



Model Specification for Installation of Tekcem Tekscreeed Unbonded Over Concrete Using 1200-Gauge DPM (Including Perimeter Edge Strip and Taping)

1. Substrate Requirements

Substrate Type:

Concrete slab.

Condition:

- Must be structurally sound, clean, and free from dust, laitance, oil, grease, curing agents, or contaminants.
 - Should be level and free from sharp protrusions or voids.
 - If moisture is present, a suitable DPM must be used beneath the screed system.
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2. Installation of Separating Membrane (1200-Gauge DPM)

Membrane Type:

1200-gauge polyethylene damp proof membrane (DPM), suitable for use beneath cementitious screeds.

Installation Method:

- Lay the DPM loosely over the concrete substrate.
- Overlap all joints by a minimum of 150 mm.
- Apply double-sided tape beneath overlaps to bond sheets.
- Apply single-sided tape over all joints to fully seal.
- Turn up membrane at perimeter walls and around penetrations to a height above the finished screed.
- Ensure membrane is tight to the substrate, wrinkle-free, and without air pockets.

Manufacturer's Guidance:

Installation must comply with the DPM manufacturer's guidance on overlaps, sealing, and detailing.

3. Installation of Perimeter Edge Strip

Material:

Closed-cell polyethylene foam or other approved resilient material.

**Dimensions:**

- Thickness: 5–10 mm
- Height: At least equal to screed depth (minimum 35 mm or 40 mm)

Placement:

Install continuously around all internal and external walls, columns, door frames, and other fixed elements. Must allow for screed expansion and isolate from rigid structures.

4. Tekcem Tekscreeed Specification**Mix Design (per m³):**

- 400 kg Ordinary Portland Cement (CEM I 42.5N)
- 1600 kg 0–4 mm screeding sand (BS EN 13139 fines category 1)
- Tekcem Tekscreeed admixture (dosage as per current TDS)
- Water: 50–60 litres (adjusted for aggregate moisture)
- Optional: 1 kg polypropylene fibres (recommended for shrinkage and thermal control)

Consistency:

Semi-dry – forms a cohesive ball when squeezed with no free water.

Working Life:

45–60 minutes after mixing.

5. Screed Application**Placement:**

Apply Tekscreeed directly over the 1200-gauge DPM.

Method:

Compact by tamping, then level and finish using a plastic float or steel trowel.

Screed Thickness:

- Minimum 35 mm for standard applications
- Minimum 40 mm for heavy-duty or high-traffic areas

Compaction:

Full and consistent compaction throughout is essential to eliminate voids.



Environmental Conditions:

- Substrate and ambient temperature: 5–30 °C
 - Relative humidity: <75%
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6. Post-Installation

Protection:

Protect from rapid drying, frost, direct sunlight, draughts, and heavy moisture exposure for at least 24 hours. Use temporary covers if necessary.

Access:

- Light foot traffic: after 12–24 hours
- Full site traffic: after ~72 hours, depending on thickness and site conditions

Floor Finishes:

Only apply floor coverings when RH ≤75% and screed is fully cured.

7. Limitations

- The DPM must be intact and free from punctures.
- Overlaps must be properly bonded and sealed with both double- and single-sided tape.
- Screed must be fully isolated at perimeters with edge strip.
- Minimum thicknesses of 35 mm or 40 mm must be maintained.
- Movement joints in the substrate should be mirrored in the screed layer.
- Avoid installation if temperatures are below 5 °C

8. Disclaimer

- This specification is based on Tekcem's expertise and current product knowledge. It is intended as a guide for best practice but does not replace appropriate professional advice, detailed design, or site-specific assessment. Tekcem Ltd accepts no liability for misuse or deviation from the guidance provided.
- Installers must ensure that the specification is suitable for their particular application and that appropriate quality control and testing is conducted throughout the process.

Tekcem Tekscreeed_unbonded_1200 gauge_concrete_no UFH_May2025_R1