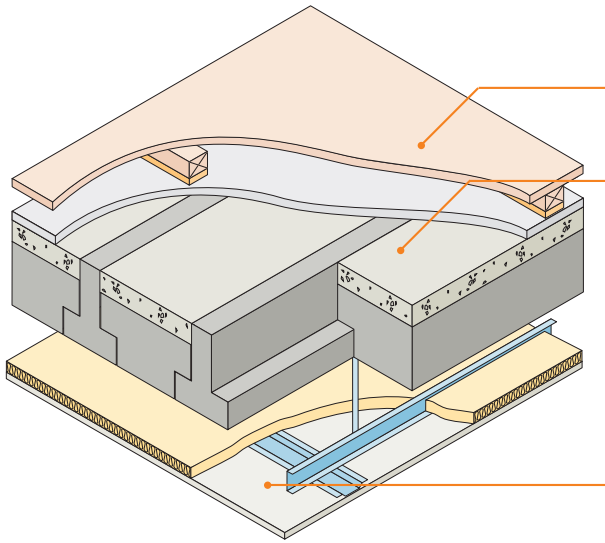


- Beam and block floor with precast or in-situ edge beams
- Using floating floor treatments
- For use with dense aggregate block flanking walls only

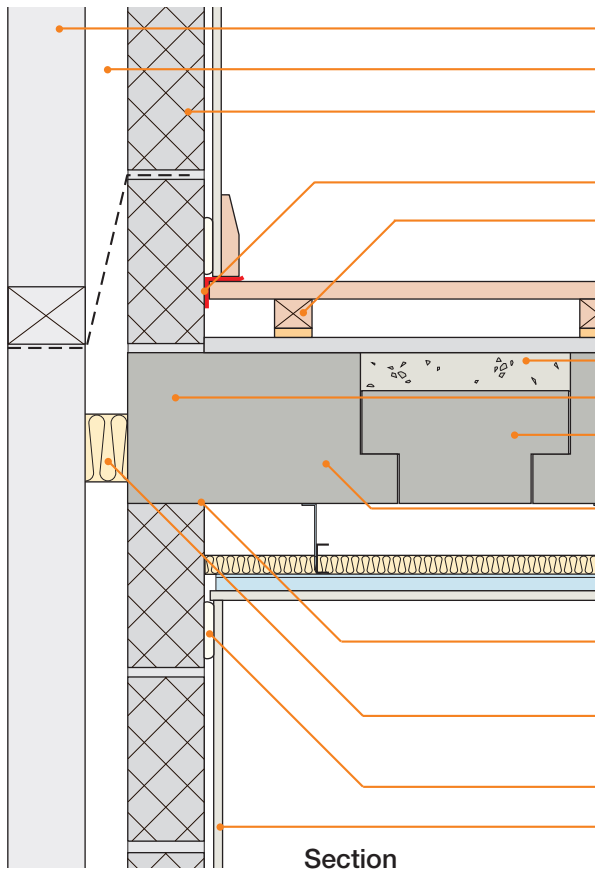


Floating floor	See section 9 for suitable floating floor treatment
Structural floor	beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m ² combined mass per unit area – see section 7 for cut rows
Ceiling	Min 300mm from top of beam to ceiling board – see section 8

