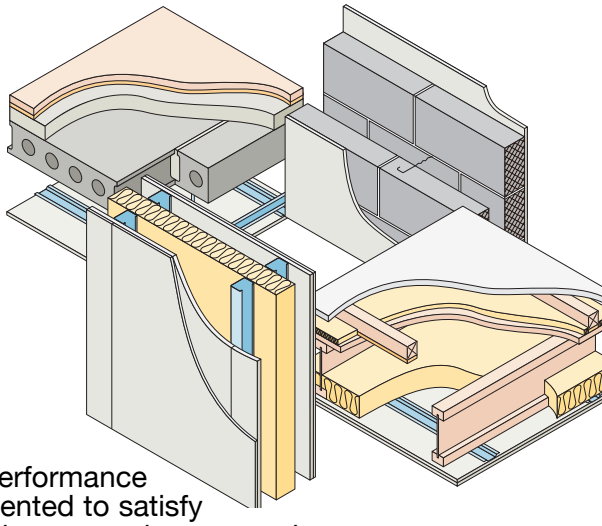

July 2025 Update Pack

Dear Colleague,

Thank you for downloading this July 2025 update.

When carrying out surveillance of scheme standards through inspection and testing, robustdetails® will take account of noted performance implications of construction technology and techniques implemented to satisfy other areas of the Building Regulations. This update includes minor amendments made to Appendix A1 concerning the detailing of masonry separating walls below finished ground floor level where support to a membrane is required. Guidance on the detailing of spandrel panels has also been updated, including an additional option to utilise Glasroc X Sheathing Board 15mm.

Timber separating floors E-FT-3, E-FT-5 and E-FT-6 have had minor amendments to the artwork to improve consistency of detailing at junctions with external and internal flanking walls and partitions. E-FT-5 and E-FT-6 now also require acceptance of on-site training in the installation of the key components to ensure consistency of performance through correct workmanship.

Other amendments made revise Besblock to Holcim as the rebranded 'Holcim Star Performer block'. 'Knauf Insulation Masonry Party Wall Slab' also replaces the previous Earthwool branding.

Please update your February 2025, 4th Edition Handbook as follows:

1. Remove and replace **page 3/4** of the Introduction.
2. Remove and replace **pages 1/2 and 7/8** of E-WM-5.
3. Remove and replace **pages 1/2 and 7/8** of E-WM-11.
4. Remove and replace **pages 1/2 and 5/6** of E-WM-17.
5. Remove and replace **pages 1/2 and 5/6** of E-WM-19.
6. Remove **all pages** of E-WM-22 and replace with new **pages 1-6**.
7. Remove and replace **pages 1/2 and 5/6** of E-WM-26.
8. Remove **all pages** of E-WM-32 and replace with new **pages 1-6**.
9. Remove and replace **page 5/6** of E-FC-17.
10. Remove and replace **page 1/2** of E-FC-19.
11. Remove and replace **page 5/6** of E-FT-1.
12. Remove and replace **pages 1-8** of E-FT-3.
13. Remove and replace **pages 1/2 and 5/6** of E-FT-5.
14. Remove **all pages** of E-FT-6 and replace with new **pages 1-8**.
15. Remove and replace **page 5/6** of E-FS-2.
16. Remove and replace **pages 1/2 and 5-8** of Appendix A1.

Yours sincerely

John Thompson

Chief Executive,
Robust Details Limited

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Changes to the fourth edition following July 2025 update

Section	Page	Amendment
Introduction		
Table 1	3	'Star Performer' Block manufacturer name changed to Holcim.
Separating Wall – Masonry		
E-WM-5		
All relevant product descriptions	1-2 & 8	'Star Performer' Block manufacturer name changed to Holcim.
E-WM-11		
All relevant product descriptions	1-2 & 8	'Star Performer' Block manufacturer name changed to Holcim.
E-WM-17		
All relevant product descriptions	1-2 & 6	'Star Performer' Block manufacturer name changed to Holcim.
E-WM-19		
All relevant product descriptions	1-2 & 6	'Star Performer' Block manufacturer name changed to Holcim.
E-WM-22		
All relevant product descriptions	1-6	Knauf Earthwool Masonry Party Wall Slab renamed as Knauf Insulation Masonry Party Wall Slab. Product and cavity width clarified as being a minimum with wider cavities with dimensionally equivalent insulation also permitted.
E-WM-26		
All relevant product descriptions	1-2 & 6	'Star Performer' Block manufacturer name changed to Holcim.
E-WM-32		
All relevant product descriptions	1-6	Knauf Earthwool Masonry Party Wall Slab renamed as Knauf Insulation Masonry Party Wall Slab. Product and cavity width clarified as being a minimum with wider cavities with dimensionally equivalent insulation also permitted.
Separating Floor – Concrete		
E-FC-17		
Checklist	6	Checklist point 3 amended to remove dependency of precast plank thickness and ceiling treatment on type of approved flanking walls.
E-FC-19		
Detail title page	1	Ceiling description amended to remove inference of a dependency between ceiling treatment options and floor plank thickness and flanking wall blockwork.

