

# 025 Industrial

Preparation of a sound, firm substrate to provide a finished wearing surface to receive industrial coatings.

## OVERVIEW

**TEKCEM 025 INDUSTRIAL** is ideal for application over sound substrates including concrete and high strength sand / cement screeds. It can be applied at thicknesses from 3mm to 25mm in one application.

TEKCEM 025 INDUSTRIAL is suitable for use in heavy duty commercial or light-medium duty industrial situations such as warehousing, workshops etc where smooth, level, durable wearing surfaces are required. It is fast setting and provides a hard-wearing surface suitable for use without finishing or for overlayment with industrial coatings.

TEKCEM 025 INDUSTRIAL can receive light foot traffic after 3 hours, light forklift wheeled traffic after 24 hours and full traffic after 7 days.

## TECHNICAL DATA

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

## WARNING

The information provided in this datasheet corresponds to the best of our expert knowledge and experience. Whilst it 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.

## BENEFITS

- Can be applied from 3mm to 25mm in one pour.
- Single part, no additives required, just add water.
- Light foot traffic after 3 hours.
- Protein free.
- Shrinkage compensated.
- Pumpable.
- High durability floor topping, AR2 wear rating.

## COVERAGE

Applied thickness	Approx. coverage per 25kg unit
3mm	5m <sup>2</sup>
5mm	3m <sup>2</sup>
10mm	1.5m <sup>2</sup>
20mm	0.75m <sup>2</sup>
25mm	0.6m <sup>2</sup>

	
TEKFLOR LIMITED Unit 1 Power Park Commercial Road Goldthorpe Industrial Estate Rotherham S63 9BL	
Cementitious screed materials for use internally in buildings	
EN 13813 Class	CT-C30-F7
Reaction to fire	E
Compressive strength	C30
Flexural strength	F7
Release of corrosive substances	CT

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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 PREPERATION

Before starting, all substrates must be clean and dry. Remove all dust, dirt, laitance, oil, grease and other contaminants that may affect adhesion. Heavily contaminated floors may require special treatment, please seek specific technical advice. Sub-floors directly to earth must have a DPM.

### SUBSTRATES

TEKCEM 025 INDUSTRIAL is designed primarily for application to sound concrete and high strength sand/cement substrates with surface tensile strength of greater than or equal to 1.5 MPa.

#### Concrete/screed:

Remove any laitance from the surface mechanically and remove all dust and debris, ideally by vacuum.

If industrial coatings are to be applied to TEKCEM 025 INDUSTRIAL ensure that the substrate is sufficiently dry to accept the coating.

For impervious coatings the surface relative humidity should typically be 75% RH or below.

If TEKCEM 025 INDUSTRIAL is left unfinished, or if vapour permeable coatings are applied, a higher surface relative humidity may be tolerated, please seek specific technical advice.

It is necessary to prime concrete/screed surfaces to aid adhesion, maintain workability and prevent air bubbles rising to the surface.

For light duty applications and porous surfaces prime with TEKPRIME diluted 3 parts water to 1 part neat TEKPRIME.

Very porous substrates may require more than one coat. For heavier duty applications subject to frequent wheeled traffic or heavy loading and on dense, non-porous surfaces, substrate priming should be carried out using TEK BOND SF.

#### Power floated concrete:

Ensure the surface has been allowed 7 days to cure. Power floated concrete can leave a loose top layer and/or laitance once it has cured. Remove the loose top layer and any laitance from the surface mechanically and remove all dust and debris ideally by vacuum. Once all laitance and/or loose material have been removed, prime the surface with TEKPRIME diluted 3 parts water to 1 part neat TEKPRIME.

### MIXING BY HAND

Slowly mix 25kg of TEKCEM 025 INDUSTRIAL powder to 4.5 litres of water. Add the powder slowly to avoid clumping. Continue to mix until a uniform consistency is achieved. If a slightly more fluid mix is required more water can be added whilst mixing. Up to 5.0 litres maximum per 25kg unit can be added. Do not exceed 5.0 litres as this will adversely affect strength and surface finish and will extend drying and overlaying times. When the desired consistency is obtained 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 25mm. If greater thickness is required allow to dry between layers of not more than 25mm. TEKCEM 025 INDUSTRIAL will begin curing in 1 to 2 hours and should be "walkable" after approximately 3 hours at 20°C. These times may be decreased by higher temperatures or increased if colder. TEKCEM 025 INDUSTRIAL 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 finishes applicator to ensure that the residual moisture in the material is suitable.

### OVERLAYING

TEKCEM 025 Industrial must be suitably dry and of sufficient strength before overlaying with industrial coatings. It is the responsibility of the industrial coating applicator to ensure that the residual moisture and strength of the TEKCEM025 Industrial are compatible with the industrial coating. If no DPM is present, an epoxy resin based DPM can be incorporated directly below TEKCEM025 Industrial, allowing the rapid installation of industrial coating as soon as the TEKCEM 025 Industrial is dry.

### LIMITATIONS

The application of TEKCEM 025 Industrial 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.