DO

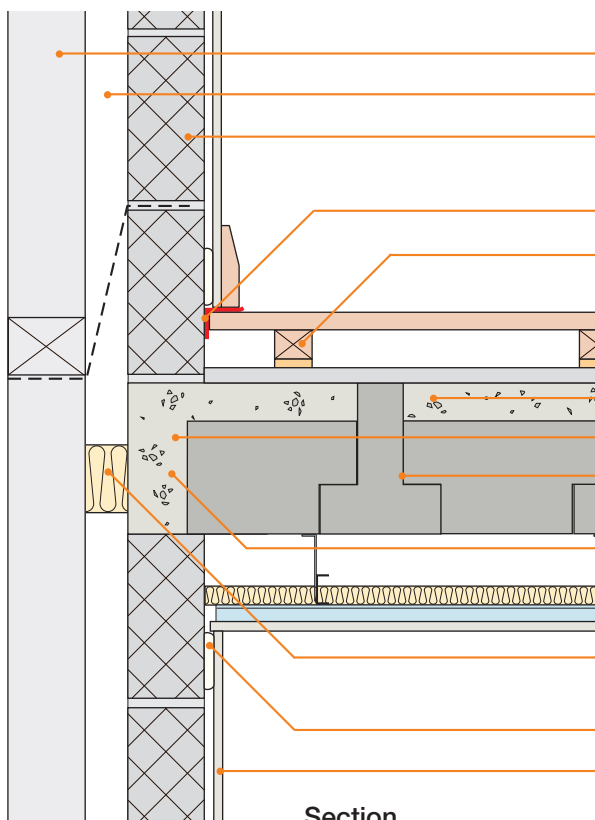
- Butt floor blocks tightly together
- Cover floor blocks with min 50mm concrete topping
- Ensure that concrete does not enter the cavity and bridge the two leaves of supporting wall blockwork - it is acceptable to use proprietary cavity stops to provide a shutter
- Ensure precast or in-situ edge beams are correctly installed
- Ensure in-situ concrete downstand is at least 75mm wide
- Ensure levelling screed is applied before using FFT1 or FFT3 (resilient batten) floating floor treatments (see section 9)
- Ensure quilt is inserted within FFT2 (cradle/saddle) floating floor treatment (see section 9)
- Ensure floating floor treatment is suitable and install in accordance with manufacturer's instructions
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure depth from top of beams to ceiling is min 300mm
- Ensure 25mm mineral fibre quilt is installed over whole ceiling board areas
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of external (flanking) walls

1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



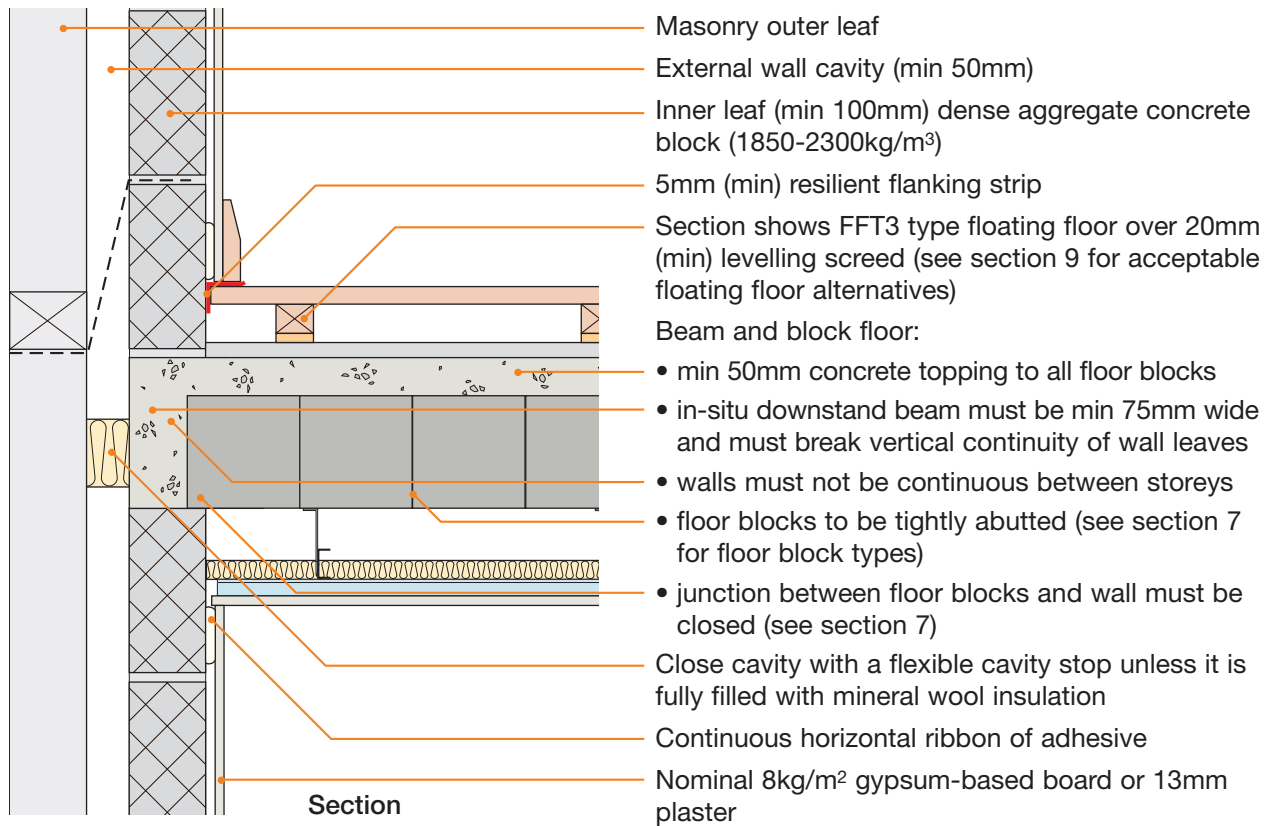
- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- 5mm (min) resilient flanking strip
- Section shows FFT3 type floating floor over 20mm (min) levelling screed (see section 9 for acceptable floating floor alternatives)
- Beam and block floor:
 - min 50mm concrete topping to all floor blocks
 - walls must not be continuous between storeys
 - floor blocks to be tightly abutted (see section 7 for floor block types)
 - precast concrete edge beam min 300mm wide must break vertical continuity of wall leaves (NB: edge beam shape may vary between manufacturers)
 - all voids between edge beam and inner leaf blockwork filled with mortar or flexible sealant
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster

2. External (flanking) wall junction – beams parallel with wall (using in-situ concrete downstand)

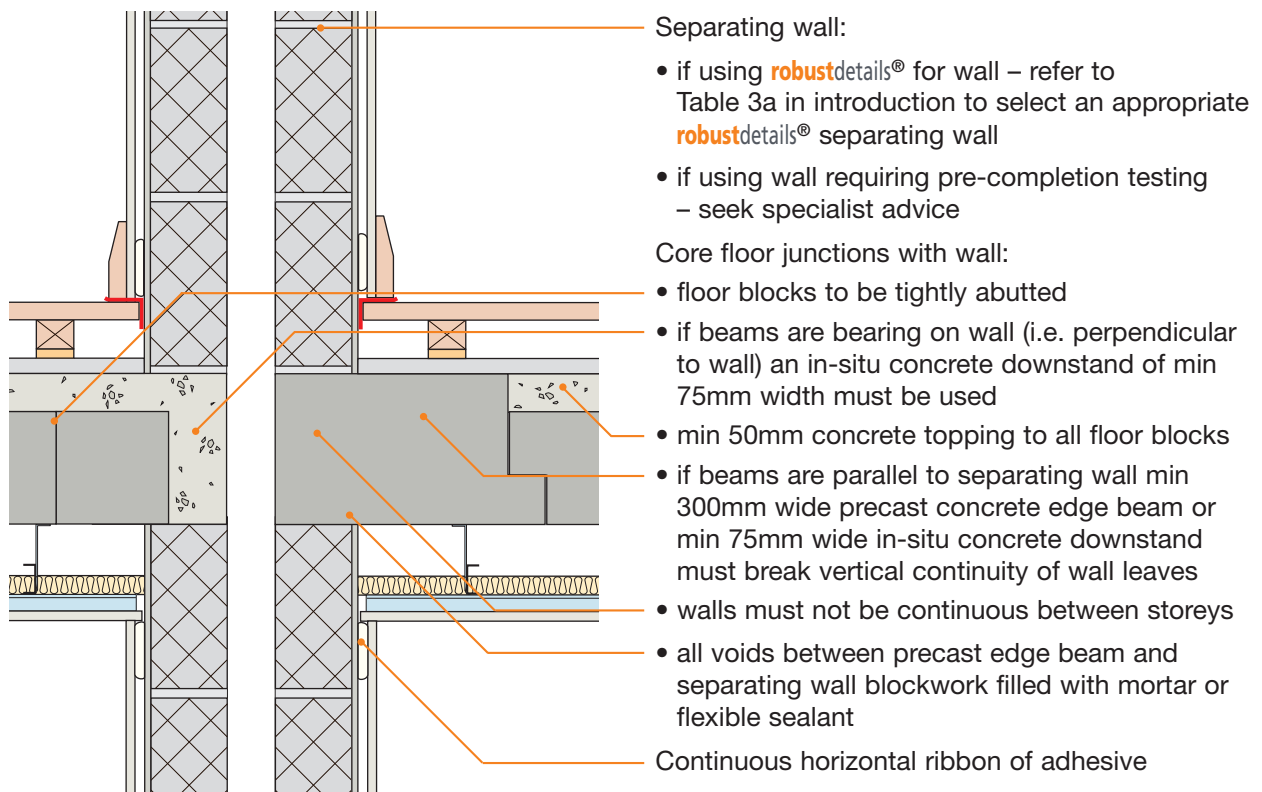


- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- 5mm (min) resilient flanking strip
- Section shows FFT3 type floating floor over 20mm (min) levelling screed (see section 9 for acceptable floating floor alternatives)
- Beam and block floor:
 - min 50mm concrete topping to all floor blocks
 - walls must not be continuous between storeys
 - floor blocks to be tightly abutted (see section 7 for floor block types)
 - in-situ concrete downstand must be min 75mm wide and must break vertical continuity of wall leaves
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster

