



Model Specification for Installation of Tekcem 212+ Leveller onto Calcium Sulphate / Anhydrite Base Using Tekprime CS (Bonded System)

1. Substrate Requirements

Substrate Type:

Calcium sulphate / anhydrite screeds, including heated screeds.

Minimum Compressive Strength:

25 MPa.

Condition:

- Structurally sound, dry, and free from laitance or surface contamination.
 - All cracks and defects repaired to achieve a continuous, stable surface.
 - Free of dust, oil, grease, curing agents, and any contaminants that may inhibit adhesion.
 - Surface relative humidity $\leq 85\%$ ($\leq 75\%$ RH for resilient floor coverings).
 - Flat and level; significant deviations corrected before priming.
 - Underfloor heating systems must be fully commissioned and switched off at least 48 hours before application.
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2. Mechanical Surface Preparation

Method:

Mechanically remove all laitance and weak surface material by grinding or vacuum-assisted shot-blasting to expose a clean, sound surface.

Cleaning:

Remove all debris and dust using an industrial vacuum.

Moisture Testing:

Confirm surface RH $\leq 85\%$. If $> 85\%$, delay works until screed reaches acceptable moisture levels or install an appropriate surface DPM.

3. Primer Application (Tekprime CS)

Primer:

Tekcem Tekprime CS – high-performance, red-pigmented primer designed for calcium sulphate/anhydrite substrates.

**Application:**

- Apply **one neat, undiluted coat** of Tekprime CS using a short-pile roller, brush, or squeegee, ensuring uniform coverage and penetration into the substrate.
- Avoid pooling or over-application.
- Work the primer well into the surface, particularly on porous screeds.
- Allow to **dry fully (approx. 60 minutes @ 20 °C)** before applying Tekcem 212+ Leveller Plus.
- Ensure the surface is dry and tack-free prior to levelling compound application.

Coverage:

Approx. 6.5 m² per litre (≈ 0.15 kg/m²).

Coverage will vary depending on substrate texture and porosity.

Conditions:

Apply only when substrate and ambient temperatures are between 5 °C and 30 °C (optimum 15–25 °C).

Maintain RH below 75 % during curing.

4. Tekcem 212+ Leveller Specification

Product:

Tekcem 212+ Leveller – fast-setting, cement-based, protein-free, shrinkage-compensated self-levelling compound.

Water Addition:

5.8 – 6.0 litres per 25 kg unit.

Do not exceed 6 litres to avoid extended drying and reduced strength.

Properties:

- Working time: 20 – 30 minutes @ 20 °C
- Light foot traffic: ~ 2 hours @ 20 °C
- Tile installation: after 3 hours @ 3 mm
- Resilient finishes: after 4 hours @ 3 mm
- Compressive strength (28 days): > 22 N/mm²
- Flexural strength (28 days): > 5 N/mm²

Thickness Guidelines (Bonded Systems):

Minimum 2 mm, maximum 12 mm in a single application.

For greater thicknesses, apply in multiple layers, re-priming with Tekprime CS between coats.



5. Screed Application

Mixing:

Add powder slowly to clean water while mixing with a slow-speed drill and paddle or suitable screed pump.

Mix until uniform and lump-free.

Allow to stand for 2 minutes, re-mix, and apply immediately.

Use each batch within 20–30 minutes of mixing.

Placement:

Pour or pump the material onto the primed substrate.

Spread using a steel trowel to the required thickness and finish with a spiked roller to remove trapped air.

Environmental Conditions:

Substrate temperature 5–30 °C; ambient RH < 75 %.

6. Post-Installation

Drying & Overlay:

- Light foot traffic after ~ 2 hours @ 20 °C
- Tiled finishes after 3 hours @ 3 mm
- Resilient finishes after 4 hours @ 3 mm
- Ensure residual moisture is within limits before applying floor finishes.

Drying Guidance:

At 3 mm thickness, typical drying time is 3–4 hours under good ventilation.

Cool or humid conditions will extend drying times.

Always verify surface RH prior to installing moisture-sensitive finishes.

Curing:

No curing membrane is required; avoid rapid drying from direct heat or draughts.

Access:

Light traffic after 2–3 hours; full traffic after 24 hours.

7. Limitations

- Do not apply below 5 °C or above 30 °C.
- Not suitable for permanent water immersion.
- Ensure substrate RH ≤ 85 % before application.
- Always use Tekprime CS for calcium sulphate substrates to prevent adverse chemical reactions with cementitious materials.



8. 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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