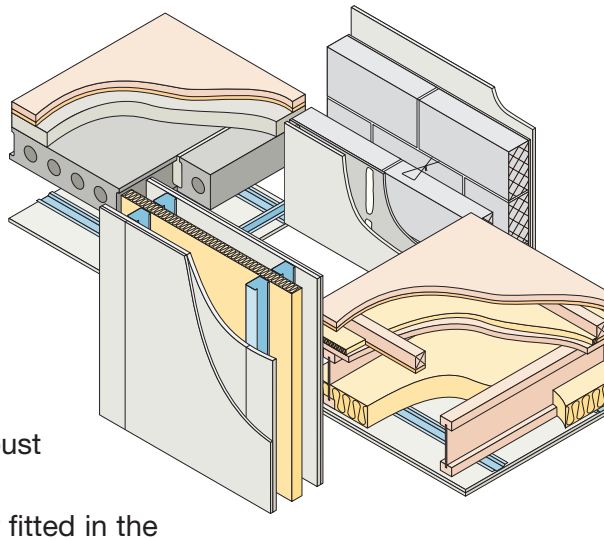
May 2015 Update Pack



Dear Colleague,

Thank you for subscribing to receive updates to the Part E Robust Details Handbook.

The major focus of this update pack is the flexible cavity closer fitted in the external cavity, in line with the separating floors. Previously, this could only be omitted if the cavity was fully-filled with built-in mineral wool – but now, where the floors listed below are registered, it can also be omitted if the cavity is filled with blown mineral wool.

Also, the colour of the insulation in E-WM-28 has been changed to more accurately represent the actual material. **Please note:** if you have a newer book (purchased after February 2015), E-WM-28 may already be shown with the blue insulation, but please replace this section anyway.

Please update your February 2015 4th Edition Handbook as follows:

1. Remove and replace page 7-8 in the Introduction.
2. Remove and replace all pages of E-WM-28.
3. Remove and replace just the first page of the concrete separating floors:

   E-FC-1, E-FC-3, E-FC-4 and E-FC-5.
4. Remove and replace all pages of the concrete separating floors:

   E-FC-6 and E-FC-7.
5. Remove and replace just the first page of the concrete separating floors:

   E-FC-8 and E-FC-9.
6. Remove and replace all pages of the concrete separating floor E-FC-10
7. Remove and replace just the first page of the concrete separating floors:

   E-FC-11, E-FC-12, E-FC-13, E-FC-14, E-FC-15 and E-FC-16.

Please note that the trademark (™) has now been removed, so the new E-FC-6 is a direct replacement for the existing E-FC-6™, for example.

Yours sincerely

John Tebbit

Managing Director,
Robust Details Limited

Changes to the fourth edition following May 2015 update

Section	Page	Amendment
Introduction		
Table 4	8	Amendment to note F4 to include floating floor requirement.
Separating Walls – Masonry		
E-WM-28		
All diagrams	All	Cavity insulation coloured blue to match actual material.
Separating Floors – Concrete		
E-FC-1		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-4		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-5		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-6		
Diagram 1	2	“built in” removed from external cavity closer statement.
Diagram 2	2	“built in” removed from external cavity closer statement.
Diagram 3	3	“built in” removed from external cavity closer statement.
E-FC-7		
Diagram 1	2	“built in” removed from external cavity closer statement.
Diagram 2	2	“built in” removed from external cavity closer statement.
Diagram 3	3	“built in” removed from external cavity closer statement.
E-FC-8		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-9		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-10		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-11		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-12		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-13		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-14		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-15		
Diagram 1	2	“built in” removed from external cavity closer statement.
E-FC-16		
Diagram 1	2	“built in” removed from external cavity closer statement.

Table 3b – Combinations of Robust Details separating walls and floors for flats/apartments in **timber frame** constructions

Separating walls	Separating floors	
	E-FT-1 E-FT-2 E-FT-3 E-FT-4 E-FT-5 E-FT-6 E-FT-7 E-FT-8	E-FC-2 E-FS-1
E-WT-1	✔	W see note 1
E-WT-2	✔	W see note 1
E-WT-3	F	W see note 1
E-WT-4	F	W see note 1

Table 3c – Combinations of Robust Details separating walls and floors for flats/apartments in **reinforced concrete** and **steel frame** constructions

Separating walls	Separating floors			
	E-FC-2	E-FC-10	E-FS-1	E-FS-2
E-WS-1	W see note 1	W	W see note 1	✔
E-WS-2	✔	W	W	W
E-WS-3	W	W	W	W
E-WS-4	W see note 1	W	W see note 1	✔

Key for Table 3b and Table 3c

F Only the separating floor requires pre-completion sound testing.

W Only the separating wall requires pre-completion sound testing.

1 Lightweight steel and timber frame walls may be constructed above in-situ poured concrete floors. The lightweight walls built directly off the concrete floors may be registered as Robust Details provided:

- they meet all other requirements of the Robust Detail, including flanking constructions;
- the principles of the raft foundation junction are followed. As such, the concrete of the floor must have a mass of 365 kg/m^2 (min), and a floating floor treatment must be provided;

Walls constructed to the soffit of in-situ poured concrete floors cannot be registered as Robust Details and may be subject to pre-completion sound testing.

See also notes relating to Combining loadbearing masonry and lightweight framed separating walls included under Table 3a.

Table 4 – Combining Robust Details separating walls with non-Robust Details separating floors in flats/apartments

Loadbearing masonry

E-WM-1	F1	E-WM-21	F1
E-WM-2	F1	E-WM-22	F1
E-WM-3	F1	E-WM-23	F1
E-WM-4	F1	E-WM-24	F1
E-WM-5	F1	E-WM-25	F1
E-WM-6	F1	E-WM-26	F1
E-WM-8	F1	E-WM-27	F1
E-WM-10	F1	E-WM-28	F1
E-WM-11	F1		
E-WM-12	F1		
E-WM-13	F1		
E-WM-14	F1		
E-WM-15	F1		
E-WM-16	F1		
E-WM-17	F1		
E-WM-18	F1		
E-WM-20	F1		

Timber frame

E-WT-1	F2
E-WT-2	F2
E-WT-3	F2
E-WT-4	F2

Light steel frame

E-WS-1	F3
E-WS-2	F4
E-WS-3	F3
E-WS-4	F3

Key

F1 Only the separating floor requires pre-completion testing provided the floor does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.

F2 Only the separating floor requires pre-completion testing provided the floor is timber-based and does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.

F3 Only the separating floor requires pre-completion testing provided the wall is being used in a lightweight steel frame flat/apartment and the floor does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.

F4 Only the separating floor requires pre-completion testing provided the wall is being used in a concrete frame building and the base of the wall is shielded by a floating floor treatment. Otherwise both the wall and floor need testing.

Table 5 – Combining Robust Details separating floors with non-Robust Details separating walls in flats/apartments

Loadbearing masonry

E-FC-1	W1	E-FC-11	W1
E-FC-4	W2	E-FC-12	W1
E-FC-5	W2	E-FC-13	W1
E-FC-6	W1	E-FC-14	W1
E-FC-7	W1	E-FC-15	W1
E-FC-8	W2	E-FC-16	W1
E-FC-9	W2		
E-FC-10	W2		

Timber frame

E-FT-1	W3
E-FT-2	W3
E-FT-3	W3
E-FT-4	W3
E-FT-5	W3
E-FT-6	W3
E-FT-7	W3
E-FT-8	W3

RC frame

E-FC-2	W4
E-FC-10	W4

Light steel frame

E-FS-1	W4
E-FS-2	W5

Key

W1 Only the separating wall requires pre-completion testing provided the wall is constructed using aggregate blocks specified for the inner leaf in the floor Robust Detail. Otherwise both the floor and wall need testing.

W2 Only the separating wall requires pre-completion testing provided the wall is constructed using blocks specified for the inner leaf in the floor Robust Detail. Otherwise both the floor and wall need testing.

W3 Only the separating wall requires pre-completion testing if used with timber frame supporting walls and twin leaf timber frame separating walls. Otherwise both the floor and wall need testing.

W4 Only the separating wall requires pre-completion testing provided the external wall meets the specification given in the separating floor Robust Detail. Otherwise both the floor and wall need testing.

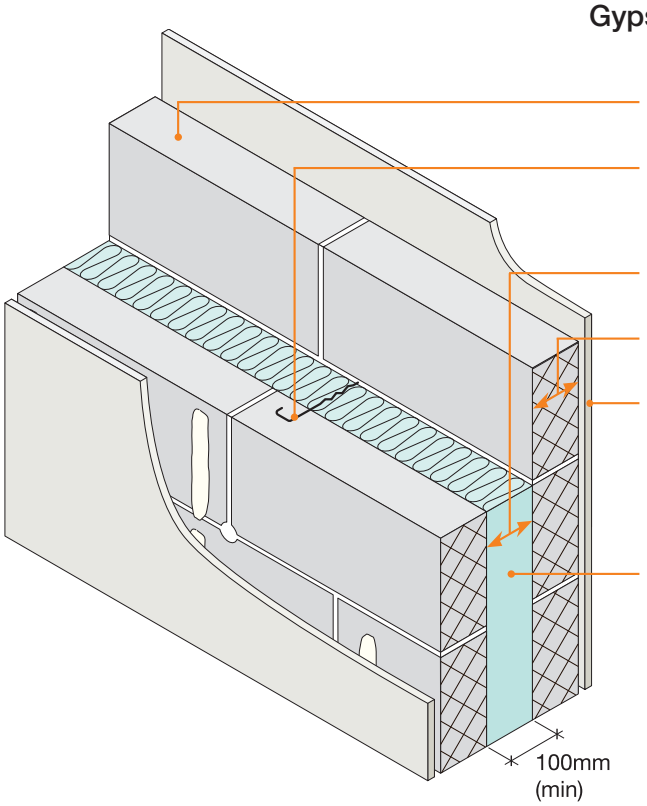
W5 Only the separating wall requires pre-completion testing if used with steel frame supporting walls and twin leaf steel frame separating walls. Otherwise both the floor and wall need testing.

For any construction that requires a separating element to be tested, the user should seek expert acoustic advice on the design and potential acoustic performance.

Separating Wall – Cavity Masonry

E-WM-28

Lightweight aggregate blocks ■
Knauf Supafil Party Wall Wool ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

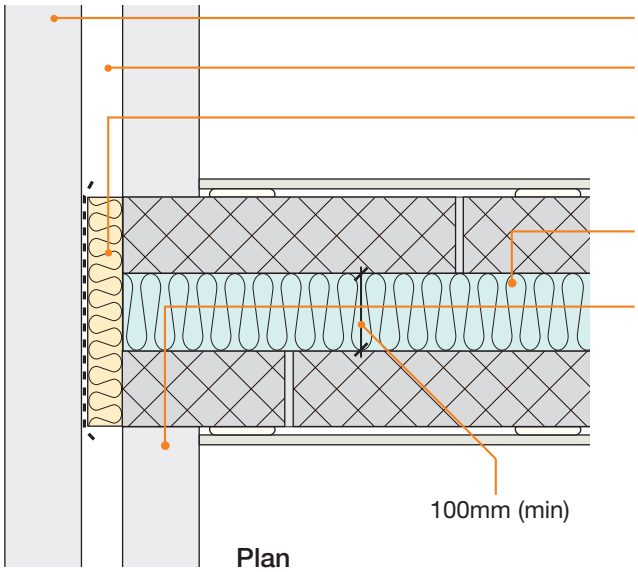


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Knauf Supafil Party Wall Wool
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

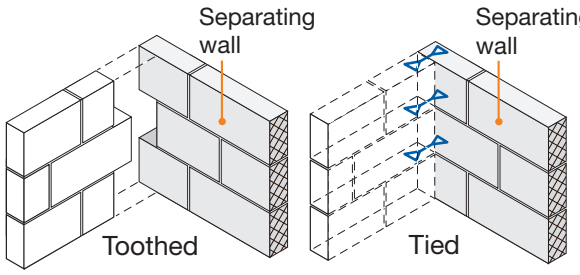
DO

- Keep cavity and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Supafil Party Wall Wool is only to be installed by contractors approved by Knauf Insulation; and must not exceed 25 kg/m³ density once installed
- Ensure all injection holes are drilled through mortar joints, and made good by fully filling with mortar
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

Close external wall cavity with a flexible cavity stop. (Optional if external wall cavity is fully filled with built in mineral wool insulation)

Supafil Party Wall Wool

Inner leaf where there is no separating floor e.g. for houses

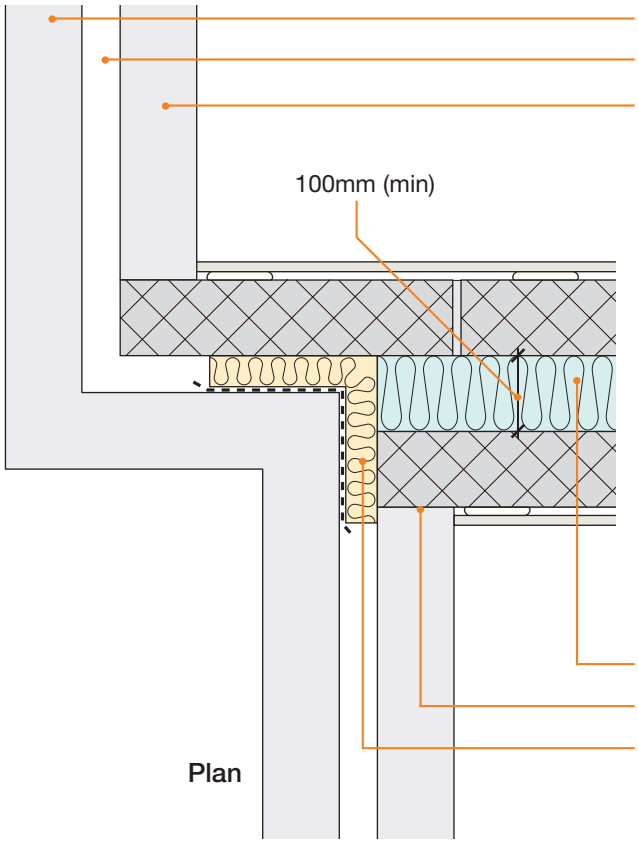
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

Inner leaf where there is a separating floor e.g. for flats/apartments

- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf where there is no separating floor e.g. for houses

- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

Inner leaf where there is a separating floor e.g. for flats/apartments

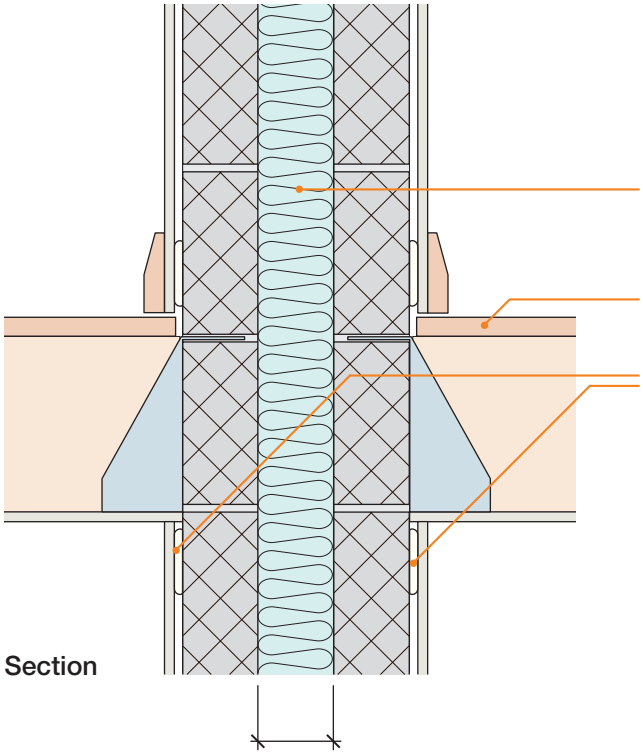
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Supafil Party Wall Wool

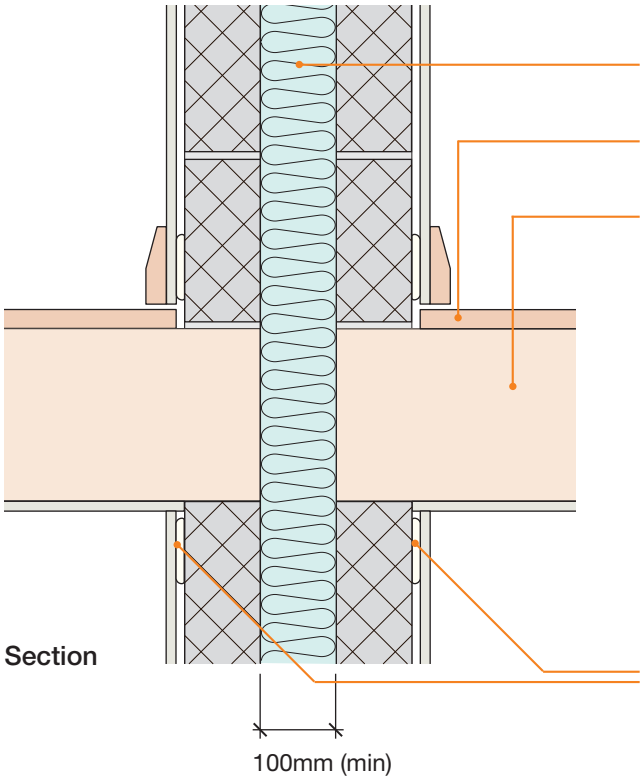
Tooth or tie walls together

Close external wall cavity with a flexible cavity stop. (Optional if external wall cavity is fully filled with built in mineral wool insulation)

3. Internal floor junction: timber floor supported on joist hangers

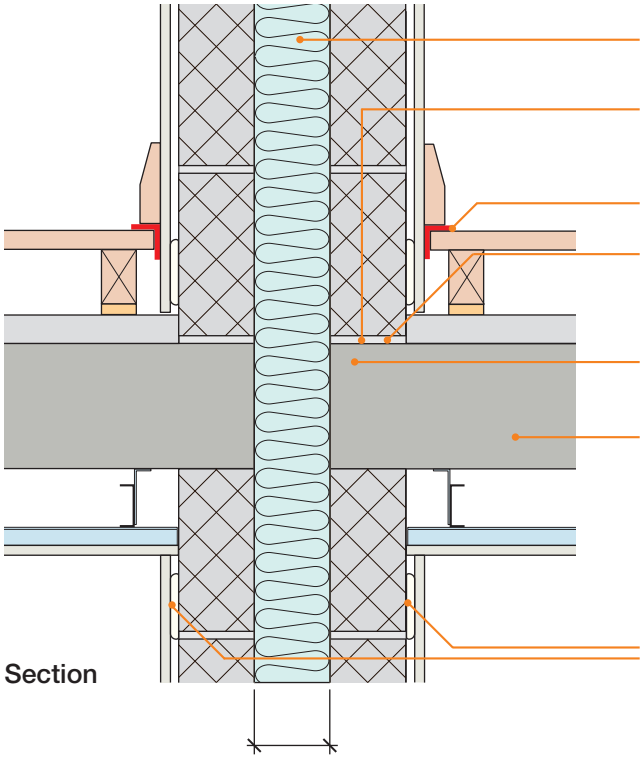


4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



Sketch shows timber joists built in

5. Separating floor junction



Section

Supafill Party Wall Wool

Separating wall must not be continuous between storeys

5mm (min) resilient flanking strip

Concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant

Separating floor must not be continuous between dwellings

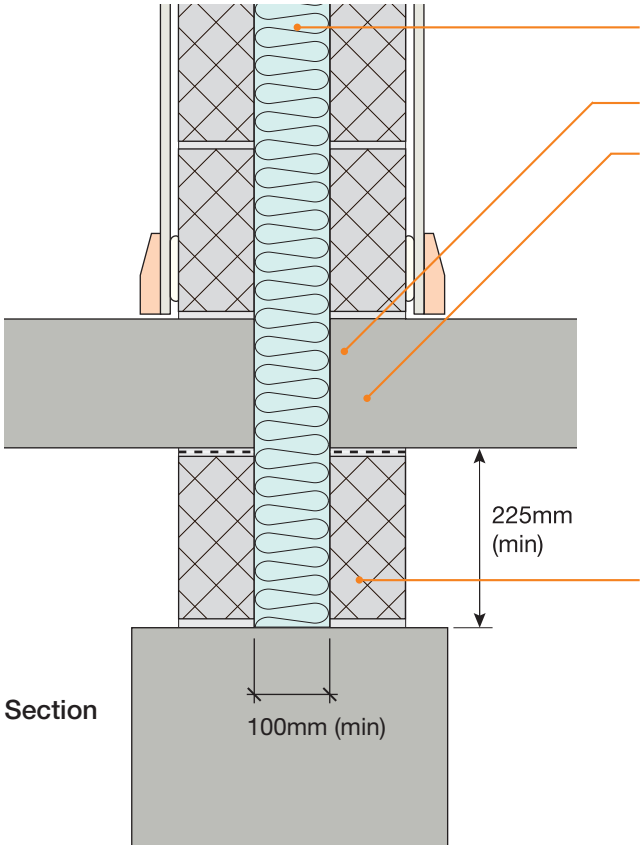
Separating floor:

