



Model Specification for Installation of Tekcem 212+ Leveller onto Asphalt / Bitumen Residue Substrate Using Tekcem TekGrip (Bonded System)

1. Substrate Requirements

Substrate Type:

Asphalt, bitumen residue, or other non-porous bituminous surfaces suitable for bonded levelling applications.

Condition:

- Structurally sound, stable, and firmly bonded to the base structure.
 - Free from movement, cracking, or excessive flex.
 - All soft, degraded, or tar-contaminated layers must be mechanically removed.
 - Surfaces must be free from oil, grease, dust, laitance, and contaminants.
 - Dry at time of priming and application.
 - Surface temperature $\geq 5^{\circ}\text{C}$ and $\geq 2.5^{\circ}\text{C}$ above dew point during application.
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2. Mechanical Surface Preparation

Method:

Mechanically clean and de-glaze the surface using a suitable method such as grinding, vacuum-assisted shot blasting, or abrading to expose a sound, textured surface.

Cleaning:

Remove all dust and debris using industrial vacuum equipment.

Moisture Testing:

Ensure the surface is dry and free of trapped moisture or condensation. If residual tack or contamination remains, remove mechanically until a clean, dry surface is achieved.

3. Primer Application (Tekcem TekGrip)

Primer:

Tekcem TekGrip – ready-to-use, fast-drying, textured bonding primer for absorbent and non-absorbent substrates including asphalt and bituminous residues.

Application Guidance:

- Shake container thoroughly before use to disperse the internal aggregate.
- Apply **one uniform coat** of Tekcem TekGrip using a roller or brush, ensuring complete



coverage.

- Avoid pooling; work the primer into the surface to promote adhesion.
- Do not dilute.
- Allow to **dry fully (approx. 20 minutes at 20 °C / 65 % RH)** before applying Tekcem 212+.
- Ensure primer is touch-dry and fully textured before screeding.

Coverage:

Approx. 0.075 – 0.11 kg/m² (typically 9 – 13 m² per litre depending on substrate porosity and texture).

Conditions:

Apply between +5 °C and +30 °C under well-ventilated, dry conditions. Avoid rising humidity or condensation during curing.

4. Tekcem 212+ Leveller Specification

Product:

Tekcem 212+ Leveller – a 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 prevent strength loss and extended drying.

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 thicker applications, apply in multiple layers, re-priming with Tekcem TekGrip between coats.

5. Screed Application

Mixing:

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

Mix until uniform and lump-free.



Allow to stand 2 minutes, re-mix, and apply immediately.
Use within 30 minutes of mixing.

Placement:

Pour or pump onto the primed substrate.

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

Environmental Conditions:

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

6. Post-Installation

Drying & Overlay:

- Light foot traffic: ~ 2 hours @ 20 °C
- Tile finishes: after 3 hours @ 3 mm
- Resilient finishes: after 4 hours @ 3 mm
- Ensure residual moisture is within acceptable limits before installing final coverings.

Drying Guidance:

Typical drying time 3–4 hours at 3 mm under normal site conditions.

Cooler temperatures or high humidity will prolong drying.

Curing:

No curing membrane is required; protect from rapid drying and strong 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 for use in continuously immersed or permanently damp areas.
- Ensure substrate is clean, dry, and sound prior to application.
- Use only Tekcem TekGrip primer on asphalt or bitumen surfaces.
- Do not apply over soft, oxidised, or unstable asphalt.



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.

Doc Ref - Tekcem 212+_Tekgrip_asphalt_bitumen_May 2025 _R1