3. External (flanking) wall junction – beams bearing on wall

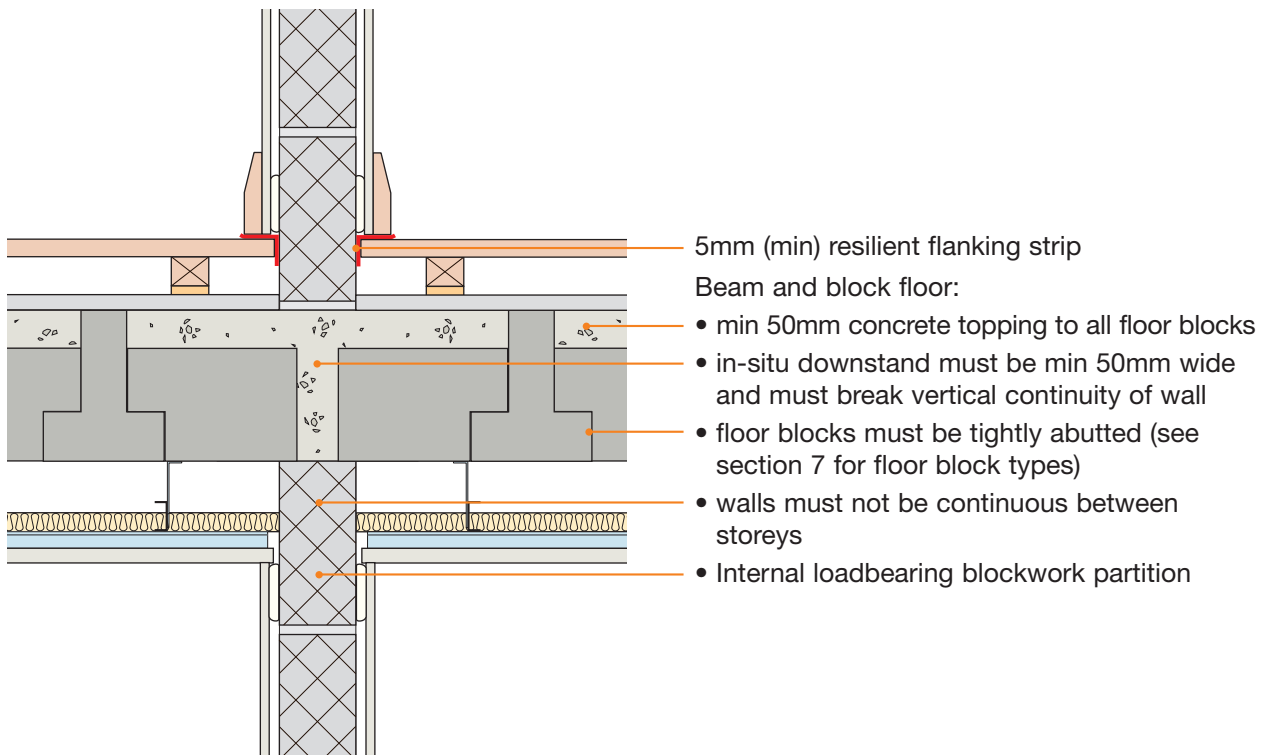


4. Separating wall junction

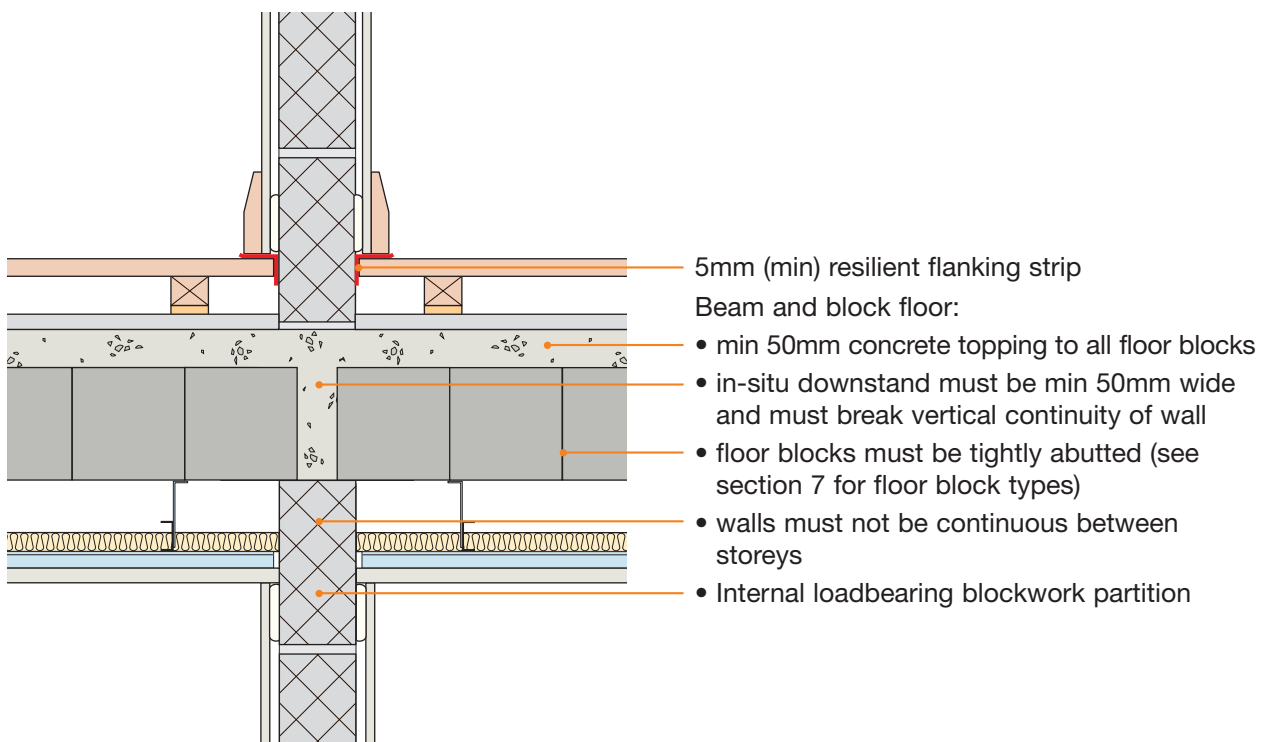


Sketch shows FFT3 type floating floor over 20mm (min) levelling screed and E-WM-3 separating wall