- if using robustdetails® for floor, refer to Table 3a in introduction and see separating floor Robust Detail for floating floor and ceiling options
- if using floor requiring pre-completion testing, seek specialist advice

Continuous horizontal ribbon of adhesive

Sketch shows E-FC-1 type separating floor, FFT1 type floating floor treatment and CT3 type ceiling

6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



Section

Supafil Party Wall Wool

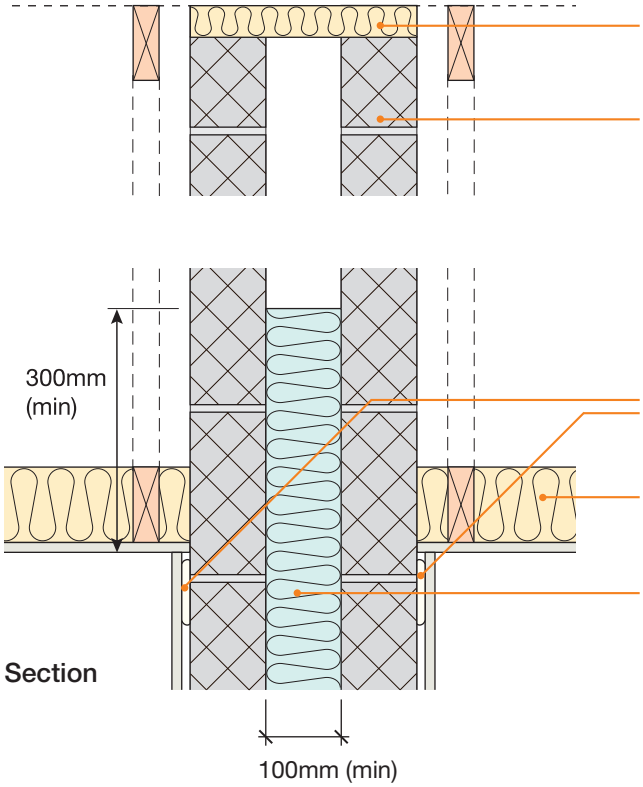
Ground floor not continuous between dwellings

Ground floor construction:

- timber joists built in with:
  - all voids around the joists filled with mortar
  - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
- beam and block floor with all voids filled with mortar, or
- concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- ground bearing slab

Cavity separating wall continuous to foundation, cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable. Solid walls which support separating walls are only acceptable where each ground floor (not timber joists) is built into one side of the separating wall and breaks the vertical continuity of the wall and the minimum clear cavity indicated is maintained.

7. Roof junction – pitched roof without room-in-roof



Junction between separating wall and roof filled with flexible closer

Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

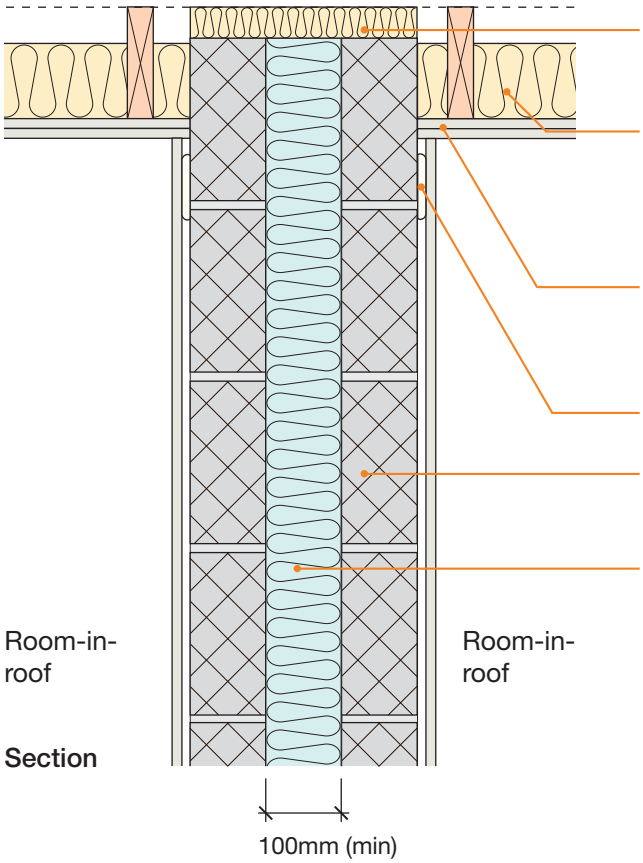
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

100mm (min) mineral wool insulation – 10 kg/m^3 (min)

Supafil Party Wall Wool

8. Roof junction – pitched roof with room-in-roof



Junction between separating wall and roof filled with flexible closer

100mm (min) mineral wool insulation minimum density 10 kg/m^3 or 60mm (min) foil faced PUR or PIR insulation, minimum density 30 kg/m^3 (See Appendix A)

2 layers of nominal 8 kg/m^2 gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters

Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

Supafil Party Wall Wool

External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties to Approved Document E “Tie type A” (see Appendix A)?			
6.	Are cavity stops installed where specified in the Robust Detail?			
7.	Are joints fully filled?			
8.	Is blue Supafil Party Wall Wool installed to a maximum density of 25 kg/m^3, and was it by an approved installer?			
9.	Are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
13.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from Knauf Insulation Ltd, manufacturer of Supafil Party Wall Wool:

Telephone: 01744 766 666 **Fax:** 01744 766 667 **E-mail:** technical.uk@knaufinsulation.com

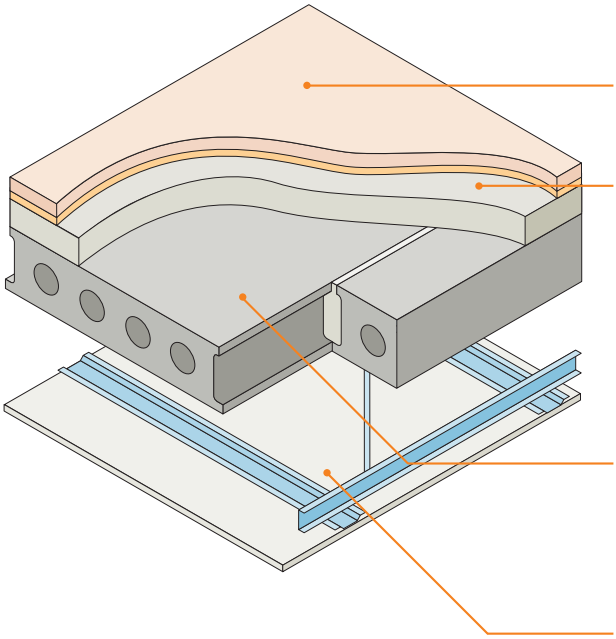
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-1

Precast concrete plank ■
Screed ■



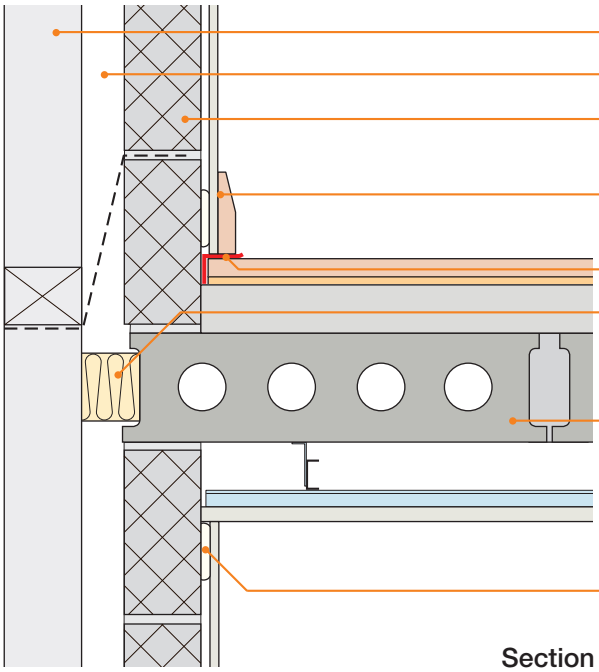
Sketch shows FFT5 type floating floor treatment and CT1 type ceiling treatment

Floating floor	See section 4 for suitable floating floor treatment
Screed	- 40mm (min) screed directly applied to plank - cement:sand or proprietary screed nominal 80 kg/m² mass per unit area, see Appendix A
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure floating floor treatment is suitable and install in accordance with the manufacturer's instructions
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Refer to Appendix A

1. External (flanking) wall junction

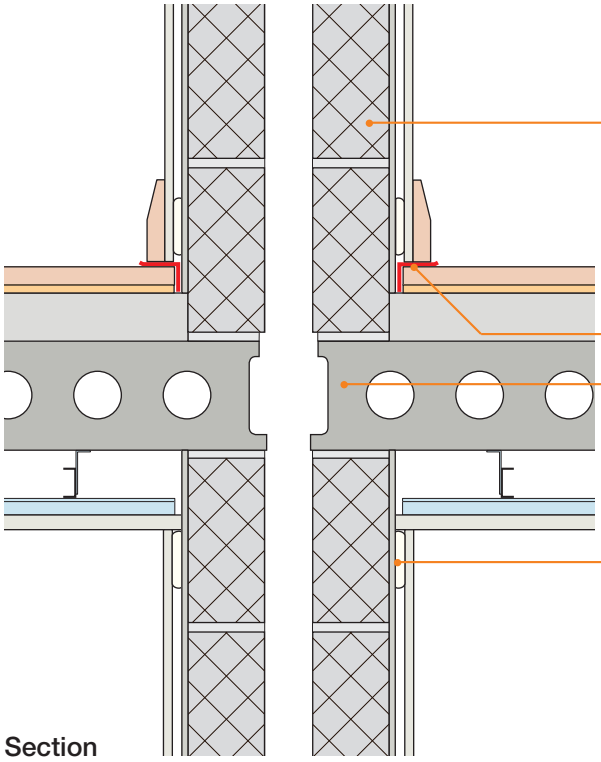


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³)
- Nominal 8 kg/m² gypsum-based board or 13mm plaster
- 5mm (min) resilient flanking strip
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

Sketch shows FFT5 type floating floor treatment and CT1 type ceiling treatment

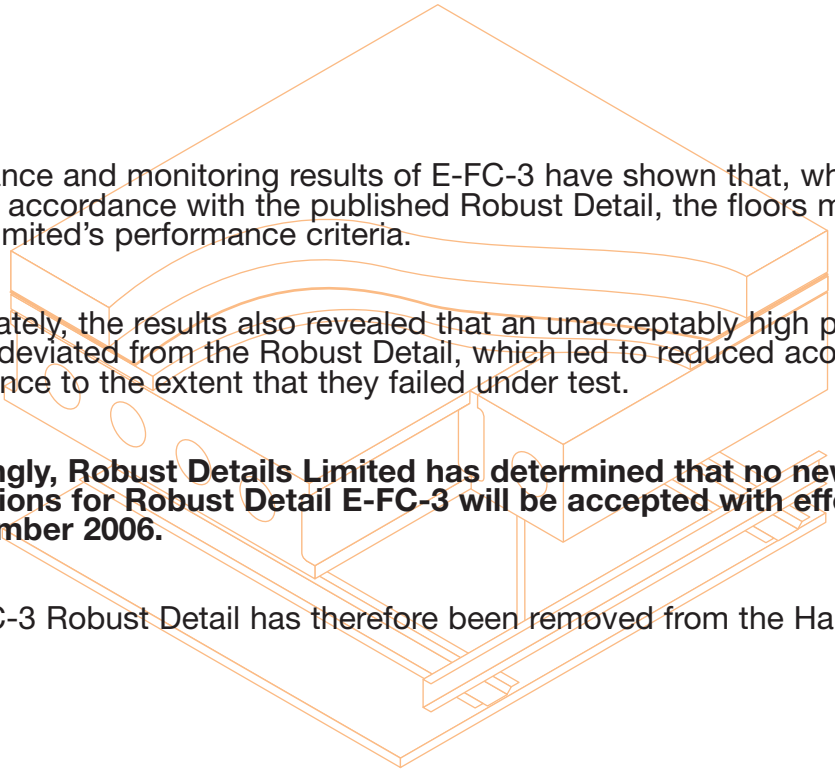
2. Separating wall junction



Section

- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- 5mm (min) resilient flanking strip
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

Sketch shows FFT5 type floating floor treatment and CT1 type ceiling treatment



Performance and monitoring results of E-FC-3 have shown that, where built strictly in accordance with the published Robust Detail, the floors meet Robust Details Limited's performance criteria.

Unfortunately, the results also revealed that an unacceptably high proportion of floors deviated from the Robust Detail, which led to reduced acoustic performance to the extent that they failed under test.

Accordingly, Robust Details Limited has determined that no new registrations for Robust Detail E-FC-3 will be accepted with effect from 1st November 2006.

The E-FC-3 Robust Detail has therefore been removed from the Handbook.

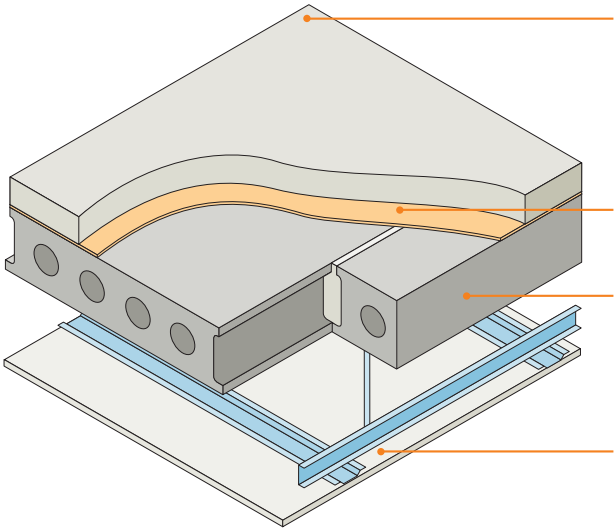
Dave Baker OBE

Chief Executive, Robust Details Limited

Separating Floor – Concrete

E-FC-4

Precast concrete plank ■
Screed laid on Thermal Economics IsoRubber resilient layer ■



Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	6mm IsoRubber layer with IsoEdge flanking strip
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth and supporting wall density

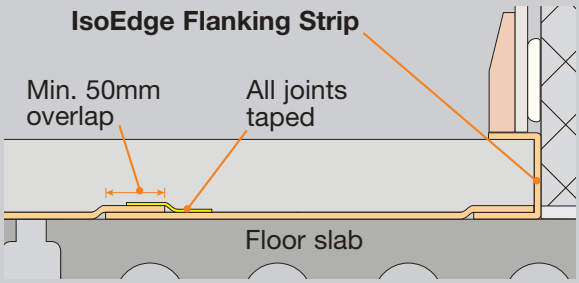
SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **6mm IsoRubber** (resilient layer to be laid over entire floor area with minimum 50mm overlaps)

2) **IsoEdge** flanking strip

3) All joints taped



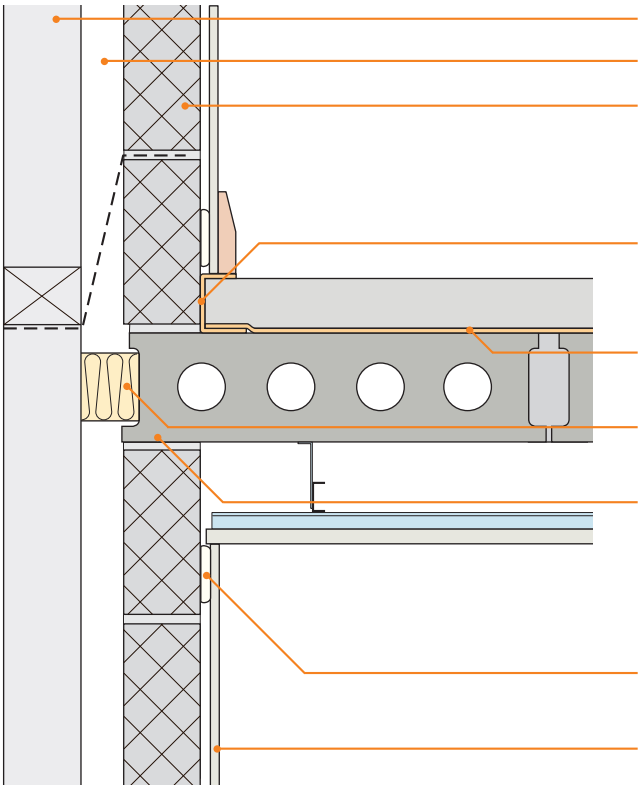
- **IsoEdge** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

From 1 January 2009, Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from Thermal Economics on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure 6mm IsoRubber resilient layer is laid over the entire floor surface and has overlapped joints of 50mm sealed with tape. On no account should the screed come into contact with the floor slab. (see Section 4 for 40mm proprietary screeds)
- Ensure 6mm IsoRubber overlaps with IsoEdge flanking strip. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the IsoEdge flanking strip isolates the skirting and wall linings. On no account should screed come into contact with the wall lining and skirting
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)

1. External (flanking) wall junction

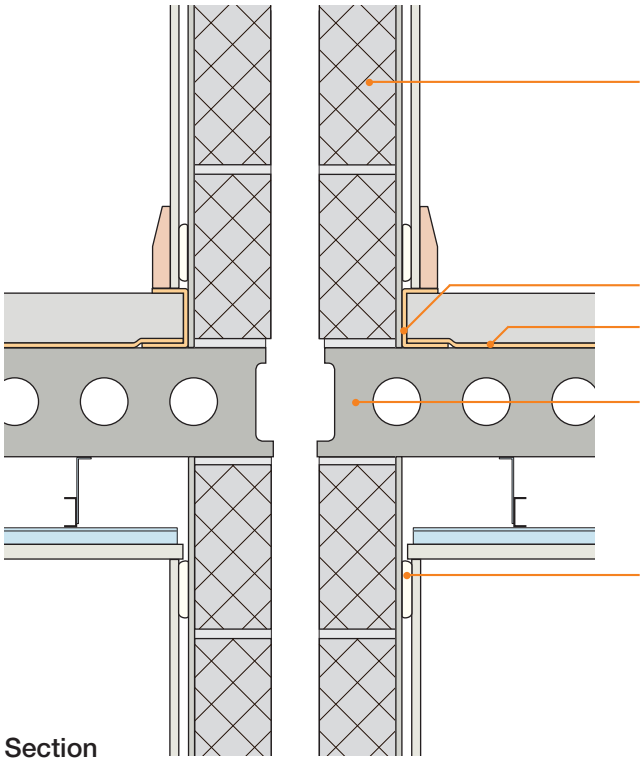


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³) or Plasmor Aglite Ultima (1050 kg/m³) or aircrete block (450-800 kg/m³)
- IsoEdge flanking strip must overlap with IsoRubber resilient layer and isolate screed from perimeter walls and skirtings
- IsoRubber resilient layer must have 50mm (min) overlapped joints and be sealed with tape
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive or IsoEdge ceiling strip
- Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

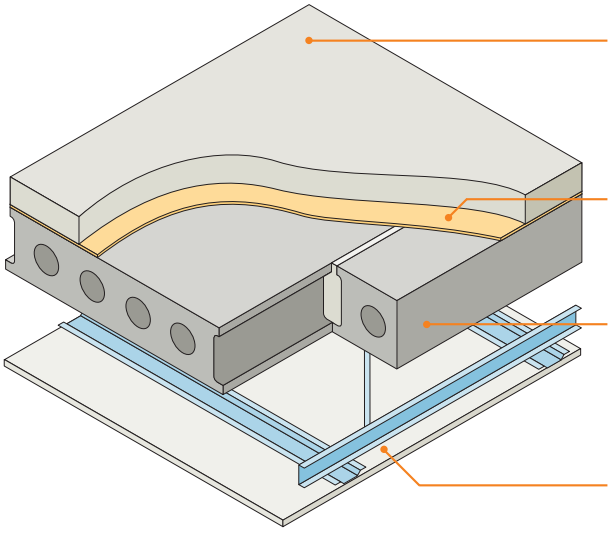
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- IsoEdge flanking strip
- IsoRubber resilient layer to overlap IsoEdge flanking strip
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive or IsoEdge ceiling strip

