suitable for tarmac, vinyl, soft smoothing compound residue, floors prone to structural movement and adhesive residue.

### PRODUCT CHARACTERISTICS

Form	Dry, free flowing powder
Colour	Grey
Composition	Blend of cement, organic binders and fillers

Specific Gravity	1.6 approx.
Product Code	30812526 25kg
Storage/Shelf Life	Store for up to 6 months from date of manufacture when stored in original, unopened packaging, clear of the ground, under cool, dry conditions within the temperature range of 5°C to 25°C. Protect from frost and excessive draughts.

### TYPICAL PERFORMANCE DATA (approx.)

Application Temperature	5°C to 25°C
Coverage	Approx. 5m <sup>2</sup> at 3mm thickness Approx. 3m <sup>2</sup> at 5mm thickness
Working Time	15 to 20 minutes approx. at 20°C
Drying Times	Foot traffic: 2 to 3 hours approx. at 20°C To lay ceramic tiles: 3 hours approx. at 20°C To lay textile floor coverings: leave overnight To lay impervious floor coverings: 24 hours approx. per 10mm thickness of smoothing compound at 20°C Note: Drying/covering times will be extended at lower temperatures.
Compressive Strength	≥ 20 N/mm <sup>2</sup> at 28 days

## DIRECTIONS FOR USE

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

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

BS CP102 Code of Practice for protection of buildings 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.

## PREPARATION

1. Wear protective gloves, clothing and eyewear.
2. Ensure the floor and air temperature is above 5°C for 24 hours prior to application and remains above 5°C throughout the application and during the curing period.
3. The freshly applied compound must be protected from rain, frost, high temperatures and conditions causing rapid drying.
4. Do not apply externally if temperatures are likely to drop below freezing within 7 days of application.
5. Ensure the subfloor is clean, sound, dry and free from contaminants that may hinder adhesion, including surface hardeners, additives, oils, grease adhesive residue etc. Bostik Cempolay Ultra Strong does not tolerate any contamination. So if any is present then ensure it is removed completely.
6. Ensure there is an effective damp-proof membrane that conforms to BS 8203:1987.

## PRIMING

7. Prime very porous surfaces or extremely dry surfaces with Bostik Cempolay Universal Primer diluted with 2 parts water. Allow to dry before applying Bostik Cempolay Ultra Strong.
8. Prime non-porous surfaces with undiluted Bostik Universal Primer and apply Bostik Cempolay Ultra Strong.
9. Any cracks in the floor must be cleaned out and filled with a suitable patch repair mortar.
10. The subfloor must 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.
11. Bostik Cempolay Ultra Strong is suitable for installations with fully commissioned underfloor heating, provided a surface temperature of 27°C is not exceeded. The heating must be switched off at least 48 hours before and after application. Bostik Cempolay Ultra Strong must not be mixed with any product to extend it, for underfloor heating applications.

## MIXING RATIO

12. 5 litres of water to 25kg powder.

### Extended Mix Ratio:

13. 4 litres of water to 25kg powder + 12.5kg of sharp sand (0 - 4mm).
14. 4 litres of water to 25kg powder + 12.5kg of granite chippings (3mm).

## MIXING

15. Measure 5 litres of clean, cold water into a clean mixing vessel and gradually add the contents of a 25kg bag of powder. If using an extended mix, alter the amount of water used according to the mix ratios detailed above.
16. Mix continuously until a smooth, homogenous paste is achieved using an electric stirrer or electric drill and paddle.
17. Do not mix more compound than you can use in approx. 15-20 minutes
18. When adding sand or chippings always add after gauging the powder. Sand must be dry.
19. Do not re-temper or add further water if the product begins to set.

## APPLICATION

20. Pour the mixture onto the prepared subfloor as a continuous operation. Spread evenly to the prepared thickness using a steel trowel.
21. Bostik Cempolay Ultra Strong can be applied from 2mm up to 20mm in one application. However when applying at greater than 10mm it may be beneficial to extend the compound with sharp sand or granite chippings.
22. Leave overnight before applying impervious floor covering or 24 hours for every 10mm before laying impervious floor coverings.
23. Ceramic tiles may be laid in as little as 3 hours, when a cement based adhesive is used, after application of the smoothing compound.
24. Protect surface from damage prior to laying a floor covering.
25. Avoid application in high temperatures as this may result in rapid setting and poor flow. The rapid loss of water may increase the risk of cracking.
26. A room temperature of 13°C to 20°C should be maintained with a minimum floor temperature of 5°C.

## DRYING TIMES

27. Under good site conditions Bostik Cempolay Ultra Strong will normally take foot traffic 2 to 4 hours after application (at 20°C). The walk on time and setting time will be delayed if the powder has been stored at temperatures below 10°C and/or when used on a cold floor.