5. Loadbearing internal wall – floor beams parallel to wall



6. Loadbearing internal wall – floor beams bearing onto wall



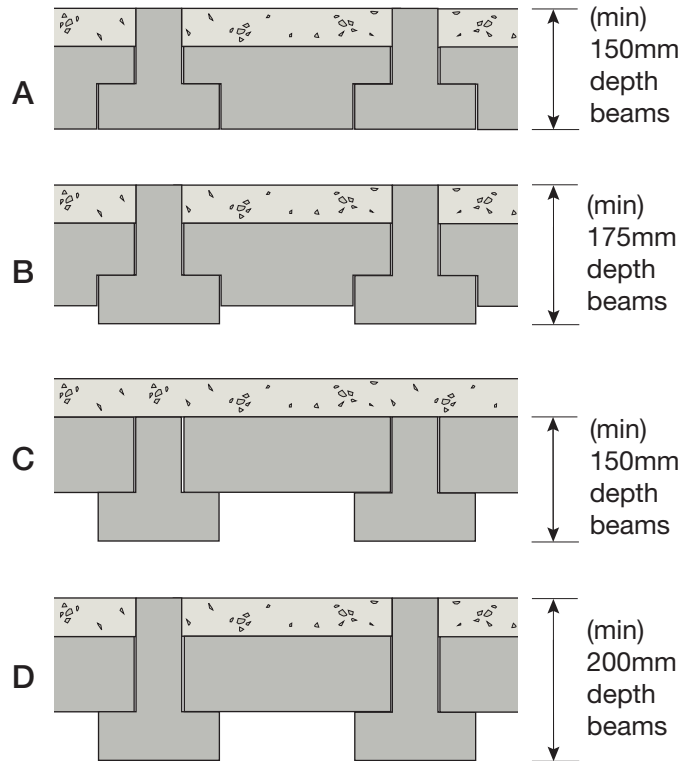
7. Floor block types

Beam/block variations

To minimise the overall floor depth, rebated or 'T' shape dense blocks may be used.