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-5

Precast concrete plank ■
Screed laid on *Cellecta*® YELO*fon*® HD10+ resilient layer system ■



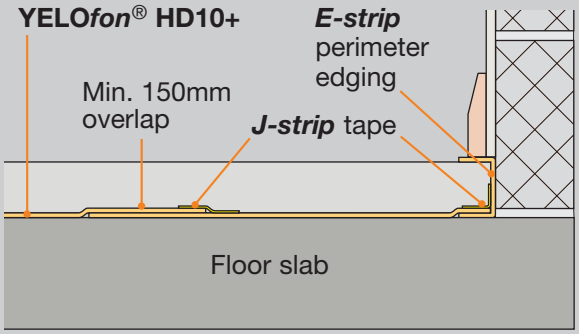
Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	**YELO*fon*® HD10+** with ***E-strip*** perimeter edging and ***J-strip*** tape for jointing
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth and block type used in supporting walls

SYSTEM INSTALLATION:

The use of this screed resilient layer system **must** incorporate all three products:

1) **YELO*fon*® HD10+** (resilient layer to be laid over entire floor area with min. 150mm overlaps)
2) ***E-strip*** (self adhesive perimeter edging)
3) ***J-strip*** (foamed acoustic joining tape)



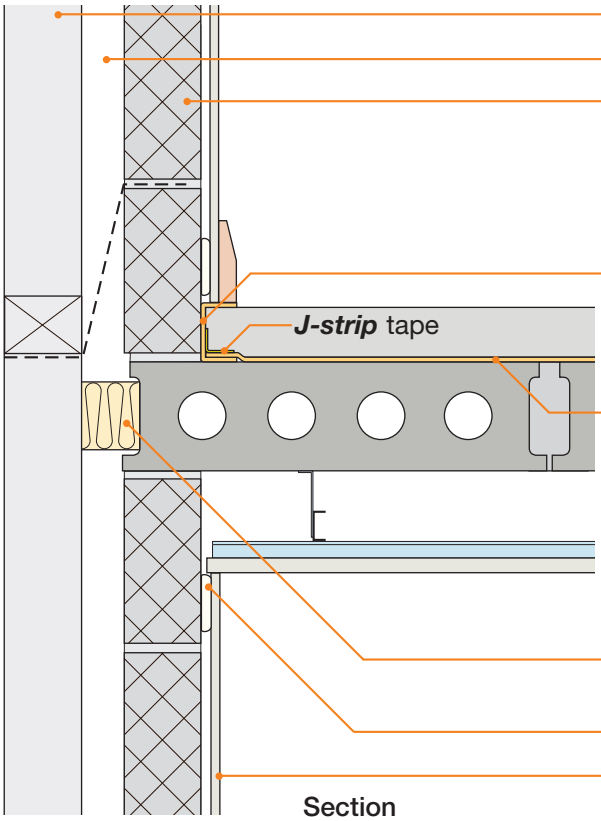
- ***E-strip*** perimeter edging to be installed at all room perimeters. See manufacturer's guidance.
- **YELO*fon*® HD10+** may also be foil faced.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from *Cellecta*® on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure **YELO*fon*® HD10+** resilient layer is laid over the entire floor surface and has overlapped joints of 150mm sealed with ***J-strip*** tape. On no account should the screed come into contact with the floor slab (See section 4 when using proprietary screeds)
- Ensure **YELO*fon*® HD10+** overlaps the ***E-strip*** perimeter edging and joints are sealed with ***J-strip*** tape. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the ***E-strip*** perimeter edging isolates the skirting and wall linings. On no account should screed come into contact with the wall lining and skirting
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) aggregate concrete block (1350-1600 kg/m³ or 1850-2300 kg/m³) or aircrete block (450-800kg/m³).

E-strip perimeter edging must be overlapped by **YELO*fon*® HD10+** resilient layer with joints sealed with ***J-strip*** tape to isolate screed from perimeter walls and skirtings

YELO*fon*® HD10+ resilient layer must have 150mm (min) overlapped joints and be sealed with ***J-strip*** tape

Concrete planks must be built into walls:
- walls must not be continuous between storeys
- planks must not abut inner leaf
- all voids between planks and blockwork filled with mortar or flexible sealant

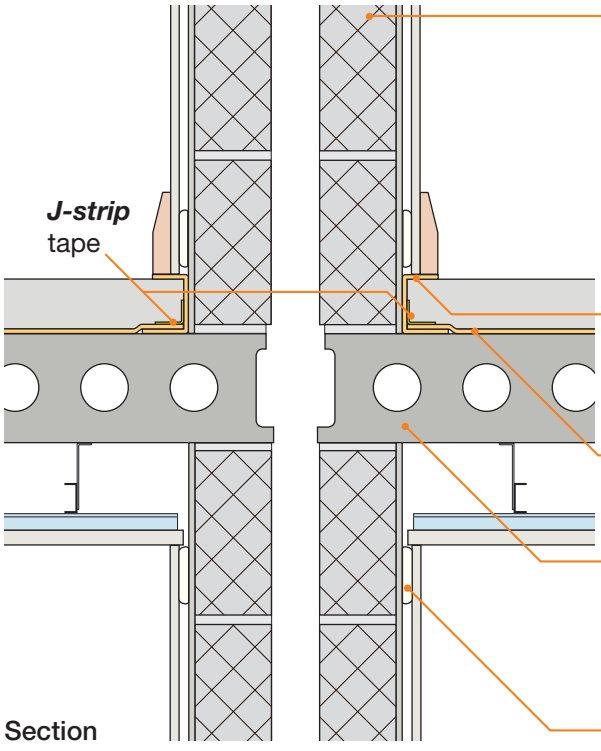
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Continuous horizontal ribbon of adhesive

Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Separating wall:
- if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
- if using wall requiring pre-completion testing – seek specialist advice

NOTE: aircrete block separating wall requires 200mm (min) planks and ceiling treatment CT5 (Refer to section 3)

E-strip perimeter edging must be overlapped by **YELO*fon*® HD10+** resilient layer with joints sealed with ***J-strip*** tape to isolate screed from perimeter walls and skirtings

YELO*fon*® HD10+ resilient layer must have 150mm (min) overlapped joints and be sealed with ***J-strip*** tape

Concrete planks to be built into wall:
- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

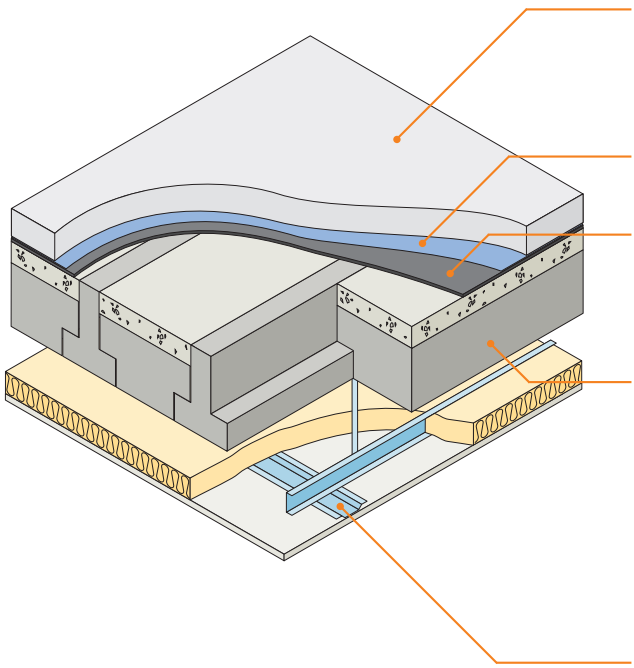
Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-6

Beam and block floor with precast or in-situ edge beams ■
Screed laid on Regupol E48 resilient layer system ■
For use with dense aggregate block flanking walls only ■

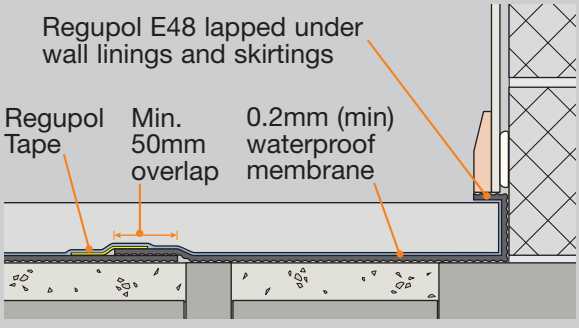


Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed, nominal 80 kg/m² mass per unit area
DPM	0.2mm (min) waterproof membrane
Resilient layer	8mm Regupol E48, dimple side down, fully lapped up walls and Regupol tape for jointing
Structural floor	beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m² combined mass per unit area – see section 7 for cut rows
Ceiling	Min 300mm from top of beam to ceiling board – see section 8

SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **8mm Regupol E48** (resilient layer to be laid over entire floor area with 50mm overlaps)
2) All joints sealed with Regupol tape
3) 0.2mm (min) waterproof membrane

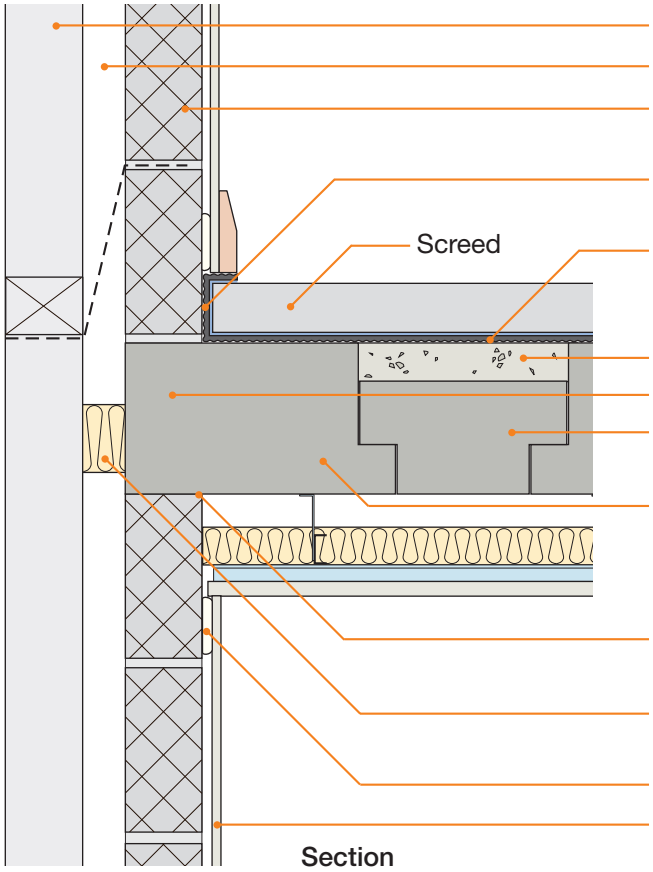


- **Regupol E48** must be laid dimpled side down
- **Regupol E48** must be turned up at walls and lapped under wall linings and skirtings
- Lay a 0.2mm (min) waterproof membrane over the entire floor

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 Regupol E48 is laid dimple side down, covers entire floor area and has overlapped joints sealed with Regupol tape
- Ensure Regupol E48 resilient layer isolates screed from the perimeter walls, wall linings and skirtings
- Ensure depth from top of beams to ceiling is min 300mm
- Ensure 50mm 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

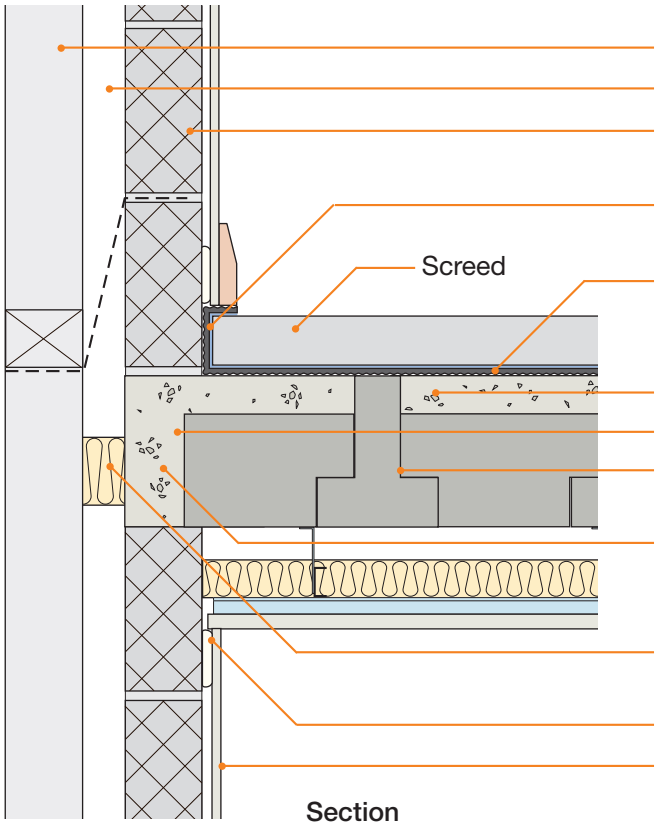
1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- 8mm Regupol E48 **must isolate screed** from all perimeter masonry walls, wall linings and skirting
- 8mm Regupol E48 must have 50mm (min) overlapped joints and be sealed with Regupol tape
- 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

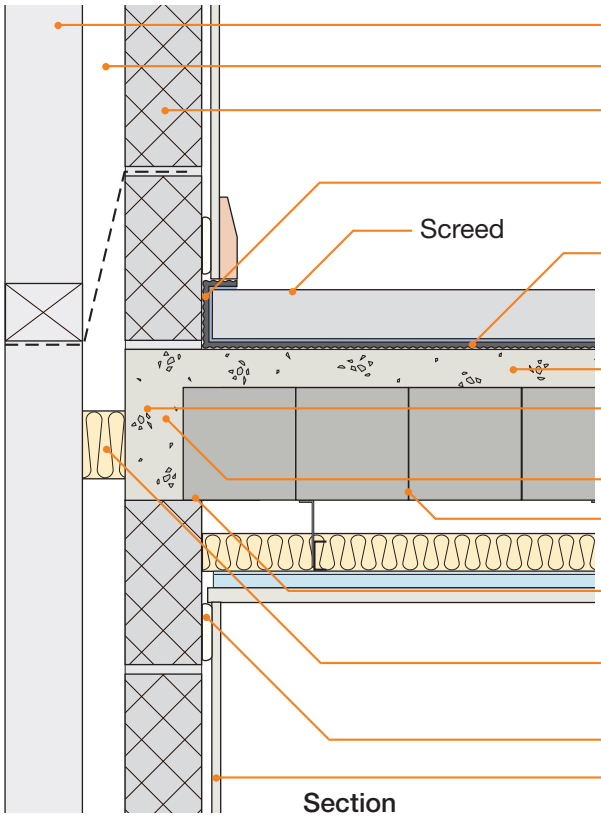
2. External (flanking) wall junction – beams parallel with wall (using in-situ concrete downstand)



Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- 8mm Regupol E48 **must isolate screed** from all perimeter masonry walls, wall linings and skirting
- 8mm Regupol E48 must have 50mm (min) overlapped joints and be sealed with Regupol tape
- 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



Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)

8mm Regupol E48 **must isolate screed** from all perimeter masonry walls, wall linings and skirting

8mm Regupol E48 must have 50mm (min) overlapped joints and be sealed with Regupol tape

Beam and block floor:

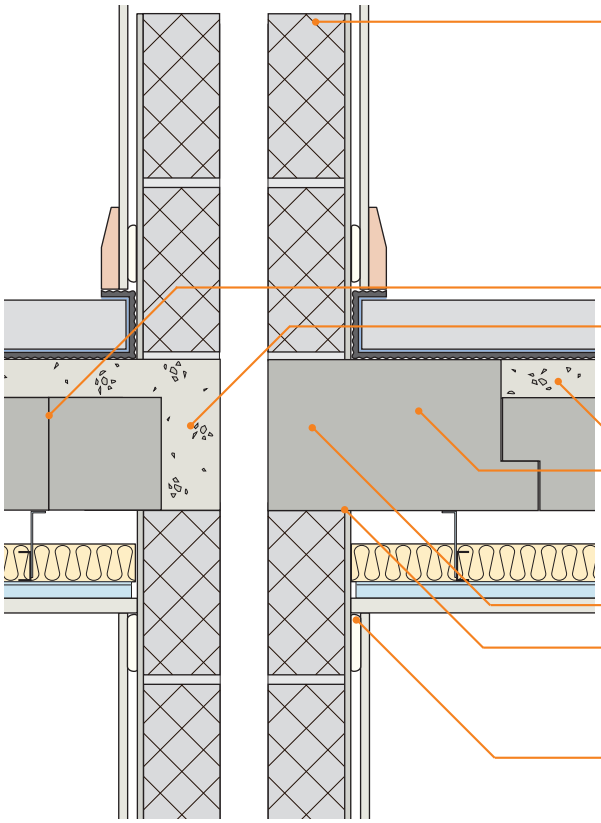
- min 50mm concrete topping to all floor blocks
- in-situ downstand beam must be min 75mm wide and must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- floor blocks to be tightly abutted (see section 7 for floor block types)
- junction between floor blocks and wall must be closed (see section 7)

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

4. Separating wall junction



Separating wall:

- if using robustdetails® for wall – refer to Table 3a in introduction to select an appropriate robustdetails® separating wall
- if using wall requiring pre-completion testing – seek specialist advice

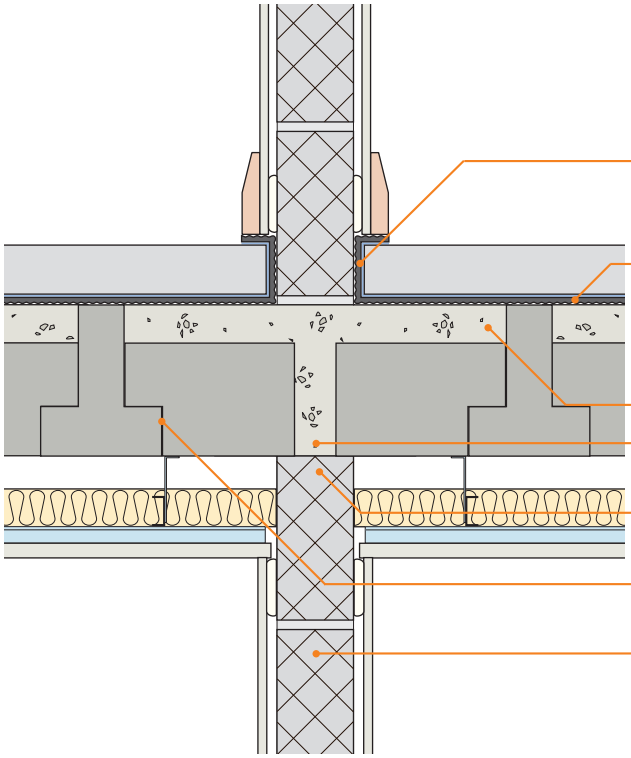
Core floor junctions with wall:

- floor blocks to be tightly abutted
- if beams are bearing on wall (i.e. perpendicular to wall) an in-situ concrete downstand of min 75mm width must be used
- min 50mm concrete topping to all floor blocks
- if beams are parallel to separating wall min 300mm wide precast concrete edge beam or min 75mm wide in-situ concrete downstand must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- all voids between precast edge beam and separating wall blockwork filled with mortar or flexible sealant

