Why insulation matters before you diagnose damp

Swipe to understand the critical first step →

Cold surfaces drive condensation

Insulation gaps

Missing or poorly installed insulation creates cold spots. Surface temperatures drop below dew point. Moisture condenses immediately.

Thermal bridging

Structural elements bypass insulation entirely. Heat escapes through concrete, steel, or masonry. Cold surfaces form at predictable points.

Condensation formation

Warm humid air meets cold walls. Water vapour converts to liquid. Persistent dampness appears — but it's not penetrating damp.

Why mould clusters in corners: External walls, window reveals, and room corners suffer worst thermal performance. Cold air stagnates. Surface temperatures plummet. Mould establishes quickly in these vulnerable zones.

Cold walls ≠ damp walls

Cold wall indicators

- Condensation appears mornings
- Surface temperature <12°C
- Moisture meter reads surface only
- Pattern follows thermal bridges
- Improves with heating/ventilation

Genuine damp indicators

- Persistent through seasons
- Hygroscopic salts present
- Deep moisture in substrate
- Tide marks or efflorescence
- External defect correlation

BS 5250 alignment: Assess thermal performance first. Measure surface temperatures. Rule out condensation before specifying remedial damp treatments. Insulation failures mimic penetrating damp — but require completely different solutions.