Model Specification for Installation of Tekcem 025+ Industrial Screed onto Calcium Sulphate/Gypsum Screed Using Tekcem Tekprime CS Primer (Bonded System – No Sealer, 3–25 mm Thickness)

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1. Substrate Requirements

Substrate Type:
Interior **calcium sulphate or anhydrite (gypsum-based) screed**, including heated screeds.

Condition:

- The screed must be **sound, fully cured**, and free from cracks, movement, or contamination.
- All laitance must be **mechanically removed** (e.g. by sanding or light grinding).
- The surface must be clean, dust-free, and dry.
- Relative humidity (RH) must be **≤85%** before priming.
- For resilient floor finishes, RH must be **≤75%** before proceeding with coverings.
- New heated screeds must be fully commissioned and switched off at least 48 hours before priming.

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2. Mechanical Surface Preparation

Method:
Mechanically sand or grind to remove laitance and open the surface. Use vacuum extraction to remove dust.

Cleaning:
Vacuum thoroughly to remove all debris and fines before applying primer.

Moisture Testing:
Check RH in accordance with **BS 8203** or **BS 5325**. RH must be ≤85% prior to applying Tekcem Tekprime CS.

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3. Primer – Tekcem Tekprime CS

Product:
Tekcem Tekprime CS – red-pigmented, ready-to-use primer designed specifically for **calcium sulphate and gypsum-based screeds**.

Application:

- **Do not dilute.** Apply one neat coat using a roller, brush, or squeegee.
- Work into the surface to ensure full coverage and even penetration.
- Avoid pooling. Apply in a single direction for consistent finish.
- Allow to dry fully before applying screed – typically 60 minutes at 20 °C (longer in cool/humid conditions).

Coverage:
Approx. 6.5 m² per litre (0.15 kg/m² depending on porosity).

Tekprime CS provides a **barrier between calcium sulphate and cement-based screeds**, preventing chemical incompatibility and enhancing adhesion.

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4. Tekcem 025+ Industrial Screed Specification

Product:
Tekcem 025+ Industrial – single-part, pumpable, shrinkage-compensated industrial screed for bonded applications.

Water Addition:
5.5 litres per 25 kg unit (maximum 6 litres). Do not exceed.

Performance Characteristics:

- 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)

Application Thickness:

- **Minimum:** 3 mm
- **Maximum:** 25 mm (in a single application)
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5. Screed Application

Mixing:
Add powder to clean water slowly while mixing with a low-speed drill or screed pump. Mix to a lump-free, uniform consistency. Let stand for 2 minutes, remix, and apply within 30 minutes.

Placement:
Pour or pump directly over the **dry Tekprime CS primed surface**. Spread to the required thickness using a trowel and finish with a spiked roller to eliminate trapped air.

Environmental Conditions:

- Substrate temperature: 5–30 °C
- Ambient RH: <75%

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6. Post-Installation Guidance

Drying Time:
Allow **1 day per 10 mm** of screed thickness in good drying conditions.
Cold, damp or poorly ventilated environments will significantly extend drying.

RH Testing:
Test RH before applying floor coverings. For resilient finishes, ensure RH ≤75% in accordance with **BS 8203**.

Access:

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

Finishes:
No surface sealer is applied. Ensure the screed is dry, clean and dust-free before applying final floor finishes.

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.