

Installation

For new or replacement suspended floors, specify joist spacing to accommodate the batt widths: 400,600,800 or 1000mm (375,575, 2 x 375, 375+575mm batt widths). Pavaflex can be sourced in 375 and 575mm wide batts.

We recommend using a vapour control membrane called Pavatex ADB Membrane lapped over the joists, for retaining the Pavaflex rather than using netting. Netting or chicken wire does not prevent convective thermal bypass of the insulation. To ensure a good fill between joists, we recommend fixing battens at intervals along the lower edge of the joists to ensure the membrane doesn't sag /or is pulled too taut. Also, use some offcuts of membrane as a capillary break between the insulation and the walls between the joist ends, this is particularly important if the insulation is touching the wall below DPC. For new joists in walls without DPCs or in otherwise damp walls, joists should be installed in DPM pockets, or on hangers.

Ventilation

Ventilation of underfloor voids is essential for ensuring integrity of the timbers. Do not block airbricks; extend into underfloor void with periscope ducts if existing airbricks are between joists (will be within insulation layer).

Periscope ducts may be necessary for airbricks to divert ventilation under the joists. Swan neck periscopes are ideal as they reduce drag. The ducting needs to be well sealed onto the airbrick. You should take the opportunity to ensure you still have cross-ventilation in the void (often blocked up by extensions). Take care not to block cross ventilation under separating internal walls.

Airtightness Pavatex DB 3.5 Membrane OR OSB / Plywood taped at joints and perimeter

With all this ventilation it is important to address airtightness at floor level. With access from above only, an airtightness (not VCL) layer should be included on top of the joists (a membrane if there is no possibility of raising the floor level, or taped OSB/T&G chipboard which is simpler to install, but raises the floor level) The airtightness layer needs to be taped where boards meet (or membrane is lapped), as well as around the perimeter, and around any penetrations for services (radiator pipes). It is possible to achieve airtightness with the membrane that retains the insulation, but the practicalities of taping where it laps over the joists, mean it is difficult and labour intensive to achieve, hence the airtightness layer at floor level. If access is possible from below, then airtightness can be achieved with one membrane below the joists, taped around the perimeter.

Periscope ducts and airbrick extensions:

Glidevale, Manthorpe or Rytons. Fix to the internal surface of the wall, with the lower end supported on a block/bricks, mastic or tape around the junction between it and the existing airbrick if in a good state, otherwise muck it in with some lime render or sand/cement if there is just a gaping hole internally. Horizontal extensions are available, if there is just an external grill and no airbrick through the wall.

Intermediate floors

Please see NBT's Acoustic floor detail drawing for recommended build-up for intermediate timber floors.