

DATA SHEET

FLANKING

MINIMISING FLANKING SOUND TRANSMISSION

Flanking sound is transmitted indirectly via junctions between building elements and paths such as windows, doors, external walls and internal corridors, floors and ceilings. It is defined as sound from a source room but not via a common building element.

It is imperative that flanking transmission is considered at the design stage and that the construction detailing specified will eliminate or at least minimise any downgrading of the acoustic performance.

Poor flanking design and installation will invariably lead to failure in performance.

The importance of good detailing

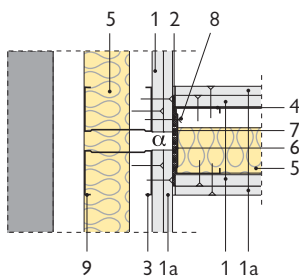
The Part E recognises that the practicalities of construction will mean that acoustic performances measured in the laboratory will be more difficult to achieve on site.

To assist the designer, good practice detailing at key junctions is provided throughout the new Approved Document E. Solutions are presented showing the essential gap filling, joint sealing, fire-stopping, cavity closing and continuity of installation to prevent sound transmission through critical junctions. XPR systems offer simple solutions to flanking issues.

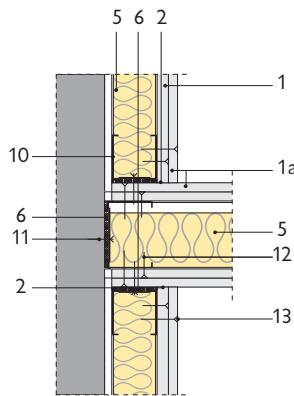
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These are just a few examples of XPR Flanking Details

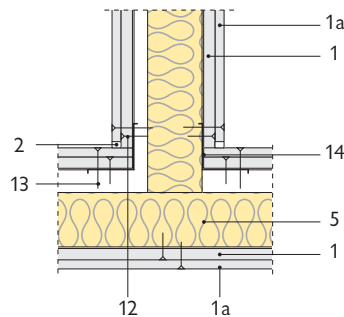
Detail Drawings



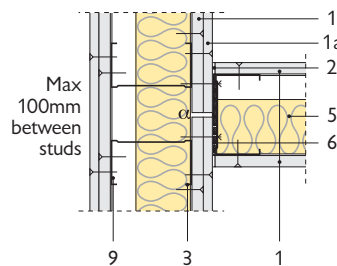
External Wall Flanking Junction Accommodating a Movement Joint



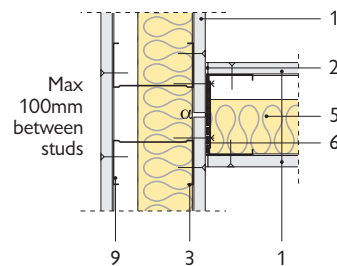
External Wall Flanking Junction



Open T-Junction



T-Junction



T-Junction

- 1 FERMACELL Gypsum-Fibreboard – 12.5mm
- 1a FERMACELL Gypsum-Fibreboard – 10mm
- 2 FERMACELL Jointstick or Jointfiller
- 3 PROTEKTOR DIN Stud - min. 75mm wide, 0.6mm gauge, min. 50mm flange
- 4 PROTEKTOR DIN Header & Footer Track to suit - 0.6mm gauge min.
- 5 60mm ROCKWOOL Flexi insulation
- 6 PROTEKTOR Acoustic Felt separation strip
- 7 Slip Joint to allow for movement
- 8 Only fix to one side of movement joint to ensure that the movement joint is not locked. Keep fixings 15mm from the edge of the FERMACELL.
- 9 Steel Studs must be left floating in the tracks.
- 10 PROTEKTOR DIN Stud 50mm x 50mm x 0.6 gauge
- 11 Wall fixing
- 12 FERMACELL Screws, 3.9 x 30mm
- 13 FERMACELL Screws, 3.9 x 45mm
- 14 PROTEKTOR inner corner profile
- α = Physical break of the board to reduce flanking sound transmission