Alternatively, as indicated in 'C' and 'D' below, plain dense blocks may be used.

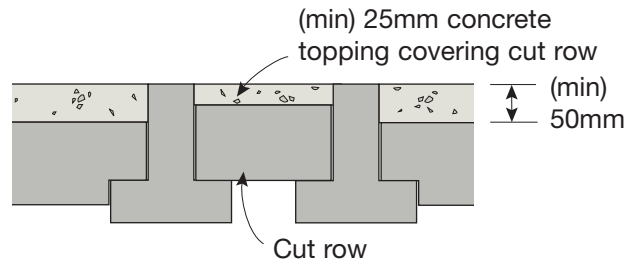
In all cases, the C20 topping must be applied such that it provides a minimum 50mm cover to the blocks.



Cut rows

No more than one cut row of floor blocks may be used per room floor with minimum 25mm concrete topping.

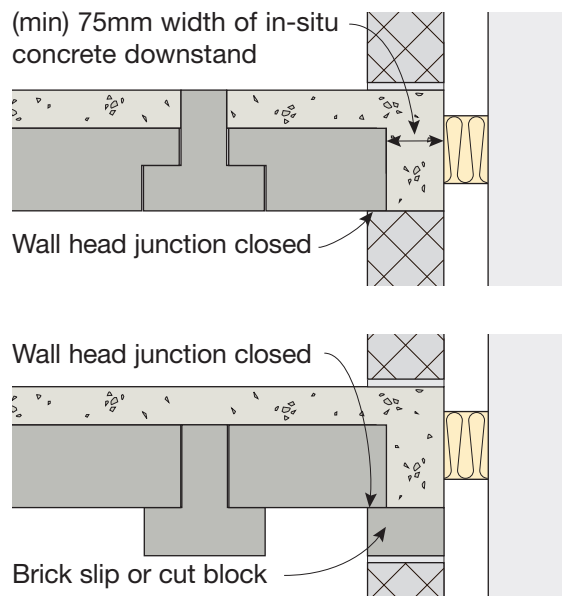
Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.



Wall head and floor block junctions

No gaps should remain where the last floor block junctions at the wall head.

Where the floor block does not close this gap, brick slips or cut blocks may be used.



8. Ceiling treatments for E-FC-7

All ceiling treatments must be installed in accordance with the manufacturer's instructions. All ceiling joints must be sealed with tape or caulked with sealant.

The minimum depth between top of beams and ceiling board **must not be less** than 300mm.

Note: the sound insulation performance of all ceiling treatments is increased if:

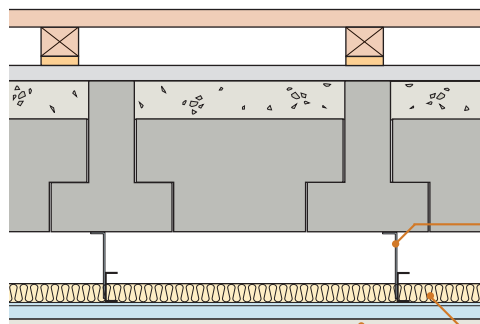
- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

Particular attention should also be paid to Building Regulations Part B – Fire Safety.



Floor depth requirements and ceiling treatments

All E-FC-7 floors must have a minimum depth of 300mm **between top of beam and ceiling board**

Only suspended metal frame ceilings systems may be used

Min 25mm mineral fibre quilt (min 10kg/m³) in the ceiling void to cover whole ceiling board area