Continuous horizontal ribbon of adhesive

Sketch shows E-WM-3 separating wall

5. Loadbearing internal wall – floor beams parallel to wall



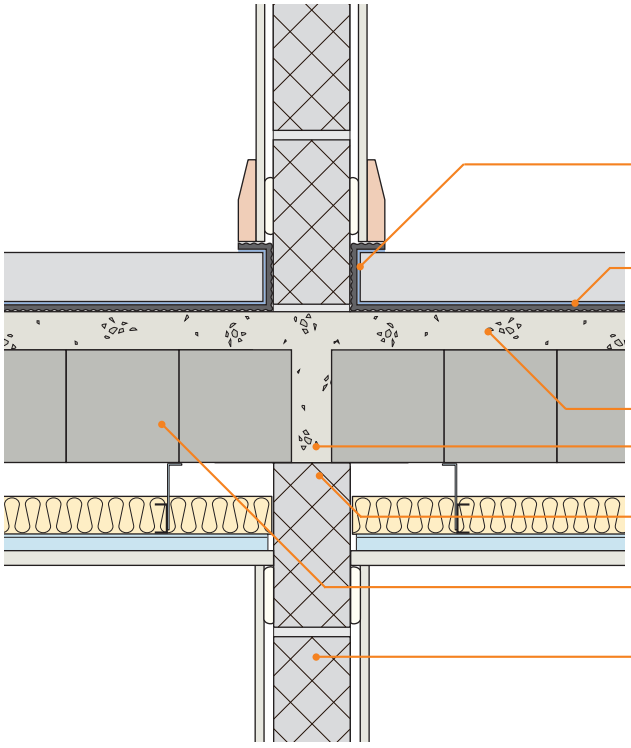
8mm Regupol E48 **must isolate screed** from all perimeter masonry walls, wall linings and skirting

8mm Regupol E48 must have 50mm (min) overlapped joints and be sealed with Regupol tape

Beam and block floor:

- min 50mm concrete topping to all floor blocks
- in-situ downstand must be min 50mm wide and must break vertical continuity of wall
- walls must not be continuous between storeys
- floor blocks must be tightly abutted (see section 7 for floor block types)
- Internal loadbearing blockwork partition

6. Loadbearing internal wall – floor beams bearing onto wall



8mm Regupol E48 **must isolate screed** from all perimeter masonry walls, wall linings and skirting

8mm Regupol E48 must have 50mm (min) overlapped joints and be sealed with Regupol tape

Beam and block floor:

- min 50mm concrete topping to all floor blocks
- in-situ downstand must be min 50mm wide and must break vertical continuity of wall
- walls must not be continuous between storeys
- floor blocks must be tightly abutted (see section 7 for floor block types)
- Internal loadbearing blockwork partition

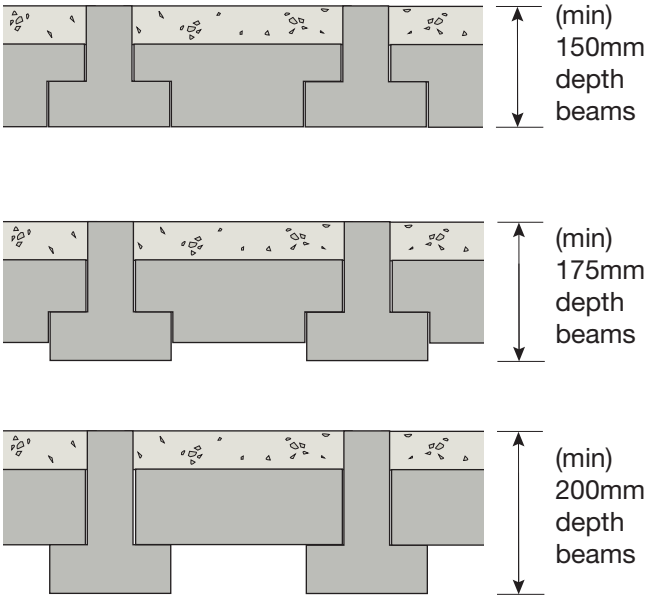
7. Floor block types

Block types

Rebated or 'T' shape dense blocks may be used for beams of 150mm depth or greater.

Rebated or 'T' shape dense blocks may be recessed for beams of 175mm or greater.

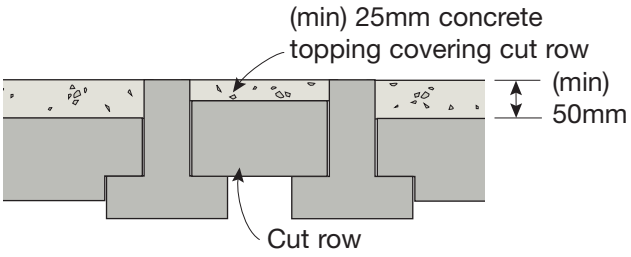
100mm dense blocks may be used for beams of 200mm depth or greater.



Cut rows

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

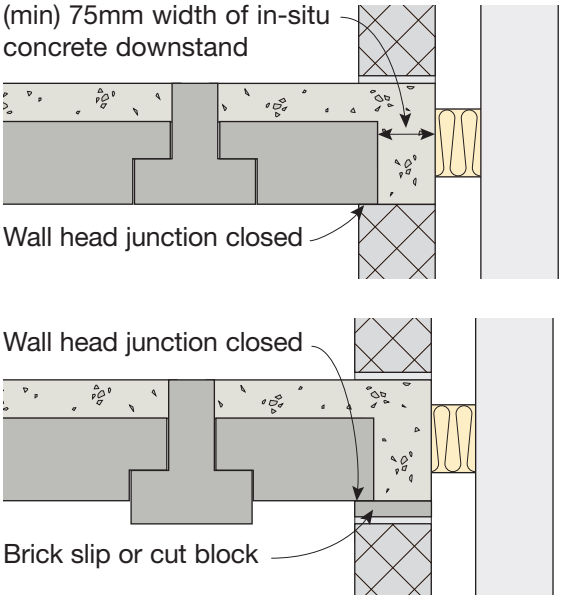
Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.



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-6

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:

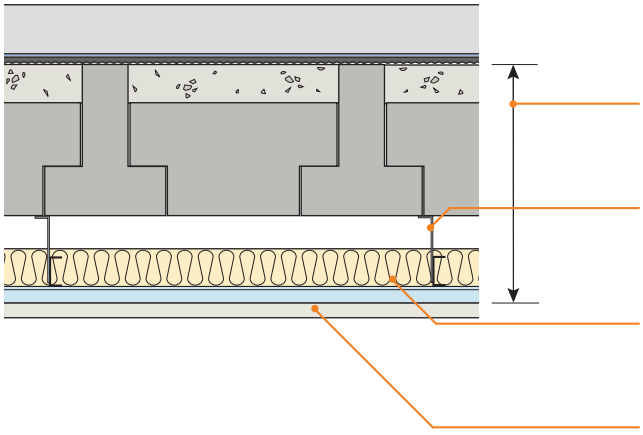
- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)

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 2m^2 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

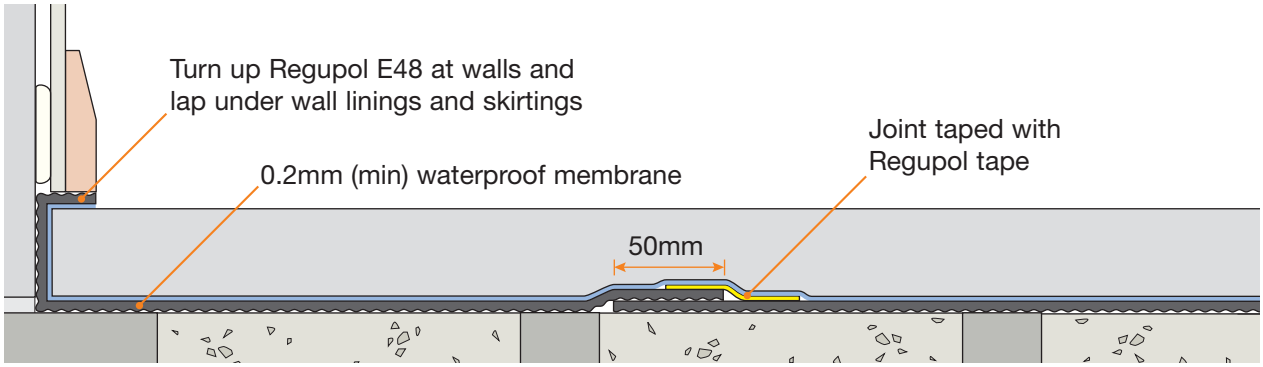
All E-FC-6 floors must have a minimum depth of 300mm **between top of beam and ceiling board**

Only suspended metal frame ceilings systems may be used

Min 50mm mineral fibre quilt (min 10kg/m^3) in the ceiling void to cover whole ceiling board area

One layer of nominal 10kg/m^2 gypsum-based board

9. Resilient layer installation



SCREED TYPE

65mm (min) cement:sand screed or 40mm (min) proprietary screed, nominal 80 kg/m² mass per unit area

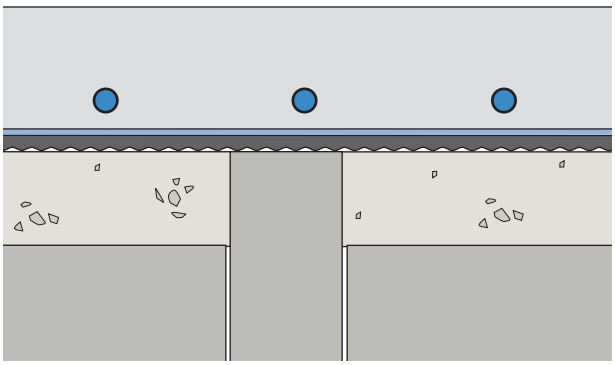
- 8mm Regupol E48 must be laid **dimpled side down**
- overlap all Regupol E48 joints (both along and across the roll) by at least 50mm and tape all joints using Regupol tape
- turn up Regupol E48 at walls to ensure screed will not touch the walls and is of sufficient length to lap under wall linings and skirtings
- lay a waterproof membrane (min 0.2mm thick) over the entire floor

10. Underfloor heating

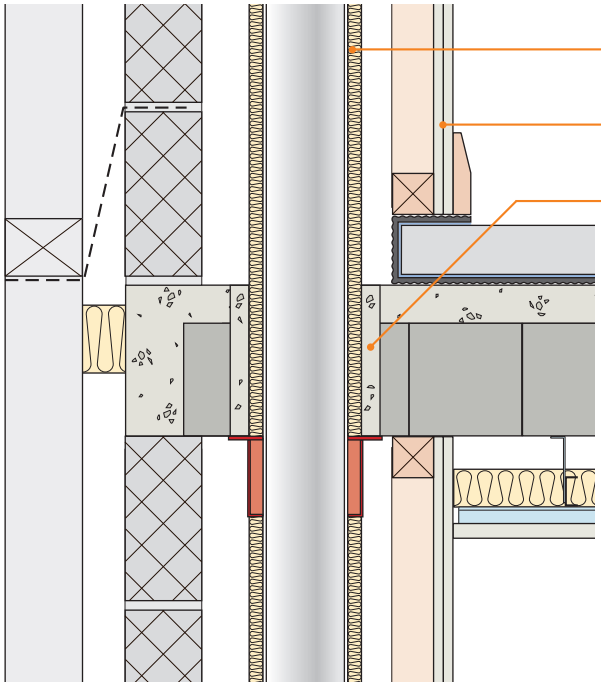
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the Regupol E48

Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.



11. Services – service pipes through separating floor

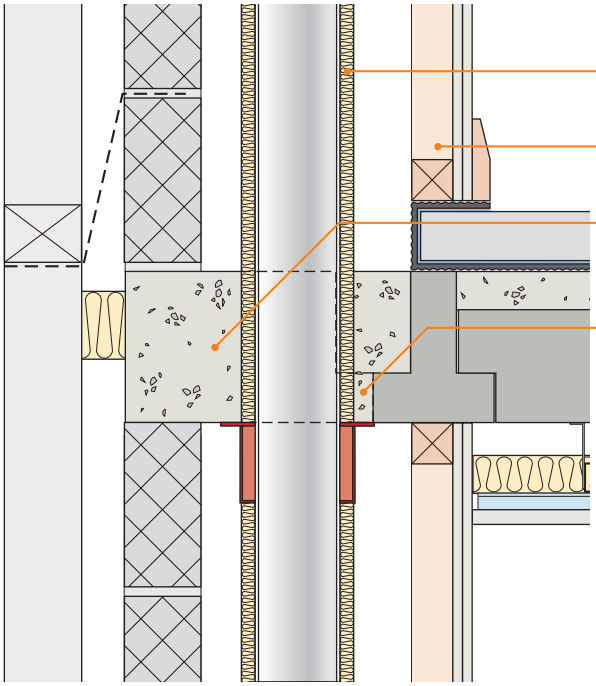


25mm (min) mineral wool quilt (min 10kg/m^3) around pipe

Pipe boxed in with two layers gypsum-based board, each layer nominal 8kg/m^2

All voids around pipe sealed

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



25mm (min) mineral wool quilt (min 10kg/m^3) around pipe

Pipe boxed in with two layers gypsum-based board, each layer nominal 8kg/m^2

Where precast edge beams are adopted it is acceptable to use in-situ concrete local to services

All voids around pipe sealed

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are the external wall inner leaves and separating walls of dense aggregate blockwork (min 1850-2300kg/m^3)?			
2.	Are all floor blocks of dense aggregate (1850-2300kg/m^3) and tightly abutted?			
3.	Are min 300mm wide precast concrete edge beams, or min 75mm in-situ concrete downstands installed where the beams are parallel to the external or separating flanking walls?			
4.	Are in-situ concrete downstand beams min 75mm wide where the beams are bearing on the external or separating flanking walls?			
5.	Is the concrete topping to the floor blocks at least 50mm thick?			
6.	Is the Regupol E48 dimple side down and covering the whole floor area with min 50mm overlapped joints and sealed with Regupol tape?			
7.	Is the Regupol E48 isolating the screed from the perimeter walls, wall linings and skirting?			
8.	Is the ceiling system metal frame, with min 50mm mineral fibre quilt laid over the whole ceiling and of min 300mm depth from top of beam to ceiling board?			
9.	Is the ceiling board 10kg/m^2 and are all joints sealed with tape or caulked with sealant?			
10.	Are service pipes wrapped in quilt and boxed with two layers of nominal 8kg/m^2 gypsum-based board?			
11.	Is the separating floor satisfactorily complete?			

Contact details for technical assistance from CMS Acoustics, sole distributor of Regupol E48 resilient layer system:

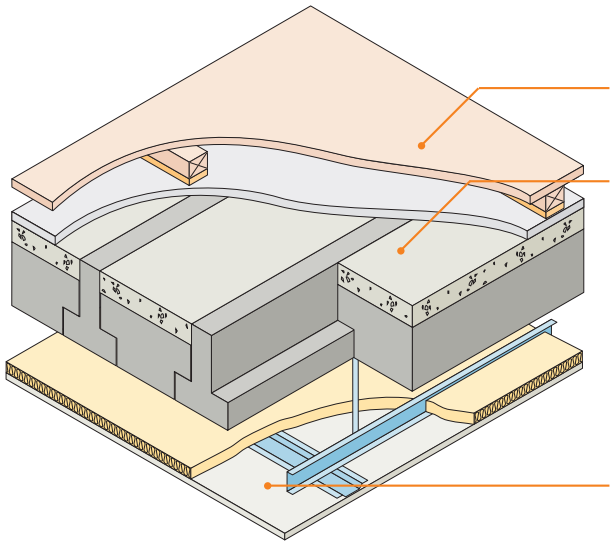
Telephone: 01925 577711 **Fax:** 01925 577733 **E-mail:** info@cmsacoustics.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete E-FC-7

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

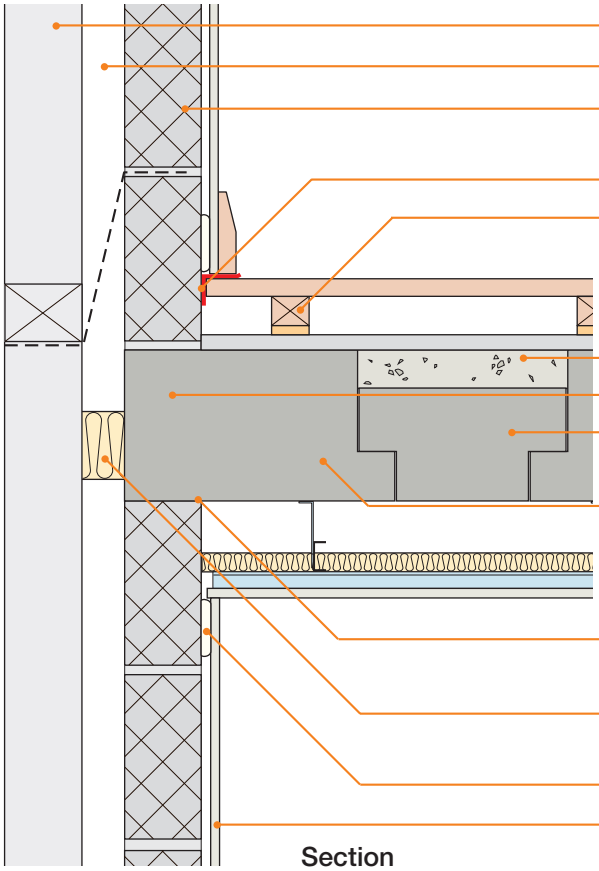


Floating floor	See section 9 for suitable floating floor treatment
Structural floor	beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m^2 combined mass per unit area – see section 7 for cut rows
Ceiling	Min 300mm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

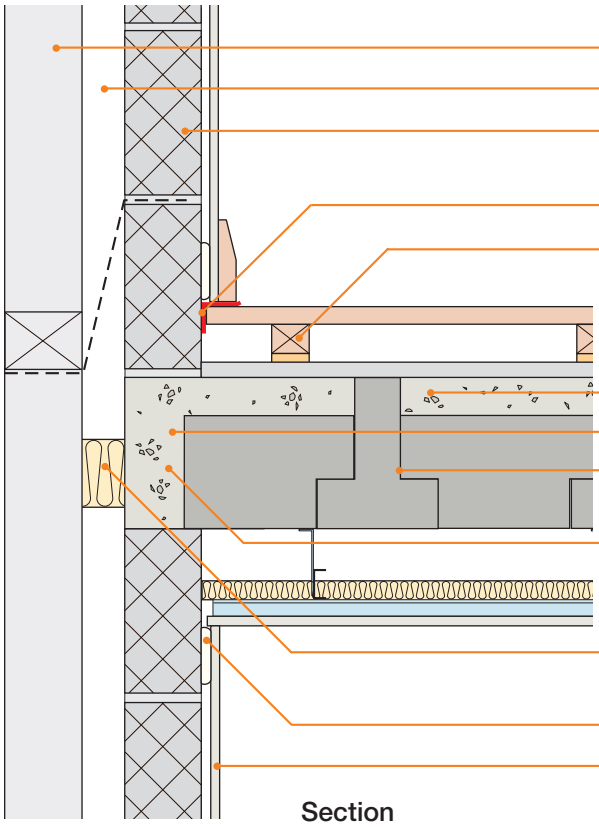
1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



Section

- 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

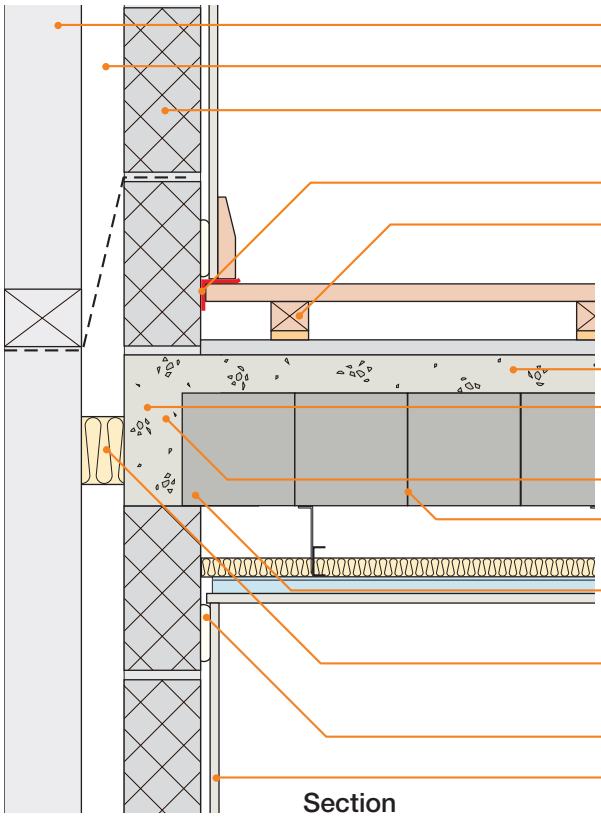
2. External (flanking) wall junction – beams parallel with wall (using in-situ concrete downstand)



Section

- 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



Section

Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m^3)

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:

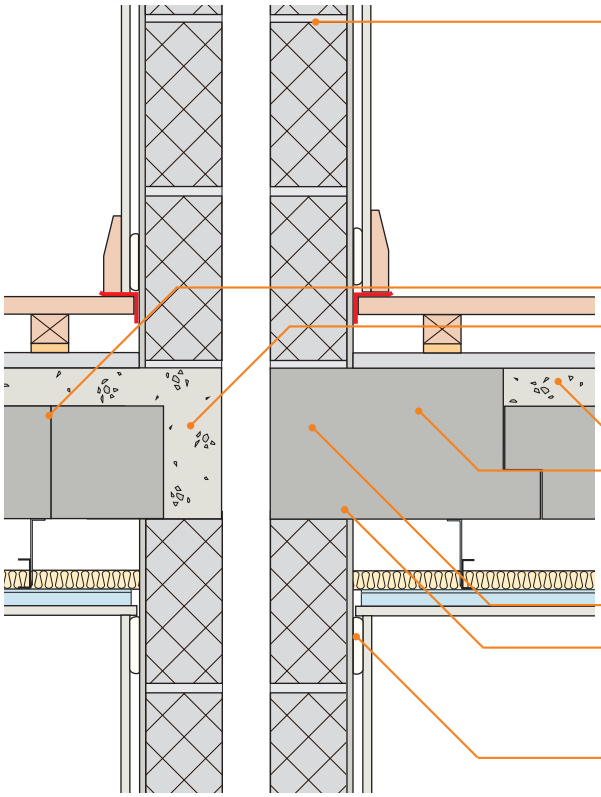
- min 50mm concrete topping to all floor blocks
- in-situ downstand beam must be min 75mm wide and must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- floor blocks to be tightly abutted (see section 7 for floor block types)
- junction between floor blocks and wall must be closed (see section 7)

Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Continuous horizontal ribbon of adhesive

Nominal 8kg/m^2 gypsum-based board or 13mm plaster

4. Separating wall junction



Separating wall:

- if using robustdetails® for wall – refer to Table 3a in introduction to select an appropriate robustdetails® separating wall
- if using wall requiring pre-completion testing – seek specialist advice

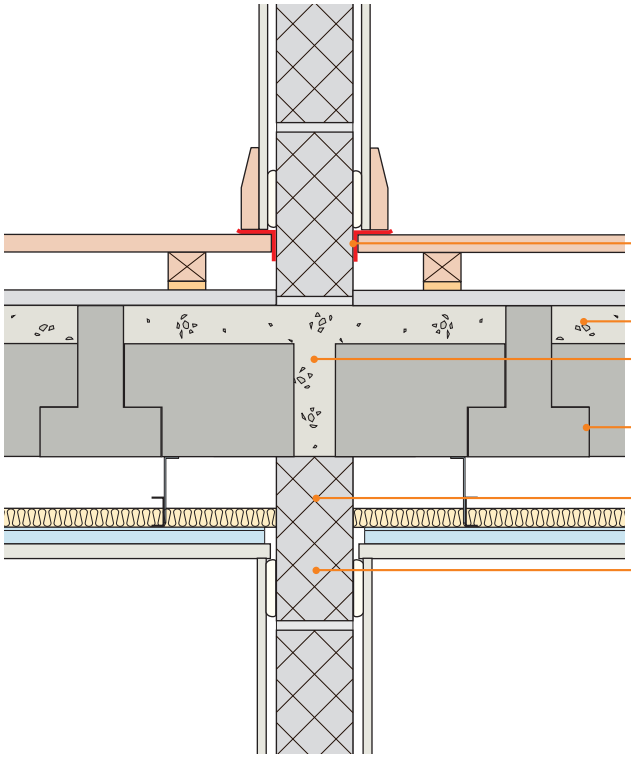
Core floor junctions with wall:

- floor blocks to be tightly abutted
- if beams are bearing on wall (i.e. perpendicular to wall) an in-situ concrete downstand of min 75mm width must be used
- min 50mm concrete topping to all floor blocks
- if beams are parallel to separating wall min 300mm wide precast concrete edge beam or min 75mm wide in-situ concrete downstand must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- all voids between precast edge beam and separating wall blockwork filled with mortar or flexible sealant

Continuous horizontal ribbon of adhesive

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

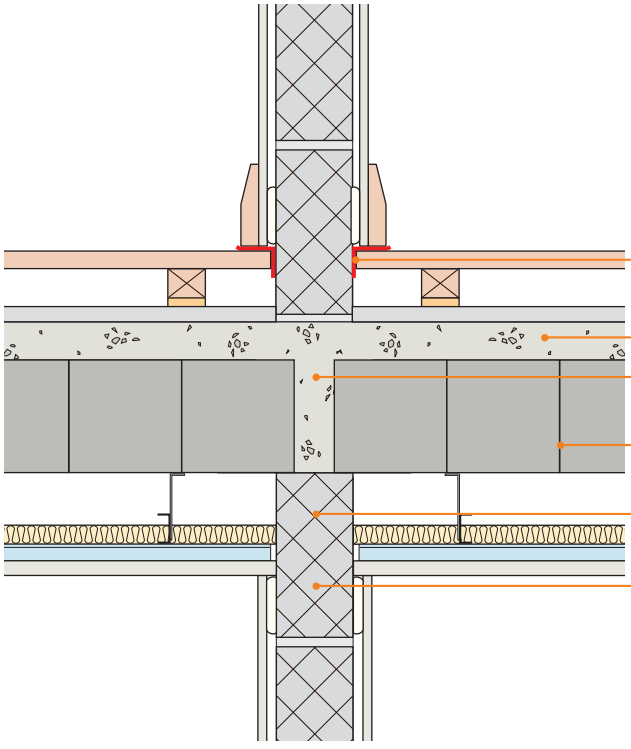


5mm (min) resilient flanking strip

Beam and block floor:

- min 50mm concrete topping to all floor blocks
- in-situ downstand must be min 50mm wide and must break vertical continuity of wall
- floor blocks must be tightly abutted (see section 7 for floor block types)
- walls must not be continuous between storeys
- Internal loadbearing blockwork partition

6. Loadbearing internal wall – floor beams bearing onto wall



5mm (min) resilient flanking strip

Beam and block floor:

- min 50mm concrete topping to all floor blocks
- in-situ downstand must be min 50mm wide and must break vertical continuity of wall
- floor blocks must be tightly abutted (see section 7 for floor block types)
- walls must not be continuous between storeys
- Internal loadbearing blockwork partition

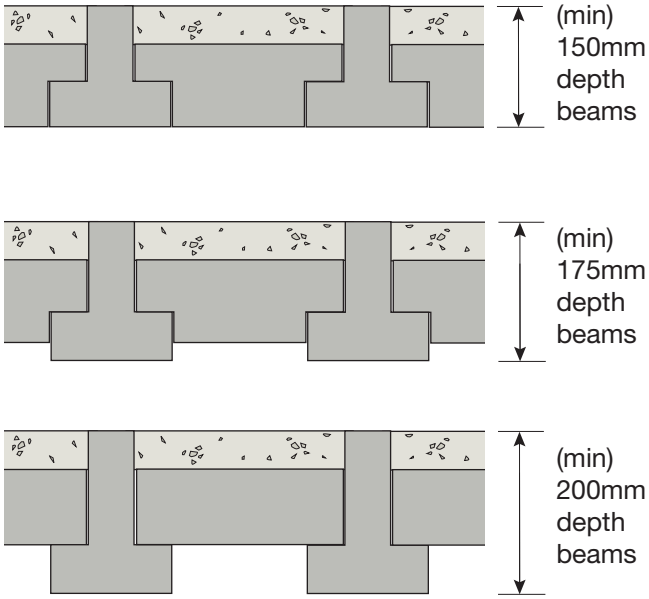
7. Floor block types

Block types

Rebated or 'T' shape dense blocks may be used for beams of 150mm depth or greater.

Rebated or 'T' shape dense blocks may be recessed for beams of 175mm or greater.

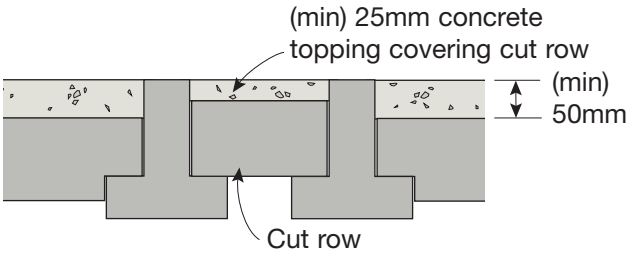
100mm dense blocks may be used for beams of 200mm depth or greater.



Cut rows

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

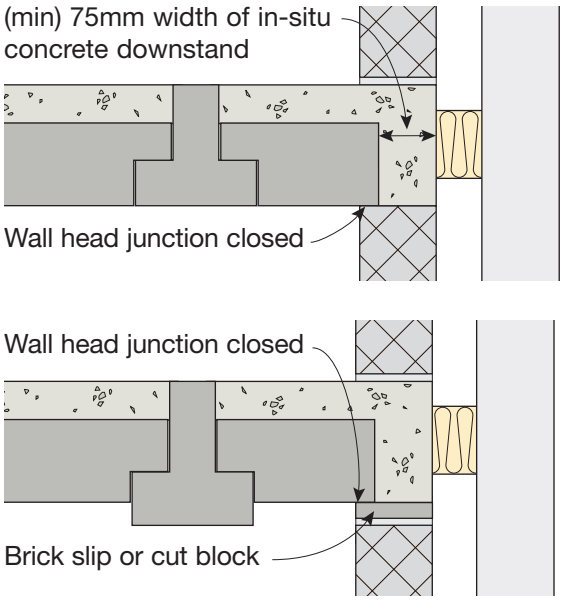
Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.



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:

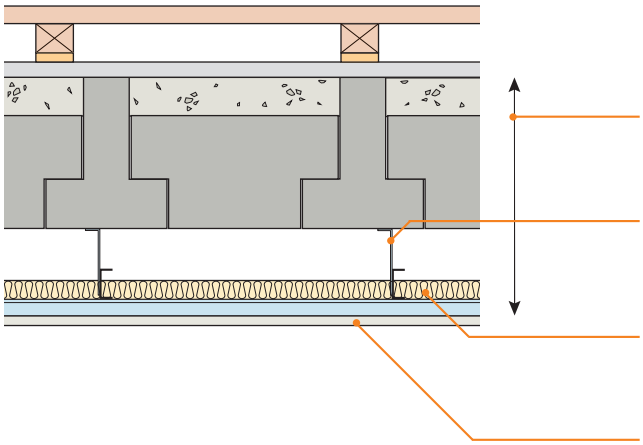
- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)

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 2m^2 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/m^3) in the ceiling void to cover whole ceiling board area

One layer of nominal 10kg/m^2 gypsum-based board

9. Floating floor treatments for E-FC-7

All floating floor treatments :

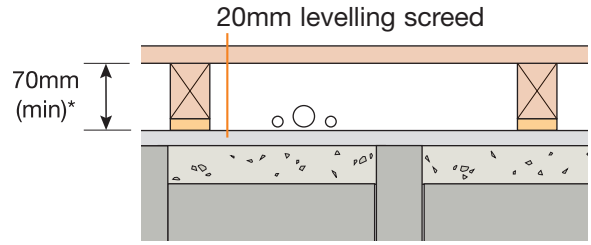
a) Must achieve a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

b) Must be installed in accordance with the manufacturer's instructions.

c) Require 5mm (min) resilient flanking strips around the perimeter of the flooring board to isolate floor from walls and skirting.

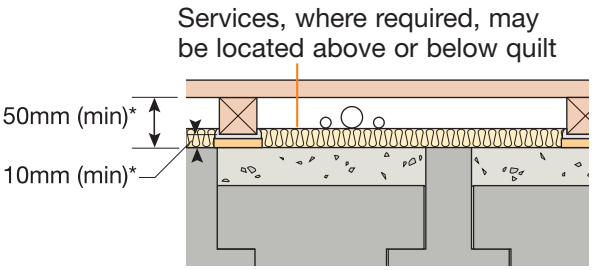
d) For further guidance on floating floor treatments and flanking strips, please refer to Appendix A.

* Note - void dimensions indicated are when floor is loaded to 25 kg/m^2.



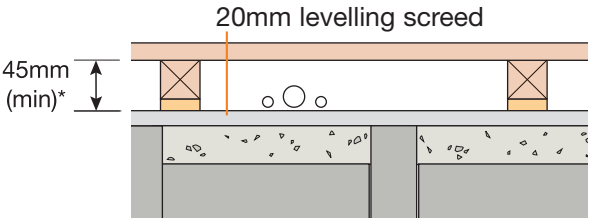
FFT1 – Resilient composite deep batten system with 20mm levelling screed

- 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/m^3)

- 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

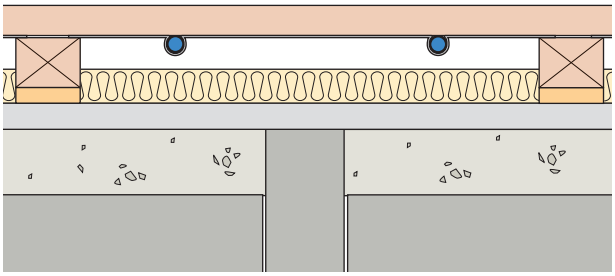
10. Underfloor heating

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

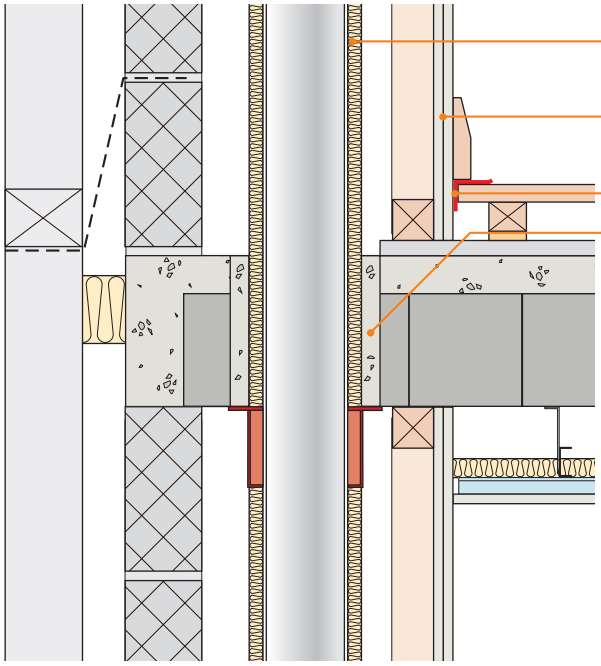
Underfloor heating must not bridge or bypass the FFT resilient layer (i.e. avoid bridging the void between the flooring board and core floor).

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

See Appendix A for further guidance.

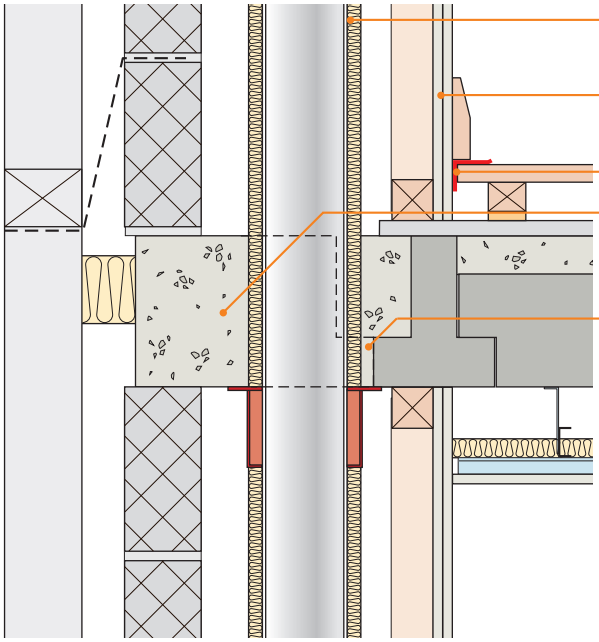


11. Services – service pipes through separating floor



- 25mm (min) mineral wool quilt (min 10kg/m^3) around pipe
- Pipe boxed in with two layers gypsum-based board, each layer nominal 8kg/m^2
- 5mm (min) resilient flanking strip
- All voids around pipe sealed

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



- 25mm (min) mineral wool quilt (min 10kg/m^3) around pipe
- Pipe boxed in with two layers gypsum-based board, each layer nominal 8kg/m^2
- 5mm (min) resilient flanking strip
- Where precast edge beams are adopted it is acceptable to use in-situ concrete local to services
- All voids around pipe sealed

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are the external wall inner leaves and separating walls of dense aggregate blockwork (min 1850-2300kg/m^3)?			
2.	Are all floor blocks of dense aggregate (1850-2300kg/m^3) and tightly abutted?			
3.	Are min 300mm wide precast concrete edge beams, or min 75mm in-situ concrete downstands installed where the beams are parallel to the external or separating flanking walls?			
4.	Are in-situ concrete downstand beams min 75mm wide where the beams are bearing on the external or separating flanking walls?			
5.	Is the concrete topping to the floor blocks at least 50mm thick?			
6.	Has the floating floor been installed correctly where a levelling screed is required under FFT1 or 3 resilient battens or mineral wool quilt is required between the FFT2 cradles/saddles?			
7.	Has the floating floor been installed in accordance with the manufacturer's instructions?			
8.	Have the resilient flanking strips been fitted at the floor edge perimeters?			
9.	Is the ceiling system metal frame, with min 25mm mineral fibre quilt laid over the whole ceiling and of min 300mm depth from top of beam to ceiling board?			
10.	Is the ceiling board 10kg/m^2 and are all joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed with two layers of nominal 8kg/m^2 gypsum-based board?			
12.	Is the separating floor satisfactorily complete?			

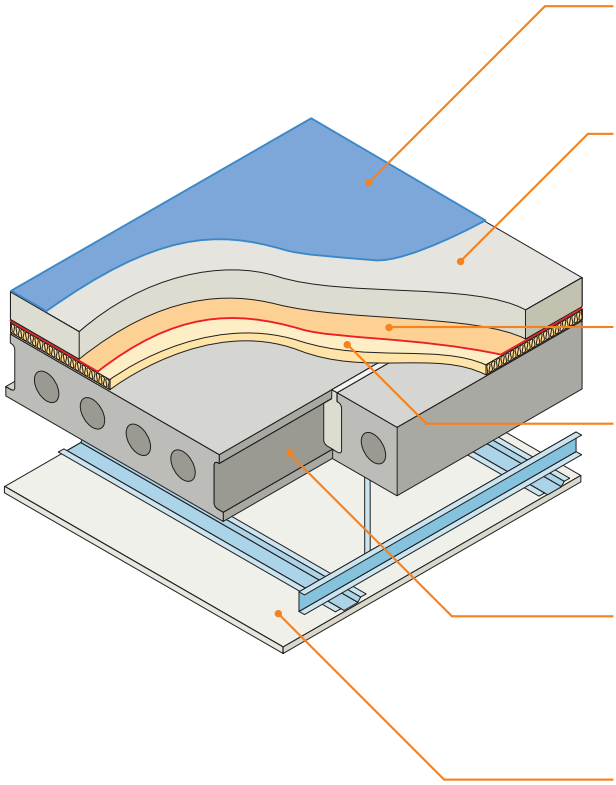
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-8

Precast concrete plank ■
Screed laid on resilient layers ■
Bonded resilient floor cover ■



Floor covering	4.5mm (min) bonded resilient floor covering (see section 4)
Screed	65mm (min) sand cement screed, or 40mm proprietary screed, 80 kg/m^2 (min) mass per unit area
Isolating layer (1)	5mm foamed polyethylene layer 30-36 kg/m^3
Isolating layer (2)	25mm mineral wool batt 140 kg/m^3 (min), 25mm EPS (flooring grade SD) or extruded polystyrene insulation
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m^2 (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

IMPORTANT

Bonded resilient floor coverings must be tested in accordance with Appendix G.

See section 4 for performance requirements and edge detail installation options.

Polyethylene foams may not be used for bonded resilient floor coverings.

