

# Cempolatex Flexi-Deep

DEEP APPLICATION, FIBRE-REINFORCED SMOOTHING COMPOUND

Date: 19 March 2021 Fact Sheet No.: TDS02121

# YOUR SMART ADVANTAGES

- Application from 3mm to 60mm in one application
- Fibre-reinforced for strength and flexibility
- Accepts ceramic tiles after just 4 hours

#### **USES**

Bostik Cempolatex Flexi-Deep is a protein-free, flexible smoothing compound for preparing interior floors prior to laying carpet, soft floor coverings or ceramic tiles. It is reinforced with fibres for strength and flexibility and can be applied to depths between 3mm and 60mm in a single application. Being protein-free, it is suitable for use in biologically sensitive areas.

Bostik Cempolatex Flexi-Deep has excellent workability and is ideal for smoothing and levelling prepared concrete subfloors, sand/cement screeds, calcium sulphate screeds, rigid timber floors and other strong rigid subfloors. It can also be applied over minimal quantities of tile adhesive residue, provided they are firmly bonded and unaffected by water.

It is suitable for use with warm water underfloor heating systems and for encapsulating electrical radiant heating mats, 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.

PRODUCT CHARACTERISTICS			
Colour	Grey		
Form	Dry, free-flowing powder		
Specific Gravity	1.36 approx.		
Composition	Polymer modified cement containing fibres		
Product Codes	30616166 20kg bag		

Storage/Shelf Life	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.

TYPICAL PERFORMANCE DATA (approx.)		
Application Temperature	+5°C to +25°C	
Coverage	Approx. 3.7m² per bag at 3mm thickness (depending on the smoothness of the floor surface & application technique)	
Gauging Liquid	Water	
Application Thickness	3mm to 60mm	
Working Times	Up to 20 minutes after mixing (depending on ambient temperatures)	
Drying Times	Foot traffic: approx. 2½ hours Ceramic tiles: approx. 4 hours Bonded soft floor coverings: approx 24 hours (<5mm thickness at +20°C, depending on ambient temperatures)	
Cleaning	Clean tools and equipment with warm, soapy water immediately after use	

#### **DIRECTIONS FOR USE**

IMPORTANT: Before using Bostik Cempolatex Flexi-Deep,

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.
- 2. 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. If minimal amounts of adhesive residue remain, it must not be affected by water and be firmly bonded.
- 4. Any cracks or holes in the floor must be cleaned out and filled with Bostik Rapid Repair Mortar. Allow to dry before applying Bostik Cempolatex Flexi-Deep.
- 5. 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 smoothing compound. Ensure that a maximum room temperature of +25°C is not exceeded during application.

#### Underfloor heating systems:

- 6. 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.
- 7. Electrical underfloor heating: Bostik Cempolatex Flexi-Deep may also be used to encapsulate electrical radiant underfloor heating mats. There must be a minimum of 5mm to 6mm Bostik Cempolatex Flexi-Deep covering the mat before bonding tiling products, and 10mm before bonding resilient textile or timber flooring. Install caballing as per manufacturer's instructions. Ensure the electrical cables are not damaged when installing the compound. The substrate to which the

- underfloor heating matting is fixed must be sound and stable.
- 8. Electrical underfloor heating must be switched off for 48 hours before installation. Wait 7 days after installation before gradually turning up underfloor heating.

#### Wooden surfaces:

- 9. The timber substrate should be solidly fixed and clean, with open joints over laid with flooring grade plywood. The plywood must be sealed to prevent moisture ingress on the underside and all edges. The plywood should be sealed with Bostik Cempolay Universal Primer to stop the ingress of moisture. The timber must be a minimum of 15mm thick and screwed down at 300mm centres.
- 10. Bostik Cempolatex Flexi-Deep can be applied to a maximum depth of 20mm on wooden surfaces.

#### DRIMING

11. In all cases, the subfloor must be primed prior to the application of the smoothing compound, as shown in the table below. See separate technical data sheets for primer application and drying details.

Absorbent substrates:	Bostik Cempolay Universal Primer (diluted 1:2 with water)	
Dense/non- absorbent substrates including epoxy membranes:	Bostik Cempolay Universal Primer (for applications above 10mm consult Technical Services)	
Calcium sulphate screeds:	Consult Technical Services	
Wooden floors: (must be mechanically fixed)	Bostik Cempolay Universal Primer (diluted 1:2 with water)	
Flooring grade mastic asphalt screeds:	Bostik Cempolay Universal Primer neat (for applications up to 5mm max)	
Underfloor heating systems:	Contact Technical Services	

#### **MIX RATIOS**

 3.5 litres of water to 20kg Bostik Cempolatex Flexi-Deep.

### **MIXING & APPLICATION THICKNESS**

- 12. According to the mix ratios above, pour clean, cold water into a clean mixing bucket. Gradually add Bostik Cempolay 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. After mixing, a maturing time of at least 2 minutes is recommended.
- 13. 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.

14. Bostik Cempolatex Flexi-Deep can be applied from a minimum depth of 3mm up to 60mm in a single application (5mm maximum total thickness on flooring grade mastic asphalt screeds).

#### **APPLICATION**

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

#### **DRYING TIMES**

- 18. 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 smoothing compound, as this may affect the curing process.
- 19. Application in high temperatures may result in rapid setting and poor flow. The rapid loss of water may increase the risk of cracking.
- 20. The drying time depends on how absorbent the subfloor is, the air humidity and both the ambient & floor temperatures.
- 21. Under good site conditions, Bostik Cempolatex Flexi-Deep will normally take foot traffic 2½ hours after application and ceramic tiles after approx. 4 hours. Leave at least 24 hours before applying bonded floor coverings. 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.
- 22. 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. Cured material can only be removed mechanically.

## PRECAUTIONS IN USE

Do not use as a substitute for a DPM. An effective membrane is required to prevent water entering the system.

Do not use a spiked roller, as this will pull fibres to the surface.  $\,$ 

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 Cempolatex Flexi-Deep, available at www.bostik.com/uk.



# CONSTRUCTION PRODUCT REGULATION DECLARATION OF PERFORMANCE

No: TDS02121

Product Description: Bostik Cempolatex Flexi-Deep

Product Code: **5010591009882** 

Intended Use: Cementitious screed material

Manufacturer:
Contact Address:

Common Road
Stafford
ST16 3EH

System of Assessment: System 4

Harmonised Standard: EN 13813:2002

Declared Performance: CT-C35-F6

Essential characteristics	Performance	Harmonised technical specification
Compressive strength	>35N/mm²	
Flexural strength	>6N/mm²	EN 13813:2002
Reaction to fire	F <sub>fl</sub>	

The performance of the product Bostik Cempolatex Flexi-Deep 5010591009882 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: Marrianne Drayton Function: Quality Manager

Signature: Date: October 2020

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