One layer of nominal 10kg/m² gypsum-based board

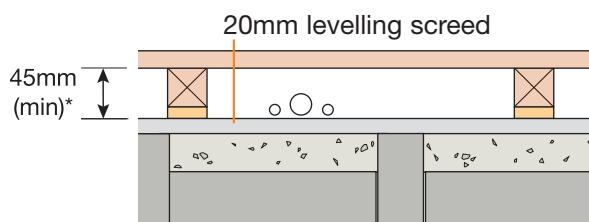
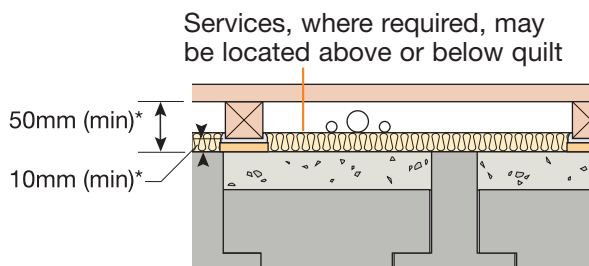
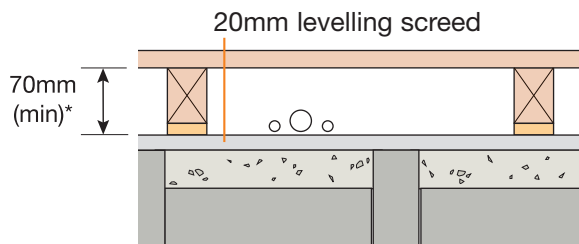
9. Floating floor treatments for E-FC-7

All floating floor treatments :

- Must achieve a minimum laboratory performance of $rd\Delta L_w=17dB$ - see Appendix D.
- Must be installed in accordance with the manufacturer's instructions.
- Require 5mm (min) resilient flanking strips around the perimeter of the flooring board to isolate floor from walls and skirting.

d) For further guidance on floating floor treatments and flanking strips, please refer to Appendix A.

* Note - void dimensions indicated are when floor is loaded to 25 kg/m².



FFT1 – Resilient composite deep batten system with 20mm levelling screed

- 18mm (min) t&g flooring board
- resilient layer must be continuous and pre-bonded to batten
- resilient composite deep battens
- ensure any services do not bridge the resilient layer
- battens may have the resilient layer at the top or the bottom

FFT2 – Resilient cradle and batten system with 25mm mineral fibre quilt (min 10kg/m³)

- 18mm (min) t&g flooring board
- cradle and batten
- ensure any services do not bridge the resilient layer

FFT3 – Resilient composite standard batten system with 20mm levelling screed

- 18mm (min) t&g flooring board
- resilient layer must be continuous and pre-bonded to batten
- resilient composite standard battens
- ensure any services do not bridge the resilient layer
- battens may have the resilient layer at the top or the bottom

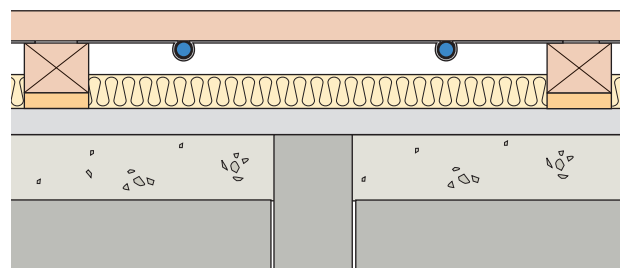
10. Underfloor heating

Underfloor heating may be used with timber floating floors FFT1, FFT2 and FFT3.