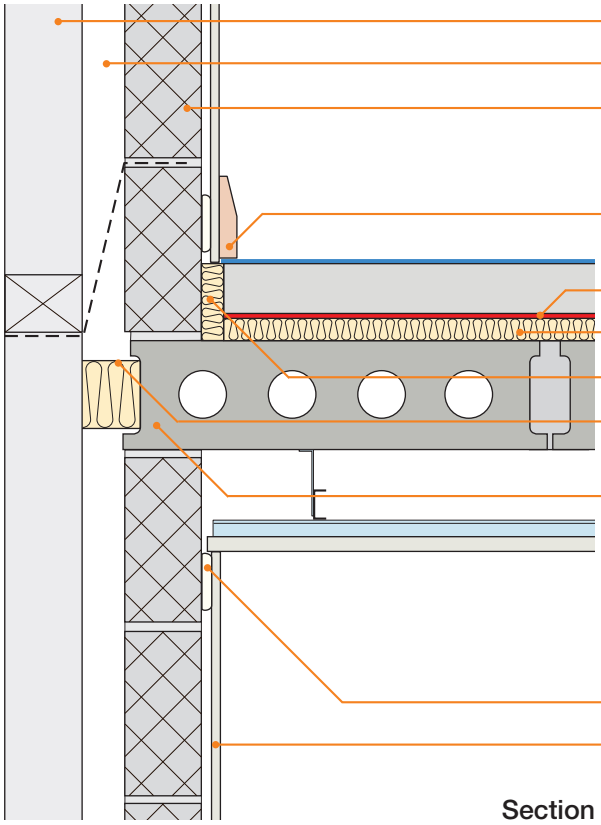
The resilient floor covering material must be overprinted with wording prohibiting its removal.

Bonded resilient floor covering should be suitably resistant to site and removals traffic.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Install the 5mm and 25mm isolating layers with staggered joints
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure the isolating edge strip is 25mm mineral wool batt (min 140 kg/m^3) or expanded (SD grade) or extruded polystyrene insulation board
- Ensure resilient floor cover is bonded using only suppliers' recommended adhesives, and is not readily removable

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³) or (1850 - 2300 kg/m³) or aircrete block (600-800 kg/m³)

Bonded resilient floor cover installed between skirting and screed (see section 4 for installation options)

5mm isolating layer (1)

25mm isolating layer (2)

25mm (min) isolation edge strip

Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Concrete planks must be built into walls:

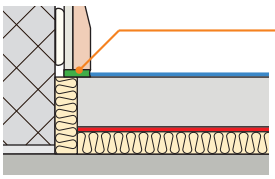
- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

Continuous ribbon of adhesive

Nominal 8kg/m² gypsum-based board or 13mm plaster

Section

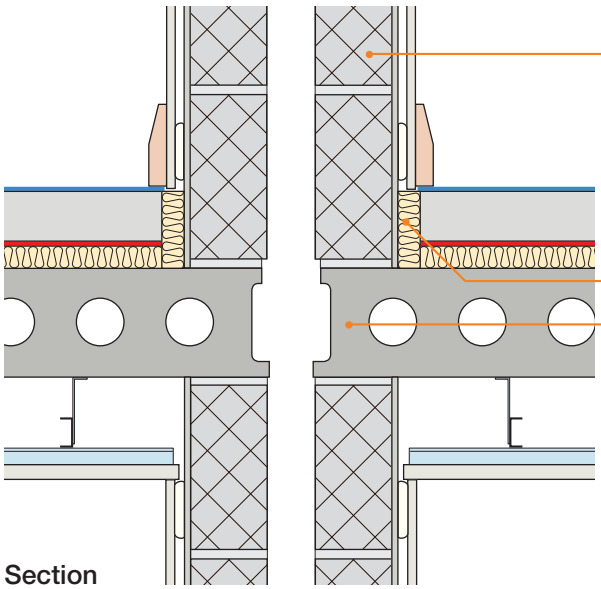
Sketch shows CT0 type ceiling treatment



Mastic sealant ensures skirting and wall lining are isolated from screed

Alternative detail

2. Separating wall junction



Separating wall:

- if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
- if using wall requiring pre-completion testing - seek specialist advice

25mm (min) isolation edge strip

Concrete planks to be built into wall:

- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

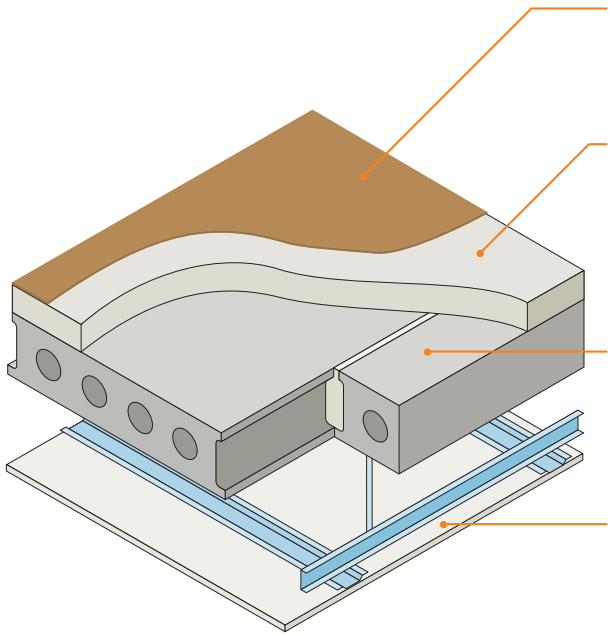
Section

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-9

3mm Thermal Economics IsoRubber Top ■
Precast concrete plank ■
Screed ■

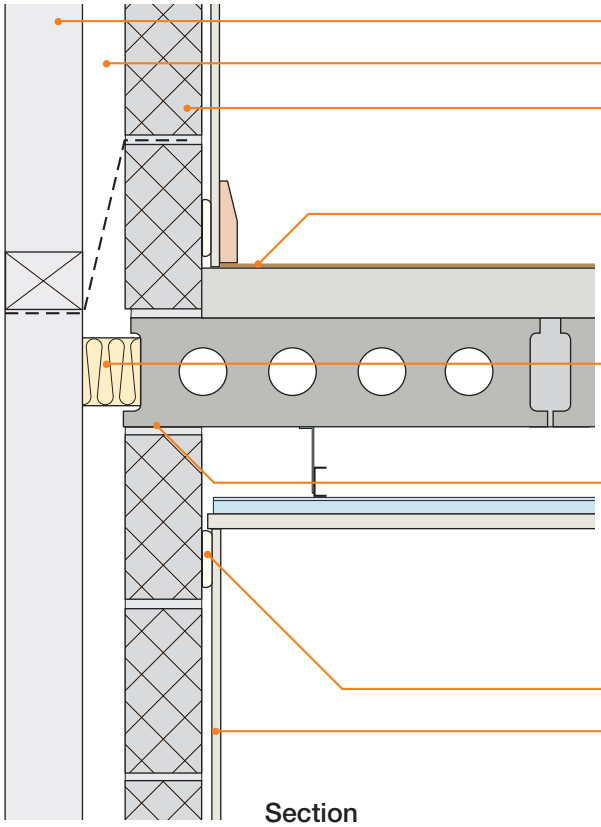


Floor covering	3mm Thermal Economics IsoRubber Top (bonded with IsoBond adhesive)
Screed	65mm (min) sand cement screed, or 40mm proprietary screed, 80 kg/m² (min) mass per unit area
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure IsoRubber Top fully covers floor area
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure IsoRubber Top is bonded to screed with IsoBond adhesive

1. External (flanking) wall junction



Section

Sketch shows CT0 type ceiling treatment

Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³) or (1850 - 2300 kg/m³) or aircrete block (600-800 kg/m³)

3mm IsoRubber Top installed over whole floor area and between skirting and screed (see section 4 for installation options for underfloor heating)

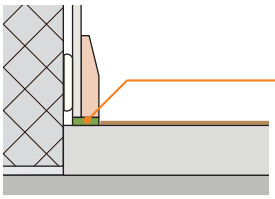
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Concrete planks must be built into walls:

- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

Continuous ribbon of adhesive

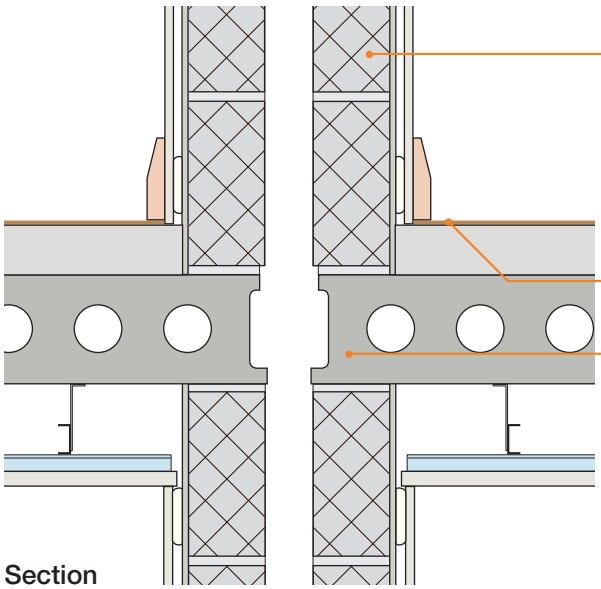
Nominal 8kg/m² gypsum-based board or 13mm plaster



Mastic sealant

Alternative detail

2. Separating wall junction



Section

Sketch shows CT0 type ceiling treatment

Separating wall:

- if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
- if using wall requiring pre-completion testing - seek specialist advice

3mm IsoRubber Top installed over whole floor area and between skirting and screed

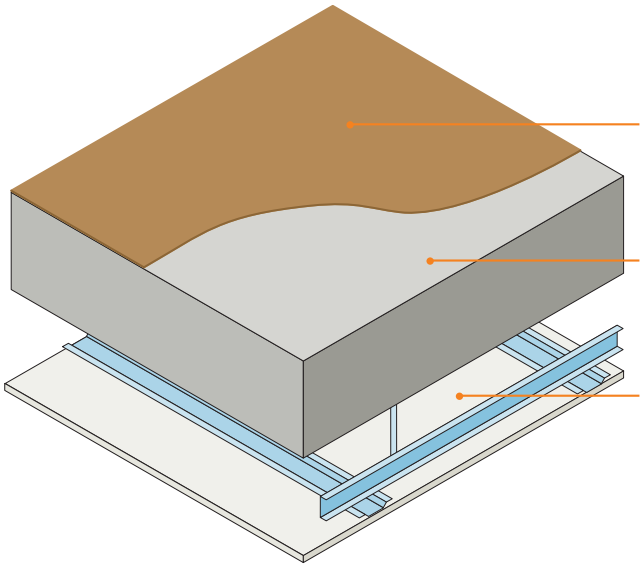
Concrete planks to be built into wall:

- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

Separating Floor – Concrete

E-FC-10

3mm Thermal Economics IsoRubber Top ■
In-situ concrete slab ■
For use in loadbearing masonry or reinforced concrete frame construction ■



Floor covering	3mm IsoRubber Top bonded to slab with IsoBond adhesive
Structural floor	175mm (min) in-situ concrete floor slab 2400 kg/m³ (min) density
Ceiling	See section 4 for suitable ceiling treatment

Reinforced concrete frame construction – alternative external (flanking) wall construction

Storey height glazing units are an acceptable alternative to the cavity walls illustrated:

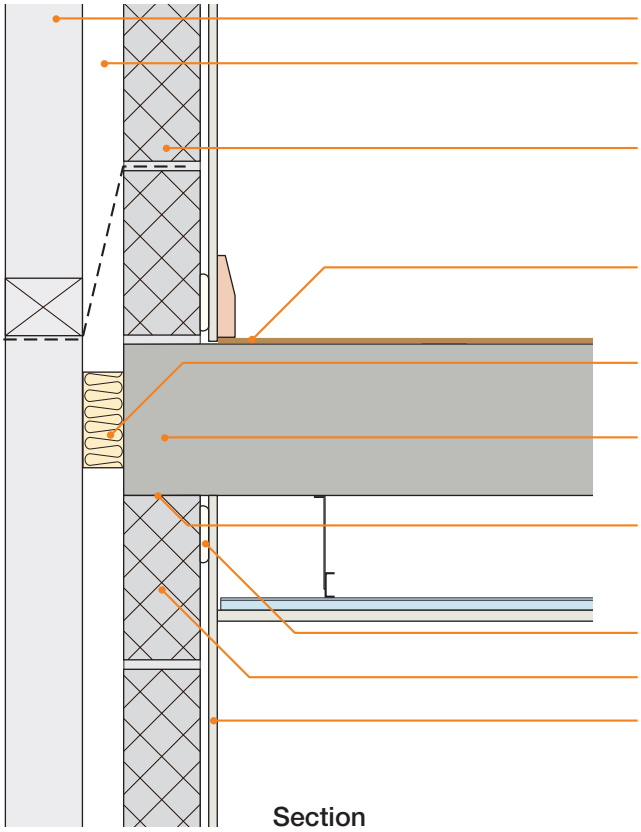
- glazing units should not be continuous between storeys
- mullion or transom supports/framing should not be continuous between dwellings
- Refer to Appendix A

Note:
Apartments may be built with robustdetails® cavity masonry separating walls (refer to Table 3a of the Introduction) provided floor slab is **NOT** continuous between dwellings

DO

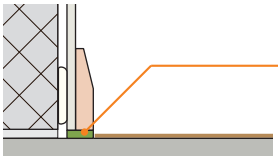
- Ensure floor slab density is 2400 kg/m³ (min)
- Fill all voids between walls and floor
- Ensure IsoRubber Top is fully bonded to slab with IsoBond adhesive
- Ensure IsoRubber Top fully covers floor surface
- Make sure there is a ceiling void of 150mm (min) and ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure that floor slab breaks the vertical continuity of flanking walls
- 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
- Refer to Appendix A

1. External (flanking) wall junction – loadbearing masonry construction



Masonry outer leaf
External wall cavity (min 50mm)
Inner leaf 100mm (min) concrete block (1350 to 1600 kg/m³) or (1850 - 2300 kg/m³)
3mm IsoRubber Top installed over whole floor area
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
Slab must not abut inner leaf
All voids between slab and blockwork filled with mortar or flexible sealant
Continuous horizontal ribbon of adhesive
Inner leaf must not be continuous between storeys
Gypsum-based board nominal 8kg/m² or 13mm plaster

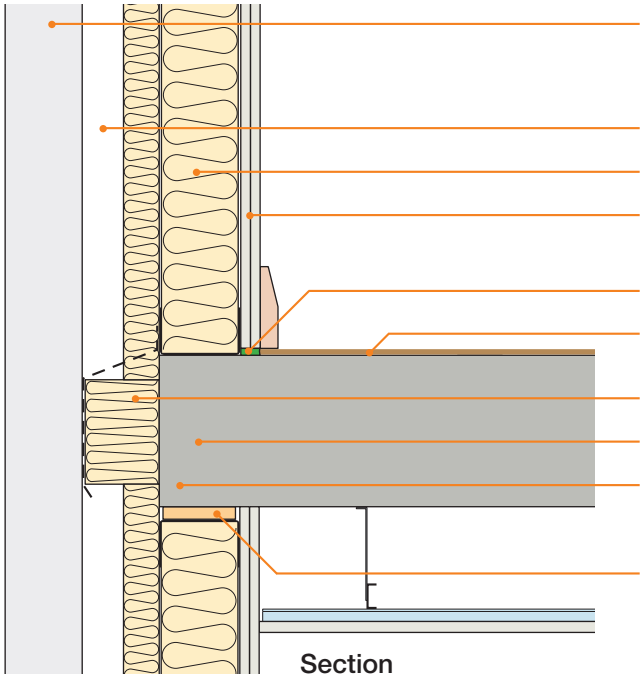
Section



Mastic sealant

Alternative detail

2. External (flanking) wall junction – reinforced concrete frame construction with steel or timber frame inner leaf

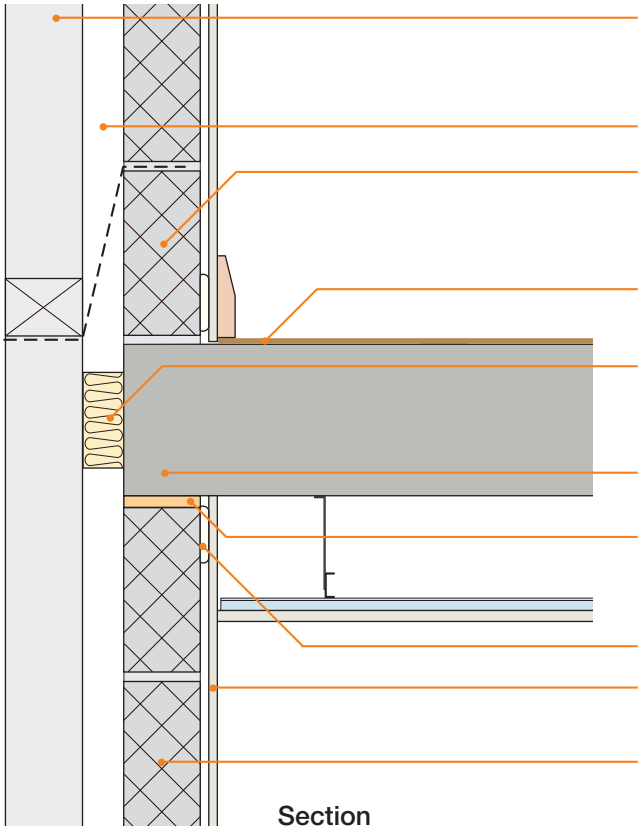


Outer leaf may be:
- masonry, or
- precast panels

External wall cavity (min 50mm)
Mineral wool insulation (min 10 kg/m³)
2 layers of gypsum-based board nominal 8 kg/m² each layer
Acoustic or flexible sealant
3mm IsoRubber Top installed over whole floor area
Close cavity with a flexible cavity stop
Inner leaf must not be continuous between storeys
Slab must not abut inner leaf
All voids between slab and inner leaf filled with flexible closer or sealant

Section

3. External (flanking) wall junction – reinforced concrete frame construction



Section

Outer leaf may be:
- masonry, or
- precast panels

External wall cavity (min 50mm)

Inner leaf 100mm (min) concrete block (1350 to 1600 kg/m³) or (1850 - 2300 kg/m³)

3mm IsoRubber Top installed over whole floor area

Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation or expanded polystyrene beads

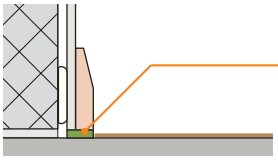
Slab must not abut inner leaf

All voids between slab and inner leaf filled with flexible closer or sealant

Continuous horizontal ribbon of adhesive

Gypsum-based board nominal 8kg/m² or 13mm plaster

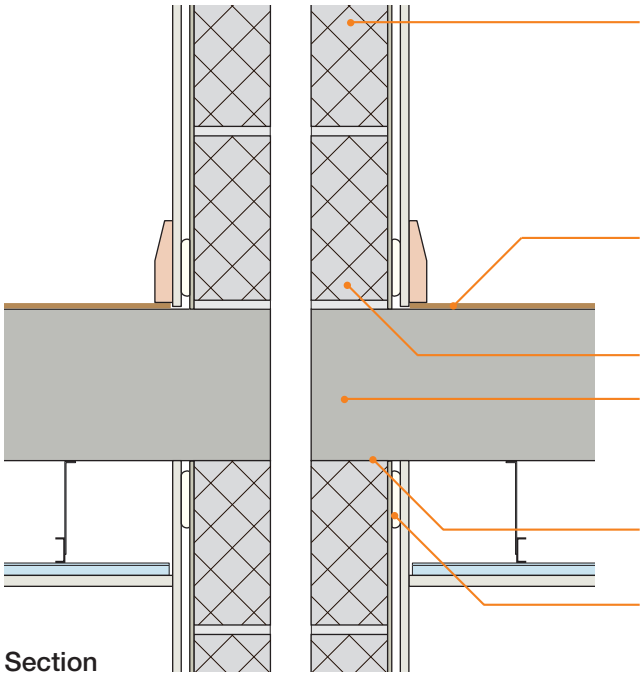
Inner leaf must not be continuous between storeys



Mastic sealant

Alternative detail

4. Separating wall junction – loadbearing masonry construction



Section

Separating wall:
- if using robustdetails® for wall – refer to Table 3a in Introduction to select an appropriate robustdetails® separating wall
- if using wall requiring pre-completion testing – seek specialist advice

3mm IsoRubber Top installed over whole floor area

Wall must not be continuous between dwellings

Slab must not abut separating wall

All voids between slabs and blockwork filled with mortar or flexible sealant

Continuous horizontal ribbon of adhesive

5. Ceiling treatment for E-FC-10

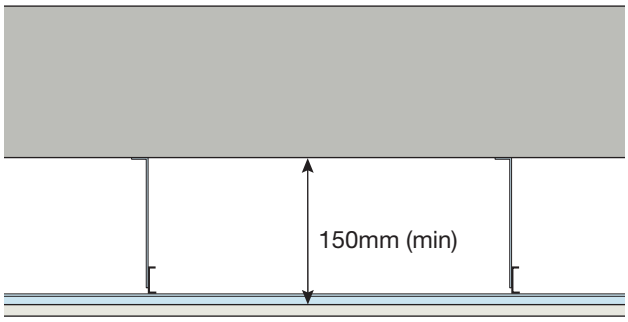
Ceiling treatment must be installed in accordance with the manufacturer's instructions.

