

Thermal Bridges

Architecture

Where the insulation line breaks, what it costs, and how to find the breaks on a drawing.

Trace the insulation line around the whole section without lifting the pen.

Where they happen

Balcony slabs passing through the wall

Window and door reveals, heads and cills

Wall to roof and wall to floor junctions

Steel and concrete columns crossing the line

Party wall and separating floor junctions

What they cost

Extra heat loss, often 10 to 30 per cent

A cold internal surface at the junction

Condensation, then mould, on that surface

Occupant complaints about a cold corner

Educational reference. If you cannot draw the insulation line as one unbroken loop, the detail is not resolved yet.