



Model Specification for Installation of Tekcem 025 Industrial Screed onto Existing Tile Floor Using Tekcem TekGrip Bonding Primer (Bonded System – No Sealer, Max 20 mm Thickness)

1. Substrate Requirements

Substrate Type:

Existing ceramic, porcelain, or natural stone tile floor.

Minimum Compressive Strength (beneath tiles):

25 MPa (original base layer).

Condition:

- Tiles must be securely fixed, stable, and free from hollow spots or movement.
 - Surface must be clean, dry, and free from sealers, polish, grease, dust, or contamination.
 - Gloss or glazed finishes must be mechanically abraded to a matt texture.
 - Surface relative humidity (RH) must be $\leq 75\%$ before application of Tekcem TekGrip.
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2. Mechanical Surface Preparation

Method:

Mechanically abrade tile surfaces (e.g. via diamond grinding or STR machine) to remove surface coatings and create a textured mechanical key.

Cleaning:

Thoroughly vacuum the surface to remove all loose material.

Moisture Testing:

Test RH in accordance with **BS 8203**. Screeding must not proceed unless RH is $\leq 75\%$.

3. Bonding Agent – Tekcem TekGrip

Product:

Tekcem TekGrip – ready-to-use, fast-drying textured primer for absorbent and non-absorbent surfaces.

Mixing:

Shake container well before use to evenly distribute the internal aggregate.



Application:

- Apply a thin, even coat with a roller (brush in detailed areas).
- Avoid puddling or over-rolling.
- Allow to dry until **fully touch dry** (~20 minutes at 20°C).
- Do not allow contamination or foot traffic before screed installation.

Coverage:

Approx. 0.075–0.11 kg/m² depending on surface profile.

Once dry, TekGrip forms a green, textured, bonded surface ready for screeding.

4. Tekcem 025 Industrial Screed Specification

Product:

Tekcem 025 Industrial – single-part, high-strength, shrinkage-compensated screed.

Water Addition:

5.5 litres per 25 kg unit (max. 6 litres).

Performance:

- Working time: 20–30 minutes
- Light foot traffic: ~3 hours
- Light forklift traffic: ~24 hours
- Full traffic: ~7 days
- Compressive strength:
 - 15 MPa (1 day)
 - 25 MPa (7 days)
 - 30 MPa (28 days)
- Flexural strength:
 - 4 MPa (1 day)
 - 6 MPa (7 days)
 - 7 MPa (28 days)

Thickness Limitation (Bonded onto Tile):

- **Minimum:** 3 mm
 - **Maximum:** 20 mm
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5. Screed Application

Mixing:

Add powder to water gradually. Mix thoroughly using a low-speed drill or pump mixer until uniform. Let stand for 2 minutes, remix, and apply within 30 minutes.

Placement:

Apply directly onto the **fully dried Tekcem TekGrip primed tile surface**. Spread and level with a trowel and use a spiked roller to eliminate air.

Environmental Conditions:

- Substrate temperature: 5–30°C
 - Ambient RH: <75%
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6. Post-Installation Guidance

Drying Guidance:

Allow approx. **1 day per 10 mm** thickness in good drying conditions. Drying time increases in low temperatures or high humidity.

RH Testing:

Test residual moisture (as per BS 8203) before application of floor finishes to confirm readiness.

Access:

- Light foot traffic: ~3 hours
- Full traffic: ~7 days

Finishes:

No resin sealer is applied. Screed must be fully dry and within RH limits before final finishes are installed.

7. Disclaimer

The information provided in this specification is based on Tekcem's experience and current knowledge and is given in good faith to assist in specifying the installation of Tekcem products. It does not replace the need for appropriate design, professional judgement, and proper site evaluation. Tekcem Ltd accepts no liability for the improper use of its products or deviation from the recommended guidelines.

Site conditions, working methods, substrate types, and application techniques can all vary significantly and are beyond Tekcem's control. Therefore, it is the responsibility of the contractor and/or installer to ensure that the products are suitable for the specific conditions of each individual project.

This specification does not relieve the user of the responsibility to carry out appropriate checks, tests, and quality assurance procedures prior to and during application.

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