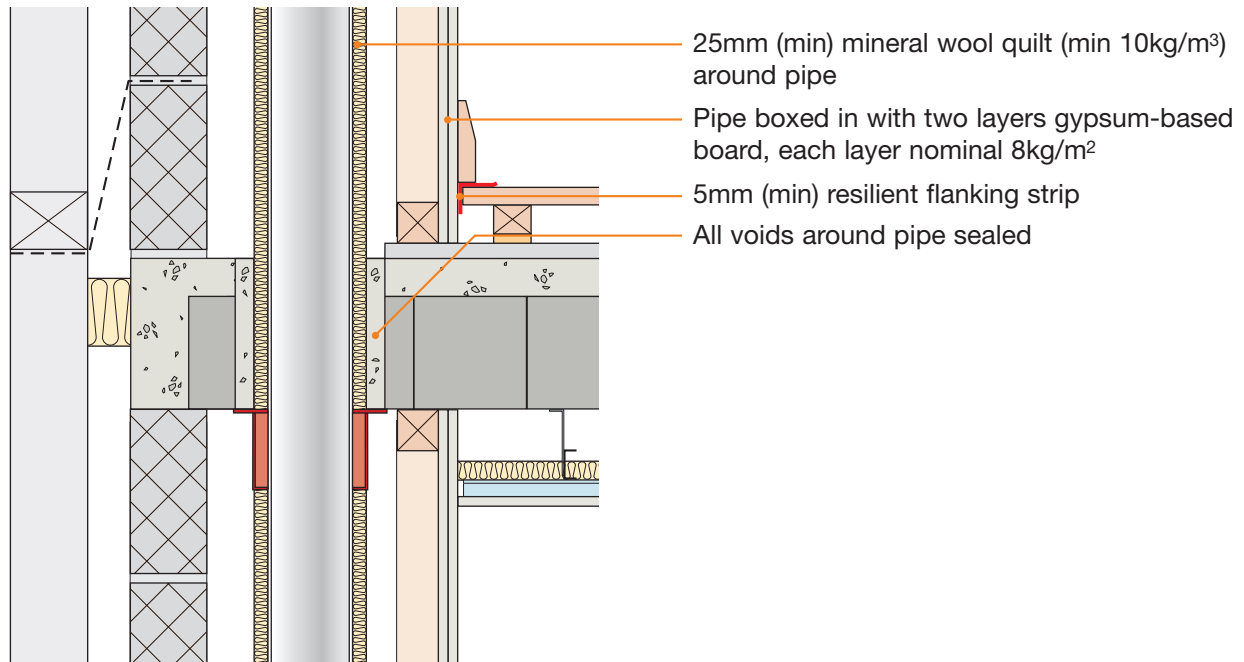
Underfloor heating must not bridge or bypass the FFT resilient layer (i.e. avoid bridging the void between the flooring board and core floor).

Rigid flooring boards must not come into direct contact with the flooring board layer.

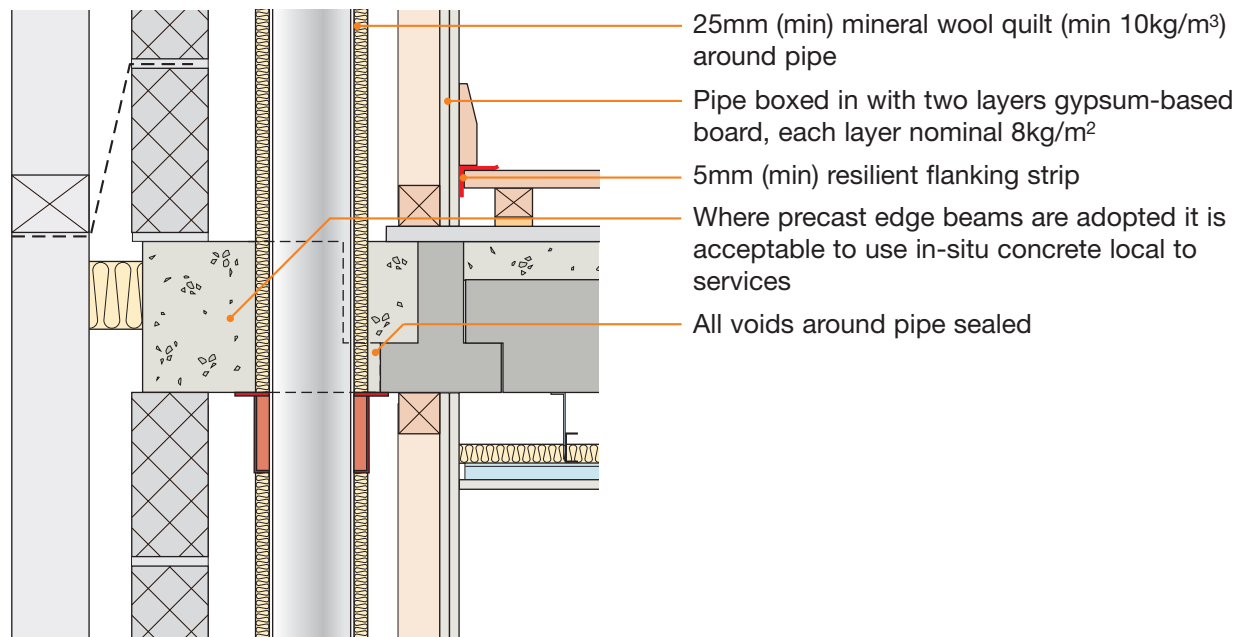
See Appendix A for further guidance.



11. Services – service pipes through separating floor



12. Service - service pipes through separating floor (using precast edge beams)



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See overleaf for checklist