



Model Specification for Installation of Tekcem Tekscreeed as a Floating Screed Over EPS Insulation Using 500-Gauge Separating Membrane

1. Substrate Requirements

Substrate Type:

EPS (expanded polystyrene) rigid insulation.

Insulation Specification:

- Minimum compressive strength: 100 kPa.
- Must be approved for use beneath cementitious screeds.
- Boards to be installed in line with manufacturer's guidance.

Installation Requirements:

- Boards laid flat and level, tightly butted, and fully supported.
 - Correct any voids or unevenness before installing the screed.
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2. Installation of Separating Membrane

Membrane Type:

500-gauge polyethylene sheet (minimum) to act as a separating layer.

Installation Method:

- Laid loose over the EPS without punctures or tears.
- Overlap joints by at least 150 mm and seal using single-sided tape.
- Turn membrane up all walls, columns, and fixed penetrations to a height exceeding the final screed thickness.

Manufacturer's Guidance:

Ensure membrane installation complies with the membrane manufacturer's compatibility advice for EPS.

3. Installation of Perimeter Edge Strip

Material:

Closed-cell polyethylene foam or equivalent

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**Dimensions:**

- Thickness: 5–10 mm
- Height: $\geq$ finished screed thickness (minimum 40 mm or 35 mm for domestic/light traffic)

Placement:

Install continuously along all perimeter walls, columns, and fixed elements. Ensure no gaps in the isolation barrier.

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

- 400 kg Ordinary Portland Cement (CEM I 42.5N)
- 1600 kg 0–4 mm screeding sand (to BS EN 13139)
- Tekcem Tekscreed admixture – dosage in line with Tekcem Tekscreed TDS
- Water: Adjust to achieve a semi-dry consistency (typically 50–60 L)
- Optional: 1 kg polypropylene fibres

Consistency:

Semi-dry — mix should form a firm ball when squeezed without bleeding water.

Working Life:

Approximately 45–60 minutes from mixing.

5. Screed Application**Placement:**

Install Tekcem Tekscreed directly onto the separating membrane above the EPS.

Method:

Spread, tamp, and compact using screed bars and appropriate tools.
Finish with plastic float or steel trowel as required.

Screed Thickness:

- Minimum: 40 mm for standard or commercial use
- Minimum: 35 mm for domestic/light duty areas

Compaction:

Ensure thorough compaction across the full depth and area, especially at junctions.



Environmental Conditions:

- Application temperature: 5°C–30°C
 - Ambient relative humidity: <75%
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6. Post-Installation

Protection:

Protect from rapid drying, direct sun, draughts, and frost for at least 24 hours.
Use coverings or damp curing methods as required.

Site Access:

- Light foot traffic: 24 hours
- Full access: 72 hours (site and thickness dependent)

Floor Finishes:

Do not install floor finishes until residual moisture is verified to be within acceptable limits ($\leq 75\%$ RH or per finish manufacturer guidance).

7. Limitations

- The membrane must fully separate the screed from insulation and substrate below.
 - Use single-sided tape for lapping and sealing 500-gauge membrane.
 - Maintain minimum screed thickness: 40 mm (commercial), 35 mm (domestic).
 - Do not allow screed to bridge to walls or substrate — ensure full isolation.
 - Install movement joints where required (e.g. thresholds or large bay areas).
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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.