All ceiling joints must be sealed with tape or caulked with sealant.

The maximum load on resilient bars shall not exceed that specified in the manufacturer's instructions.

Note: the sound insulation performance of ceiling treatment is increased if:

- 25mm (min) mineral wool quilt is placed in the ceiling void, and/or
- resilient hangers are used



Downlighters and recessed lighting

Provided there is a minimum ceiling void of 150mm, downlighters or recessed lighting may be installed in the ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m^2 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

Any ceiling system – 150mm void

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 10 kg/m^2 gypsum-based board

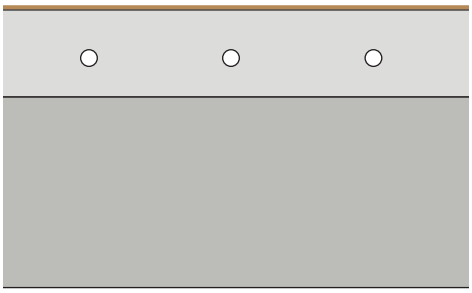
6. Underfloor heating systems within screeds

Underfloor heating systems may be installed within the screed.

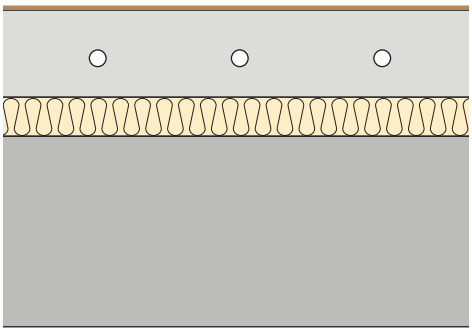
Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.

Note: If required it is permissible to have an insulation layer between screed and slab (as shown in Option B).

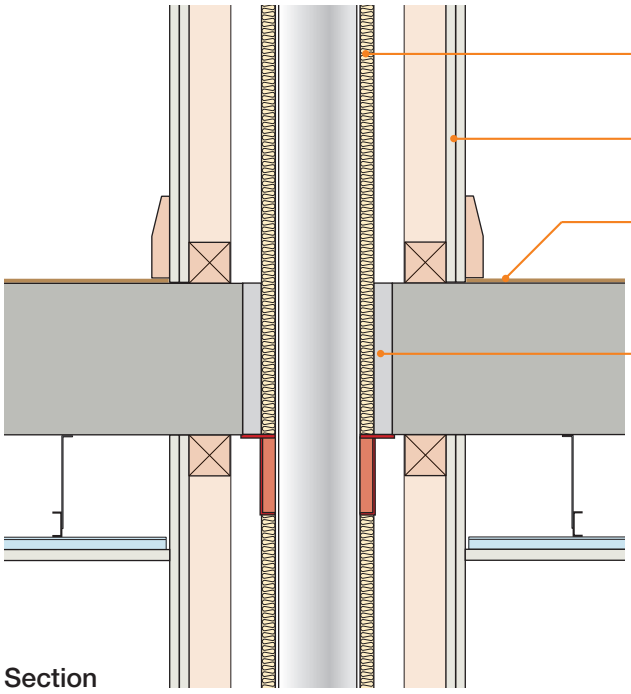
OPTION A



OPTION B



7. Services – Service pipes through separating floor



Section

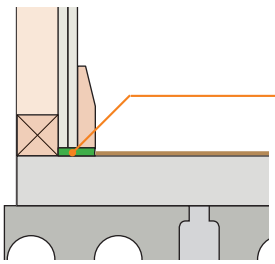
25mm (min) mineral wool quilt (min 10kg/m^3) around pipe

Pipe boxed in with two layers gypsum-based board, each layer nominal 8 kg/m^2

3mm IsoRubber Top installed over whole floor area

All voids around pipe sealed

Alternative detail



Mastic sealant

CHECKLIST (to be completed by site manager /supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is concrete slab density 2400 kg/m^3 (min)?			
2.	Where blockwork inner leaves are adopted for the external (flanking) walls are they of the correct density?			
3.	Is concrete slab 175mm (min) thick?			
4.	Is inner leaf discontinuous between storeys?			
5.	Has ceiling system been installed in accordance with the manufacturer's instructions (where applicable)?			
6.	Is there a minimum ceiling void of 150mm?			
7.	Are all ceiling board joints sealed with tape or caulked with sealant?			
8.	Has the IsoRubber Top been bonded to the slab with IsoBond adhesive?			
9.	Is the IsoRubber Top fully covering the floor surface?			
10.	Are service pipes wrapped in quilt and boxed in with two layers of gypsum-based board, nominal 8 kg/m^2 each layer			
11.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Thermal Economics, manufacturer of IsoRubber Top:

Telephone: 01582 544255 **Fax:** 01582 429305 **E-mail:** technical@thermal-economics.co.uk

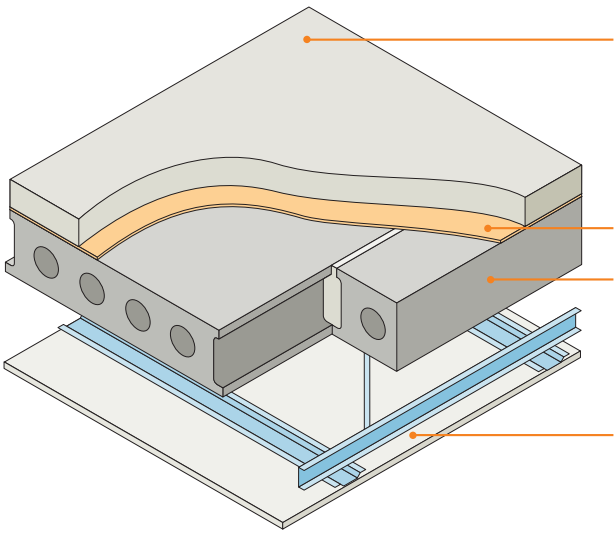
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-11

Precast concrete plank ■
Screed laid on Icopal-MONARFLOOR® TRANQUILT® resilient layer ■



Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	10mm TRANQUILT®
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth and supporting wall density

SYSTEM INSTALLATION

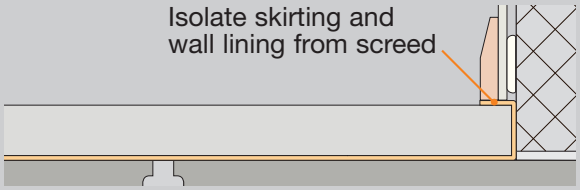
The use of this screed resilient layer system **must** incorporate the following:

1) **TRANQUILT®** (resilient layer to be laid over entire floor area with integrated overlap seal)

2) **TRANQUILT®** to be laid with 150mm upstand at wall (to allow for isolation under wall lining and skirting after screed is poured)

3) **Monarfloor Acoustic Adhesive** (to affix all **TRANQUILT®** perimeter edges to slab and integrated overlap

4) Butt joints which do not have integral overlap to be adhered and taped See section 4

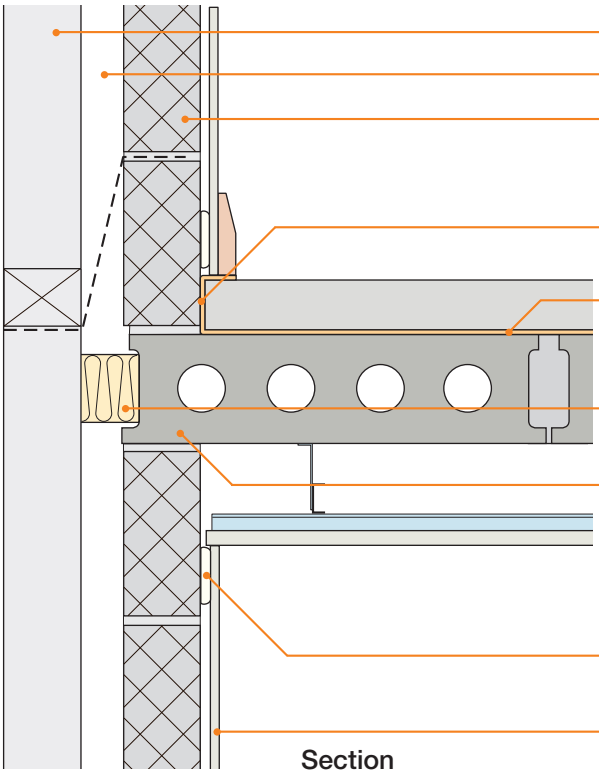


DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure TRANQUILT® resilient layer is laid over entire floor surface with 150mm upstand at perimeter walls
- Ensure integrated overlap is sealed with Monarfloor Acoustic Adhesive
- Ensure all joints without integrated overlap are sealed with adhesive and taped
- Ensure correct blocks are used in construction of external (flanking) walls
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)

From 1 January 2009, Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from Icopal-MONARFLOOR® on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

1. External (flanking) wall junction

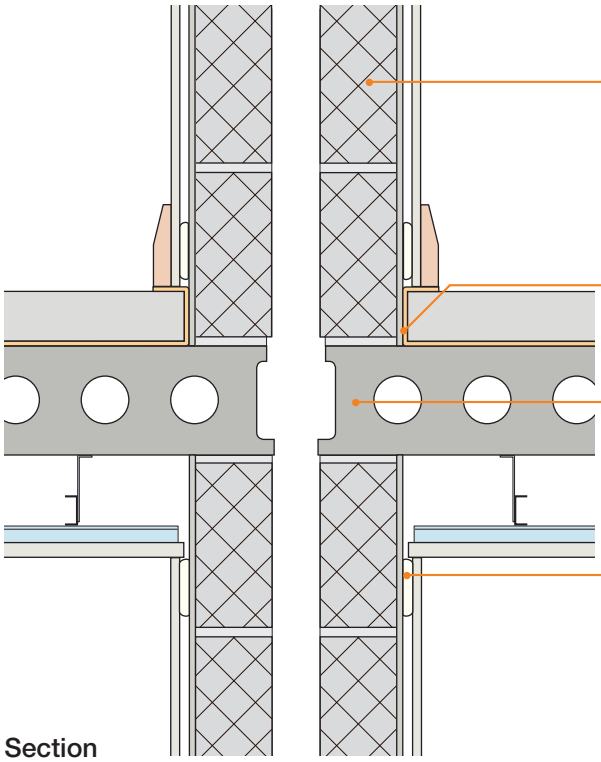


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³)
- TRANQUILT® to be laid with 150mm upstand
- TRANQUILT® resilient layer must have joints sealed using integrated overlap with adhesive or tape See section 4
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive
- Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

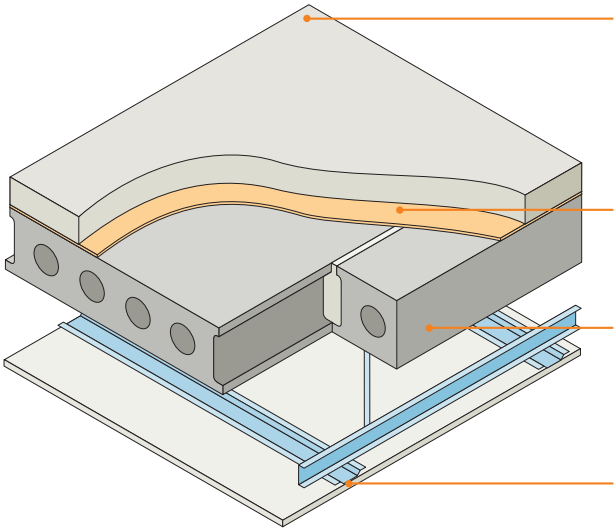
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- TRANQUILT® to be laid with 150mm upstand
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-12

Precast concrete plank ■
Screed laid on Thermal Economics IsoRubber Base HP3 resilient layer ■



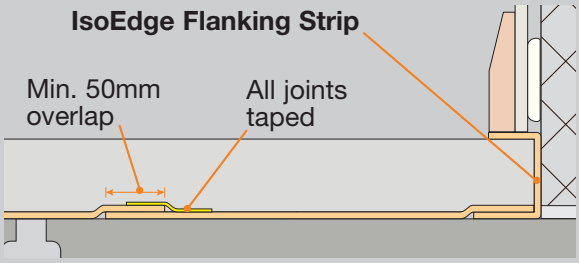
Sketch shows CT1 type ceiling treatment

Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	3mm IsoRubber Base HP3 layer with IsoEdge flanking strip
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment

SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **3mm IsoRubber Base HP3** (resilient layer to be laid over entire floor area with minimum 50mm overlaps)
2) **IsoEdge** flanking strip
3) All joints taped



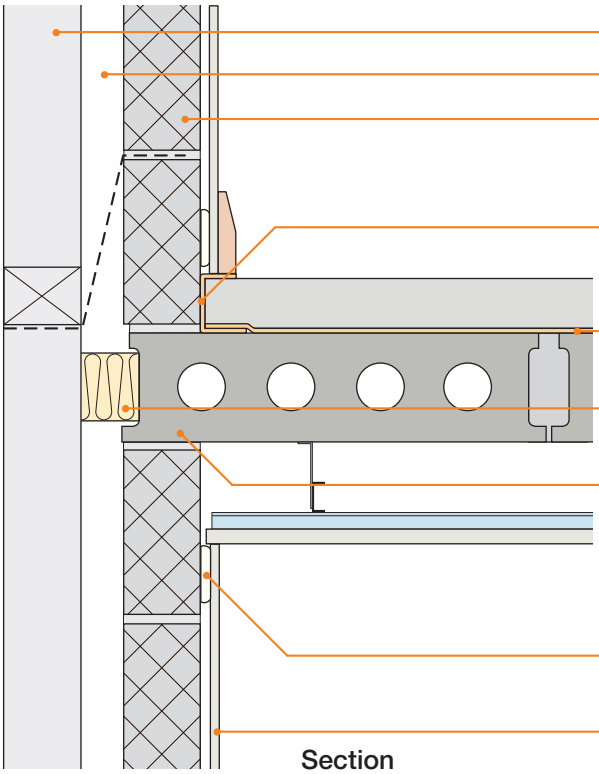
- **IsoEdge** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

From 1 January 2009, Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from Thermal Economics on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure 3mm IsoRubber Base HP3 resilient layer is laid over the entire floor surface and has overlapped joints of 50mm sealed with tape. On no account should the screed come into contact with the floor slab. (see Section 4 for 40mm proprietary screeds)
- Ensure 3mm IsoRubber Base HP3 overlaps with IsoEdge flanking strip. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the IsoEdge flanking strip isolates the skirting and wall linings. On no account should screed come into contact with the wall lining and skirting
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)

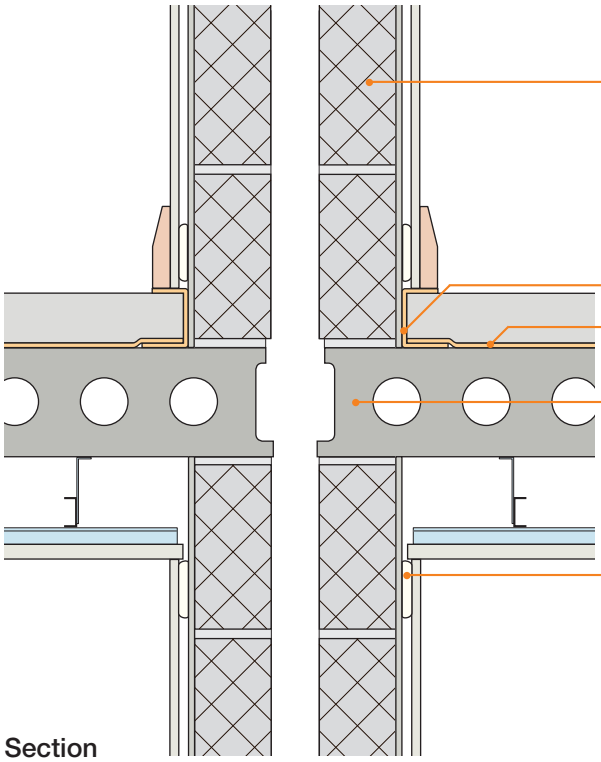
1. External (flanking) wall junction



- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350-1600 kg/m^3 or 1850-2300 kg/m^3) or aircrete block (450-800 kg/m^3)
- IsoEdge flanking strip must overlap with IsoRubber resilient layer and isolate screed from perimeter walls and skirtings
- IsoRubber resilient layer must have 50mm (min) overlapped joints and be sealed with tape
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive or IsoEdge ceiling strip
- Nominal 8 kg/m^2 gypsum-based board or 13mm plaster

Sketch shows CT1 type ceiling treatment

2. Separating wall junction



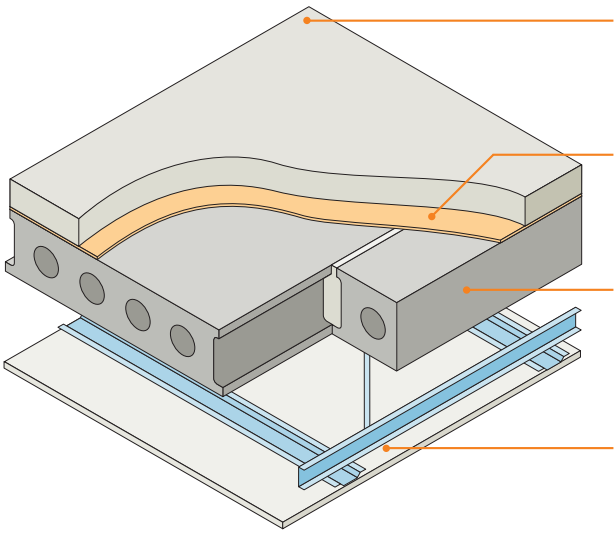
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- IsoEdge flanking strip
- IsoRubber resilient layer to overlap IsoEdge flanking strip
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive or IsoEdge ceiling strip

Sketch shows CT1 type ceiling treatment

Separating Floor – Concrete

E-FC-13

Precast concrete plank ■
Screed laid on InstaCoustic InstaLay 65 resilient layer ■



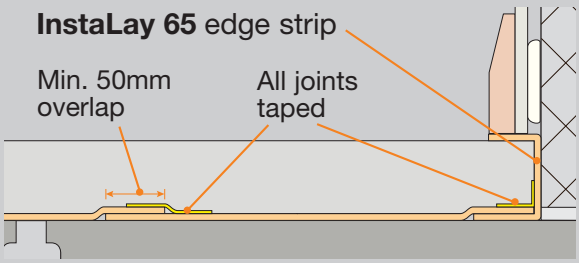
Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed
Resilient layer	InstaLay 65 layer with InstaLay 65 edge strip
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m^2 (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **InstaLay 65** (resilient layer to be laid over entire floor area with minimum 50mm overlaps)
2) **InstaLay 65** edge strip
3) All joints taped



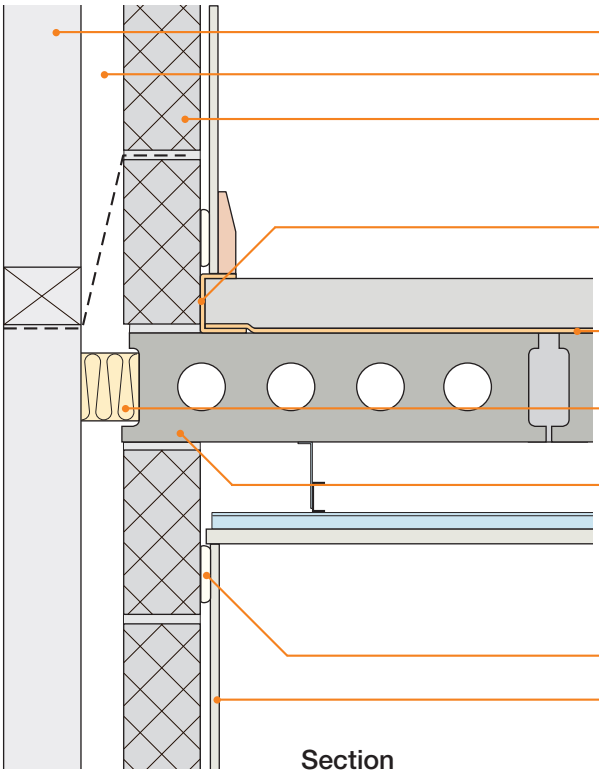
- **InstaLay 65** edge strip to be installed at all room perimeters. See manufacturer's guidance.

Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from InstaCoustic on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure InstaLay 65 resilient layer is laid over the entire floor surface and has overlapped joints of 50mm sealed with tape. On no account should the screed come into contact with the floor slab.
- Ensure InstaLay 65 overlaps with InstaLay 65 edge strip. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the InstaLay 65 edge strip isolates the skirting and wall linings. On no account should screed come into contact with the wall lining and skirting
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)

1. External (flanking) wall junction

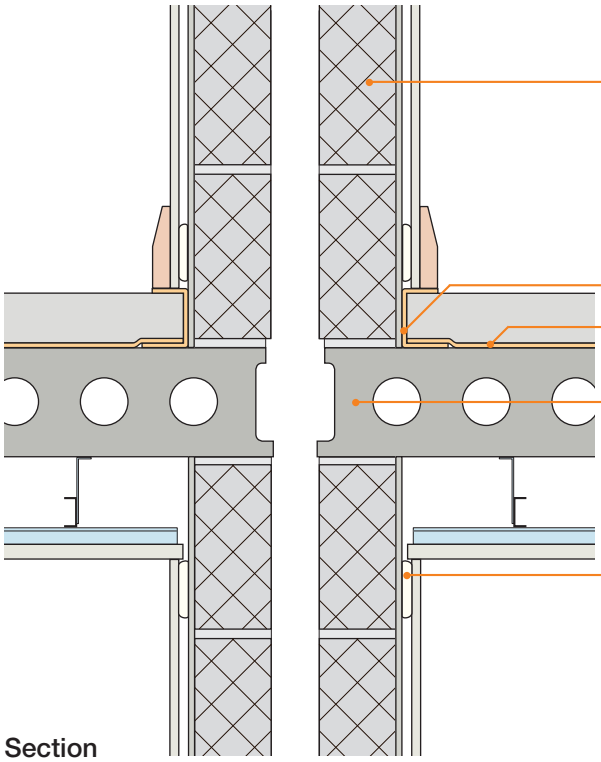


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³) or aircrete block (450-800 kg/m³)
- InstaLay 65 edge strip must overlap with InstaLay 65 resilient layer and isolate screed from perimeter walls and skirtings
- InstaLay 65 resilient layer must have 50mm (min) overlapped joints and be sealed with tape
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive
- Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

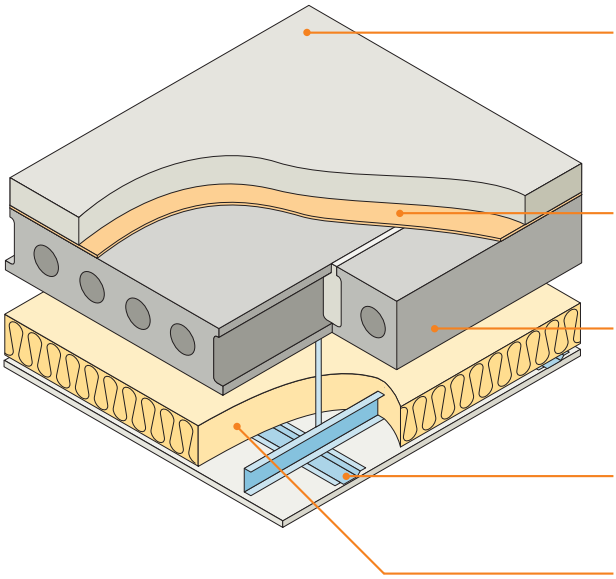
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- InstaLay 65 edge strip
- InstaLay 65 resilient layer to overlap InstaLay 65 edge strip
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-14

Precast concrete plank ■
Screed laid on Thermal Economics IsoRubber Code layer ■



Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	6mm IsoRubber Code layer with IsoEdge 6/260 flanking strip
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment
Absorbent material	50mm (min) mineral wool quilt insulation 10 kg/m³ (min)

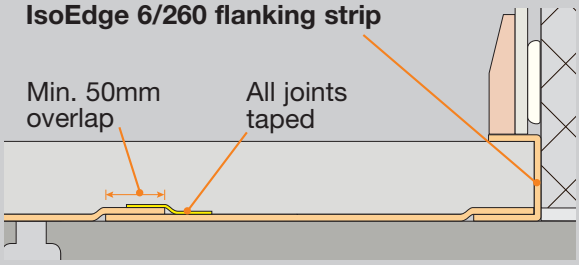
SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **6mm IsoRubber Code layer** (resilient layer to be laid over entire floor area with minimum 50mm overlaps)

2) **IsoEdge 6/260** flanking strip

3) All joints taped



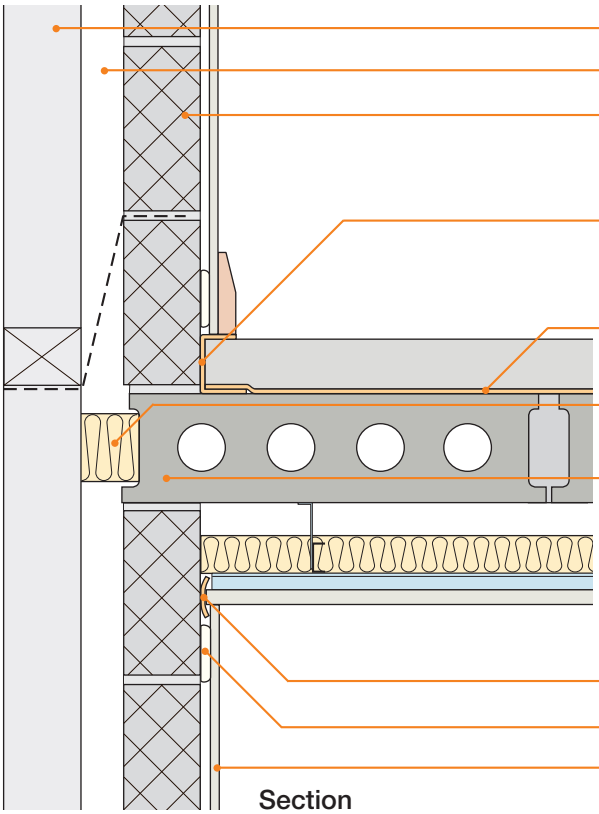
- **IsoEdge 6/260** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from Thermal Economics on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure 6mm IsoRubber resilient layer is laid over the entire floor surface and has overlapped joints of 50mm sealed with tape. On no account should the screed come into contact with the floor slab. (see Section 4 for 40mm proprietary screeds)
- Ensure 6mm IsoRubber overlaps with IsoEdge flanking strip. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the IsoEdge flanking strip isolates the skirting and wall linings. On no account should screed come into contact with the wall lining and skirting
- Ensure that only the correct blocks are used in the construction of external (flanking) walls, unless specifically referred to in the Handbook all blocks should be assumed to be solid (i.e. not hollow or cellular)
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions

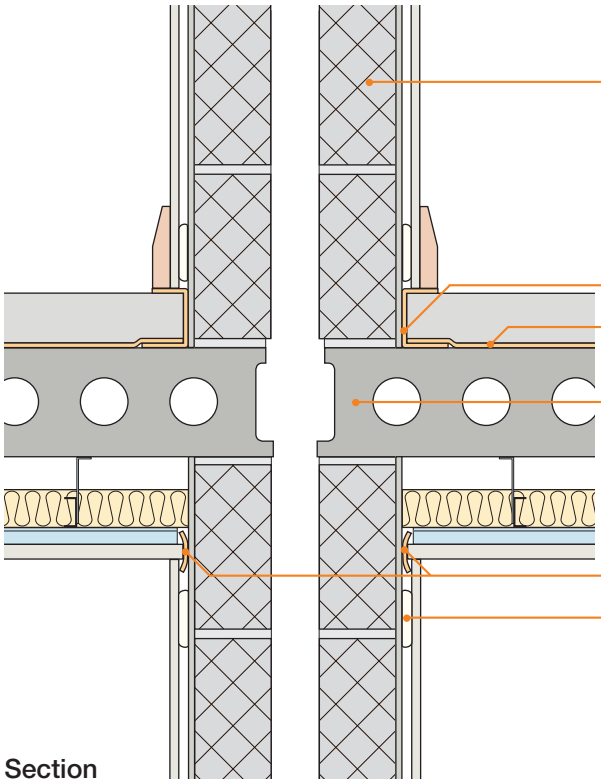
1. External (flanking) wall junction



- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³) or aircrete block (450-800 kg/m³)
- IsoEdge 6/260 flanking strip must overlap with IsoRubber resilient layer and isolate screed from perimeter walls and skirtings
- IsoRubber Code layer must have 50mm (min) overlapped joints and be sealed with tape
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Isosonic ceiling strip
- Continuous horizontal ribbon of adhesive
- Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



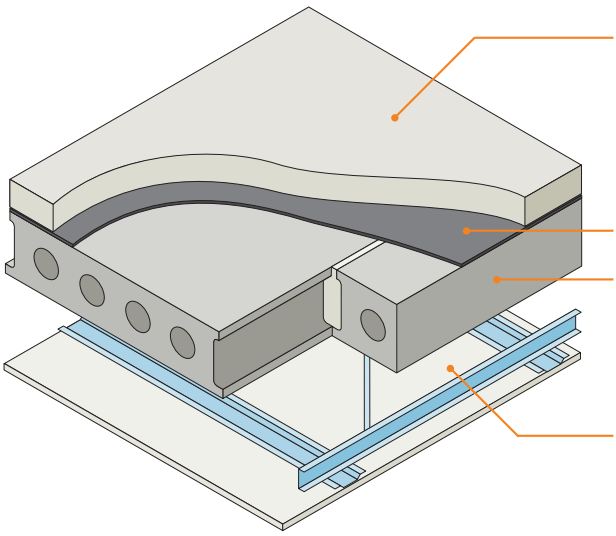
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- IsoEdge 6/260 flanking strip
- IsoRubber Code layer to overlap IsoEdge flanking strip
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Isosonic ceiling strip
- Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-15

Precast concrete plank ■
Screed laid on Regupol Quietlay resilient layer ■



Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	Regupol Quietlay
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

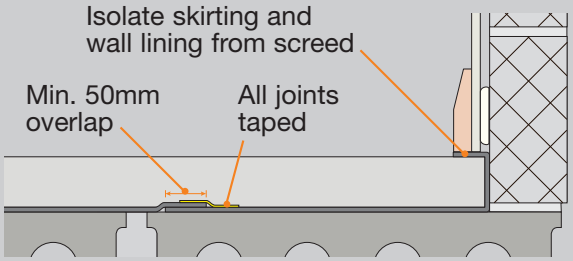
SYSTEM INSTALLATION

The use of this screed resilient layer system **must** incorporate the following:

1) **Regupol Quietlay** (resilient layer to be laid over entire floor area)

2) **Regupol Quietlay** to be laid with min 100mm upstand at wall (to allow for isolation under wall lining and skirting after screed is poured)

3) All joints taped with Regupol Tape only

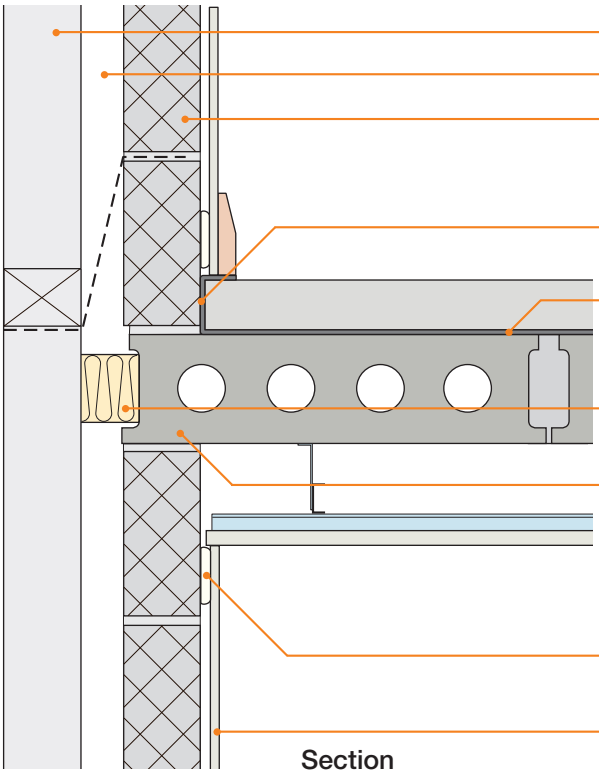


DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure resilient layer is laid over entire floor surface with min 100mm upstand at perimeter walls
- Ensure that ‘Regupol’ is printed on the resilient layer material
- Ensure all joints are taped with Regupol Tape
- Ensure correct blocks are used in construction of external (flanking) walls
- Make sure ceiling treatment is installed in accordance with the manufacturer’s instructions (where applicable)

Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from CMS Danskin on the installation of the screed and resilient layer. Please contact Robust Details Limited for further information.

1. External (flanking) wall junction

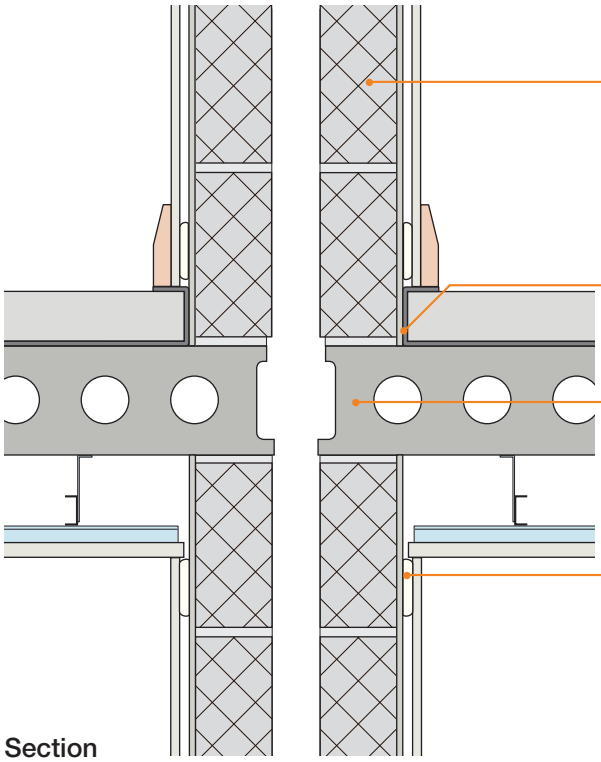


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 - 2300 kg/m³)
- Regupol Quietlay to be laid with min 100mm upstand
- Regupol Quietlay resilient layer must have joints taped with Regupol Tape. See section 4
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - walls must not be continuous between storeys
  - planks must not abut inner leaf
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive
- Nominal 8 kg/m² gypsum-based board or 13mm plaster

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

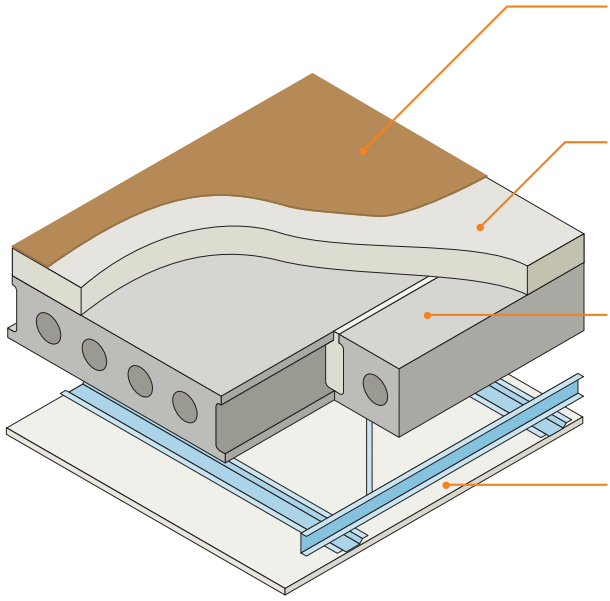
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- Regupol Quietlay to be laid with min 100mm upstand
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

Separating Floor – Concrete

E-FC-16

3mm Thermal Economics IsoRubber CC3 ■
Precast concrete plank ■
Screed ■

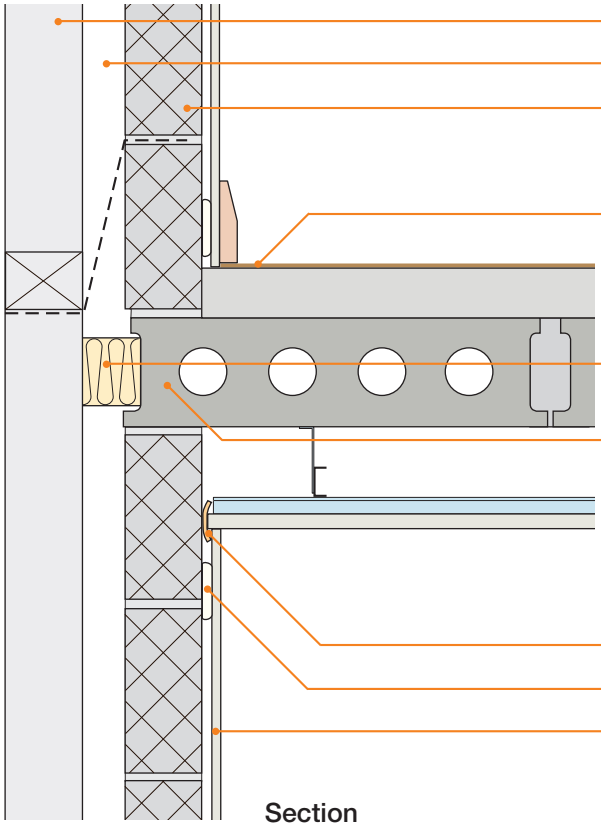


Floor covering	3mm Thermal Economics IsoRubber CC3 (bonded with IsoBond adhesive)
Screed	65mm (min) sand cement screed
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m^2 (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

DO

- Butt planks tightly together
- Grout all joints between planks
- Fill all voids between walls and floor
- Ensure IsoRubber CC3 fully covers floor area
- Make sure ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure IsoRubber CC3 is bonded to screed with IsoBond adhesive

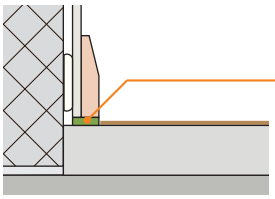
1. External (flanking) wall junction



Section

Sketch shows CT0 type ceiling treatment

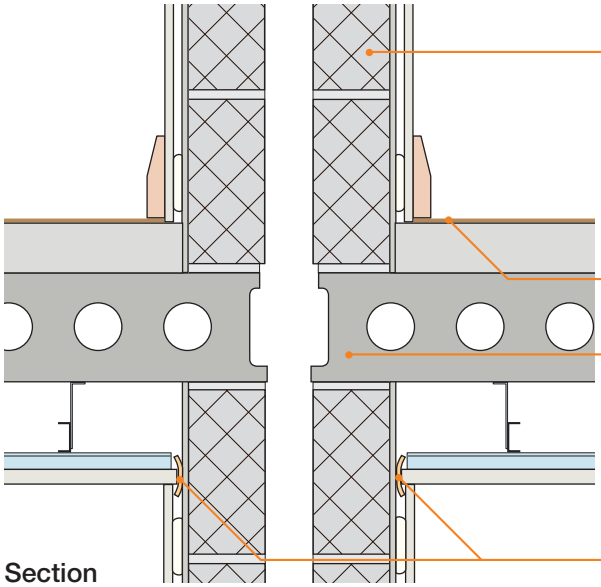
- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³) or (1850 - 2300 kg/m³) or aircrete block (600-800 kg/m³)
- 3mm IsoRubber CC3 installed over whole floor area and between skirting and screed (see section 4 for installation options for underfloor heating)
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Concrete planks must be built into walls:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- IsoSonic ceiling strip
- Continuous ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster



- Mastic sealant

Alternative detail

2. Separating wall junction



Section

Sketch shows CT0 type ceiling treatment

- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing - seek specialist advice
- 3mm IsoRubber CC3 installed over whole floor area and between skirting and screed
- Concrete planks to be built into wall:
  - wall must not be continuous between storeys
  - planks must not abut separating wall
  - all voids between planks and blockwork filled with mortar or flexible sealant
- IsoSonic ceiling strip