

Rapid smoothing / fine leveling of sound floor surfaces prior to application of floor finishes.

## OVERVIEW

**TEKCEM 220** is ideal for application over sound substrates including concrete and sand / cement screeds. It can be applied at thicknesses from 2mm to 20mm in one application.

TEKCEM 220 is fast setting and can receive a tiled floor finish at 3 hours or most other types of finish after 24 hours (at 20°C).

TEKCEM 220 is shrinkage compensated and provides the perfect smoothing material for most floor finishes including thinner vinyl.

## TECHNICAL DATA

Packaging	25kg lined paper sacks
Water addition	5.5L per 25kg unit
Working time	20-30minutes at 20°C
Light foot traffic after	2-3 hours
Time to receive floor finishes	24 hours
Application thickness	2mm to 20mm
Consumption of powder per mm	1.7kg/m <sup>2</sup> /mm
Compressive strength	1 day >15MPa 7 days >25MPa 28 days >28MPa
Flexural strength	1 day >4MPa 7 days >6MPa 28 days >7MPa

## BENEFITS

- Can be applied from 2 to 20mm in one pour.
- Single part, no additives required, just add water.
- Light foot traffic after 3 hours.
- Protein free.
- Shrinkage compensated.
- High durability.
- Pumpable.

## COVERAGE

Applied thickness	Bags required per 100m <sup>2</sup>
2mm	12
6mm	36
12mm	72
20mm	136

## WARNING

Whilst the information provided in this datasheet is true and accurate to the best of our knowledge, it may contain information which is unsuitable under certain circumstances since materials, site conditions and method of application vary with each application.

TEKCEM LTD cannot be held responsible for any loss or damage due to incorrect use or from the possibility of variations in working conditions and/or workmanship beyond our control. The user alone is responsible for any consequences deriving from the product.

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## TOOLS REQUIRED

- Steel trowel
- Spiked roller
- Mixing bucket, slow speed drill and paddle (small projects)
- Mixer / pump (high volume applications)

Wash all tools thoroughly with water directly after use.

## SURFACE PREPARATION

Before starting, all substrates must be clean, dry and strong enough to support the weight of the leveller, adhesive and the final floor covering being applied. Remove all dust, dirt, oil, grease and other contaminants that may affect adhesion. Where traces of adhesive remain, these must be strong, sound and well adhered to the substrate.

The substrate must be confirmed dry by consistent moisture readings; <75% relative humidity (RH) or <0.5% residual moisture content prior to application. If there is any doubt concerning the suitability of a surface or measurement of moisture, please seek technical advice.

Remove any loose or flaking layers. Laitance should be removed from concrete and sand/cement screed surfaces.

Sub-floors directly to earth must have a damp-proof membrane.

## SUBSTRATES

### Concrete/screed:

Ensure new concrete is confirmed dry via consistent moisture readings across the whole surface. Sand/cement screeds must have a surface relative humidity reading of less than 75% RH before work can commence. If it is a new screed, allow 1 day per mm for drying.

Remove any laitance from the surface mechanically and remove all dust and debris, ideally by vacuum. It is necessary to prime sand/cement screeds to aid adhesion, maintain workability and prevent air bubbles rising to the surface. Prime with a mixture of 3 parts water to 1 part TEKPRIME. Do not over apply, as this can cause the primer to skin over. Ensure that 100% coverage is achieved. Very porous substrates will require more than one coat of diluted TEKPRIME.

### Ceramic/quarry/stone tiles:

Make sure the surface is clean and free of dirt and dust. Prime the surface with one coat of TEKPRIME Slurry Mix (consisting of 1 part water to 1 part TEKPRIME, mixed with approximately 30% by weight of TEKCEM 220, to form a brush-on bonding slurry). Allow the slurry mix to dry before commencing application of TEKCEM 220.

### Calcium sulphate:

Ensure the calcium sulphate screed is confirmed dry via consistent moisture readings across the whole surface. Calcium sulphate screeds must have a surface relative humidity reading of less than 75% RH before work can commence. If it is a new screed, allow 1 day per mm for drying for depths up to 40mm and 2 days per mm thereafter.

Remove any laitance from the surface mechanically and remove all dust and debris, ideally by vacuum. Calcium sulphate screeds must be sealed prior to applying TEKCEM 220. Prime with a mixture of 3 parts water to 1 part TEKPRIME and allow to dry. If required, follow by a second coat of 3 parts water to 1 part TEKPRIME and allow to dry.

## MIXING BY HAND

Always mix by adding powder to clean water. Slowly mix 25kg of TEKCEM 220 powder to 5.0 litres of water. Do not exceed 5.0 litres of water as this will result in polymer bleed, extended drying times and a weakened mix. Add the powder slowly to avoid clumping. Continue to mix until a uniform consistency is achieved. When the desired consistency is achieved allow to stand for 2 mins before remixing prior to application. Ensure that each mix is used within 30 mins of first mixing.

## MIXING BY PUMP

Mix in accordance with the pump manufacturer's recommendations. The rate of water addition should be adjusted to give a smooth, cohesive mix with no surface bleed or segregation. Carry out flow checks at regular intervals during pumping.

## APPLICATION

Apply by pouring or pumping to the desired thickness and trowel finish to a maximum of 20mm. The use of a spiked roller is recommended immediately afterwards in thin applications in order to remove trapped air and smooth out flow lines.

If a thickness greater than 20mm is required, allow the first layer of TEKCEM 220 to dry, then prime with a mixture of 3 parts water to 1 part TEKPRIME, between layers and allow primer to dry. Before adding the second layer of TEKCEM 220.

TEKCEM 220 will begin curing in 1 to 2 hours and should be "walkable" after approximately 2-3 hours at 20°C. Curing and drying times will vary according to ventilation and temperature.

TEKCEM 220 must be suitably dry before overlaying with floor finishes. Typically, this will be after 3 hours for tiles or 24 hours for most other floor finishes.

It is the responsibility of the floor finish applicator to ensure that the residual moisture in the material is suitable.

## LIMITATIONS

The application of TEKCEM 220 should only be carried out when the floor temperature is 5 - 30°C and the ambient relative humidity is below 75%. These conditions should be maintained during application and drying. Do not use in areas subject to permanent water immersion.

## HEALTH AND SAFETY

This product is not classified under the Chemicals Hazard Information and Packaging for Supply Regulations. A Material Safety Data Sheet relating to this product can be obtained from TEKCEM LTD. Please dispose of packaging and waste responsibly.

## STORAGE AND SHELF LIFE

Six months in unopened bags and stored under good, cool and dry conditions.

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## SETTING NEW LEVELS

The Screed Development Centre  
Unit 1 Power Park, Commercial Road  
Goldthorpe Industrial Estate

Full installation guide can be found on our website:

[WWW.TEKCEM.CO.UK](http://WWW.TEKCEM.CO.UK)

[WWW.TEKFLOOR.CO.UK](http://WWW.TEKFLOOR.CO.UK)

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