



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

1. Substrate Requirements

Substrate Type:

Concrete slab.

Condition:

- Substrate must be clean, sound, and free from dust, laitance, oil, grease, curing agents, or any contaminants.
 - Must be level enough to receive a uniform screed thickness without hollows or abrupt changes in level.
 - Should be dry where possible; otherwise, a 1200-gauge DPM acts as the separating and moisture control layer.
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2. Installation of Separating Membrane (1200-Gauge DPM)

Membrane Type:

1200-gauge polyethylene damp proof membrane, suitable for unbonded cementitious screeds.

Installation Method:

- Lay the DPM loosely over the prepared substrate.
- Overlap all joints by ≥ 150 mm.
- Apply double-sided tape beneath each overlap to bond sheets.
- Seal the top of the joints with single-sided tape for total encapsulation.
- Turn up membrane at all perimeter walls, columns, and service penetrations to a height above finished screed level.
- Membrane should lie flat with no wrinkles or trapped air.

Manufacturer's Guidance:

Follow the DPM manufacturer's instructions for all detailing, bonding, and sealing practices.



3. Installation of Perimeter Edge Strip

Material:

Closed-cell polyethylene foam or similar approved perimeter insulation strip.

Dimensions:

- Thickness: typically 5–10 mm
- Height: equal to or greater than screed depth (min. 35 mm or 40 mm for heavy-duty use)

Placement:

- Install continuously around perimeter walls, columns, door thresholds, and all fixed vertical elements.
 - Ensure continuity without gaps to permit thermal and structural movement.
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4. Tekcem RapidoWITT Screed Specification

Mix Design (per m³):

- 265 kg Tekcem RapidoWITT
- 1850 kg 0–4 mm Screeding Sand (to BS EN 13139)
- 900 g PP fibres
- Approx. 85 litres water (adjust for moisture content of sand)

Consistency:

- Semi-dry: should form a firm ball when squeezed, with no water bleed.

Working Life:

- 45–60 minutes after mixing (temperature and humidity dependent)
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5. Screed Application

Placement:

- Lay Tekcem RapidoWITT screed directly over the 1200-gauge DPM.
- Compact thoroughly using tamping techniques to eliminate voids.
- Finish with plastic float or steel trowel as required.

**Thickness:**

- Standard: 35 mm minimum
- Heavy-duty: 40 mm minimum

Compaction:

- Full depth compaction is critical for structural performance and finish durability.

Environmental Conditions:

- Temperature range: 5°C to 30°C
 - Ambient RH: <75% during installation
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6. Post-Installation**Protection:**

- Shield freshly placed screed from draughts, direct sunlight, frost, and rapid drying for at least 24 hours.
- Temporary coverings may be used to aid curing.

Access:

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

Floor Finishes:

- Apply only once residual moisture ≤ 2 CM% or $\leq 75\%$ RH is achieved, in line with flooring manufacturer recommendations.
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7. Limitations

- Ensure the DPM fully covers and seals the concrete surface without punctures or damage.
 - All laps must be taped using both double- and single-sided tape as specified.
 - Edge strip must be installed before screeding.
 - Maintain specified minimum thickness (≥ 35 mm or ≥ 40 mm depending on use).
 - Screed must be isolated from all vertical elements.
 - Do not install screed below 5°C.
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8. Disclaimer

This specification is based on Tekcem Ltd's current product knowledge and installation guidance. It is offered in good faith but does not replace the need for project-specific design, testing, and professional judgement. Tekcem Ltd accepts no liability for misuse or misapplication of its products.

It is the responsibility of the contractor or installer to confirm that Tekcem RapidoWITT is suitable for the specific project conditions and to conduct proper quality assurance throughout the installation.

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