28. Under no circumstances should the smoothing compound be force dried as this will affect the curing process. The working area should be protected from direct sunlight and through draughts, which may cause localized accelerated curing. The working time of the compound will be reduced at higher temperatures.

#### INSTALLATION TIME

29. To lay ceramic tiles it will take approx. 3 hours at 20°C.
30. To lay impervious floor covering it will take approx. 24 hours for every 10mm thickness of smoothing compound at 20°C.
31. For wood floors it will take up to 10mm approx. 72 hours. Allow a further 24 hours for every 10mm thickness of smoothing compound.

#### CLEANING

32. Tools should be cleaned immediately after use with warm soapy water.
33. Surplus material must be removed from surrounds and tiled surfaces whilst it is still wet.
34. Remove bulk using a rubber squeegee.
35. Remove the residue of uncured material using a damp cloth.
36. Do not allow to cure. Once cured it can only be removed mechanically.

#### PRECAUTIONS IN USE

For any application not covered please contact Technical Services on +44 (0) 1785 272625 or visit [www.bostik.com/uk](http://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](http://www.bostik.com/uk).

Not for use with forklift trucks.

BOSTIK HOTLINE

Smart help +44 (0) 1785 272625



**CONSTRUCTION PRODUCT REGULATION  
DECLARATION OF PERFORMANCE**

No.:TDS00001

Product Description: **BOSTIK CEMPOLAY ULTRA STRONG**  
Product Code: **5010591366008**  
Intended Use: **Cementitious Screed Material**  
Manufacturer: **Bostik Ltd**  
Contact Address: **Common Road  
Stafford  
ST16 3EH**  
System of Assessment: **System 4**  
Harmonised Standard: **EN 13813:2002**  
Declared Performance: **CT-C20-F6**

Essential Characteristics	Performance	Harmonised technical specification
Reaction to Fire	<b>F</b>	<b>EN 13813:2002</b>
Compressive strength	<b>≥ 20 N/mm<sup>2</sup></b>	
Flexural Strength	<b>≥ 6 N/mm<sup>2</sup></b>	

The performance of the Bostik Cempolay Ultra Strong 5010591366008 is in conformity with the declared performance shown in the table above.

This declaration of performance is issued under the sole responsibility of Bostik Ltd.

**Signed for and on behalf of Bostik Ltd by:**

**Name:** Alison Jamieson

**Function:** S.H.E.Q. Manager

**Signature:** 

**Date:** May 2014

This disclaimer is issued by Bostik Limited ("the Company") and applies to the use of any products supplied by the Company ("the Products") displayed on this Technical Data Sheet ("TDS"). Please read this disclaimer carefully before using any of the Products. Using this TDS and/or the Product constitutes your acceptance of this disclaimer. Its contents shall prevail over any directions of use and any disclaimer and/or exclusion or limitation of liability of the Company which may appear on the packaging of the Products.

This disclaimer sets out the entire financial liability of the Company (including any liability for the acts or omissions of its employees, agents and sub-contractors) to any user of the Products ("Product User") in respect of any use made or resale by the Product User, of any of the Products in this TDS.

This disclaimer does not affect the Company's liability for death or personal injury arising from the Company's negligence in respect of the Products, nor its liability for fraud, or fraudulent misrepresentation, nor any other liability which cannot be excluded or limited under applicable law.

The Company's total liability however arising and whether caused by tort (including negligence and breach of statutory duty), breach of contract or otherwise, arising in connection with the use made or resale by the Product User of any of the Products in this TDS shall be limited to the price paid for the Product by the Product User.

The Company shall not be liable to the Product User for any pure economic loss, loss of profit, loss of business, depletion of goodwill or otherwise, in each case whether direct, indirect or consequential, or any claims (including in respect of personal injury insofar as not caused by the Company's negligence) for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the use made or resale by the Product User of any of the Products in this TDS.

The Company shall not be liable to the Product User in relation to any loss for any use which is inappropriate or use which is otherwise than in accordance with the relevant instructions for use of the Products in this TDS or on the Product. Product Users are advised to confirm the suitability of the Products by their own tests.

This TDS covers just one of a large range of products supplied by the Company.

Full information on these products and advice on application is freely available from our fully trained staff throughout the country. In addition, specialist technical advice is available from our Technical Services Department. This TDS supersedes all previous TDSs relating to the Products, and users of it must ensure that it is the current issue. Destroy all previous TDS, and if in any doubt, contact the Company, quoting the code number in the top right hand corner on the front of this document.

Sales	Tel: 0844 371 1192	Fax: 01785 241818	<a href="mailto:customer.service@bostik.com">customer.service@bostik.com</a>
Technical Advice	Tel: 0844 371 1197	Fax: 01785 272867	<a href="mailto:technical.service@bostik.com">technical.service@bostik.com</a>
Safety Data Sheets	Tel: 01785 272625	Fax: 01785 212962	<a href="mailto:sds.box-eu@bostik.com">sds.box-eu@bostik.com</a>