Section	Page	Amendment
Separating Floor – Timber		
E-FT-1		
Floating Floor treatments	5	Minimum void dimension created by resilient cradle or batten clarified as being when loaded to 25 kg/m^2.
E-FT-3		
Floor to wall treatments	2-5	Wallboard to ceiling board alignment redrawn for consistency with other timber floor details. Ceiling board shown as permitted to be continuous across top of non-load bearing partitions, with consistency to other timber floor details.
Floating floor treatments	7	Minimum void dimension created by resilient cradle or batten clarified as being when loaded to 25 kg/m^2.
E-FT-5		
Detail title page	1	Requirement added to receive on-site training from Cellecta® on the insulation.
Floor to wall junctions	2 & 5	Wallboard to ceiling board alignment redrawn for consistency with other timber floor details.
Checklist	6	Requirement added to receive on-site training from Cellecta® on the insulation.
E-FT-6		
Detail title page	1	Requirement added to receive on-site training from Cellecta® on the insulation.
Floor to wall junctions	2-5 & 7	Wallboard to ceiling board alignment redrawn for consistency with other timber floor details. Ceiling board shown as permitted to be continuous across top of non-load bearing partitions, with consistency to other timber floor details.
Checklist	8	Requirement added to receive on-site training from Cellecta® on the insulation.
Separating Floor – Metal Joists		
E-FS-2		
Floating Floor treatments	5	Minimum void dimension created by resilient cradle or batten clarified as being when loaded to 25 kg/m^2.
Appendix A1		
Cavity stops	2	Additional cavity stop option introduced for separating blown-fibre filled vavity walls.
Spandrel panels	5	Drawing amended to reflect more commonly used framing sizes. Additional option for Glasroc X Sheathing Board 15mm introduced.
Radon and methane barriers	7	New detail introduced to permit low-density rigid insulation only where necessary to support a membrane crossing the cavity below finished floor level and subject to avoidance of debris accumulations.

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Introduction

List of Robust Details

Table 1 – Separating walls

E-WM-1	masonry – dense aggregate blockwork (wet plaster)
E-WM-2	masonry – lightweight aggregate blockwork (wet plaster)
E-WM-3	masonry – dense aggregate blockwork (render and gypsum-based board)
E-WM-4	masonry – lightweight aggregate blockwork (render and gypsum-based board)
E-WM-5	masonry – Holcim Star Performer® cellular blockwork (render and gypsum-based board)
E-WM-6	masonry – aircrete blockwork (render and gypsum-based board)
E-WM-7	Suspended from further registrations
E-WM-8	Suspended from further registrations
E-WM-9	masonry – solid dense aggregate blockwork (render and gypsum-based board)
E-WM-10	masonry – aircrete thin joint blockwork with specified wall ties (render and gypsum-based board finish)
E-WM-11	masonry – lightweight aggregate blockwork (render and gypsum-based board) 100mm minimum cavity
E-WM-12	masonry – Plasmor “Aglite Ultima” lightweight aggregate blockwork (render and gypsum-based board)
E-WM-13	masonry – aircrete thin joint - untied blockwork (render and gypsum-based board)
E-WM-14	Suspended from further registrations
E-WM-15	Suspended from further registrations
E-WM-16	masonry – dense aggregate blockwork (render and gypsum-based board) with 100mm minimum cavity
E-WM-17	masonry – lightweight aggregate blockwork Saint Gobain-Isover RD Party Wall Roll (gypsum-based board)
E-WM-18	masonry – dense aggregate blockwork (wet plaster) with 100mm minimum cavity
E-WM-19	masonry – dense or lightweight aggregate blockwork (render and gypsum-based board) with 100mm minimum cavity and MONARFLOOR® BRIDGESTOP® system
E-WM-20	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity
E-WM-21	masonry – lightweight aggregate blockwork (wet plaster) with 100mm minimum cavity
E-WM-22	masonry – lightweight aggregate blockwork – Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (gypsum-based board) with 100mm minimum cavity
E-WM-23	masonry – aircrete blockwork Superglass Party Wall Roll (gypsum-based board) 100mm min cavity
E-WM-24	masonry – aircrete blockwork Saint Gobain – Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity
E-WM-25	masonry – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 100mm minimum insulated cavity
E-WM-26	masonry – Holcim Star Performer® cellular blockwork (gypsum-based board) with 100mm minimum insulated cavity
E-WM-27	masonry – lightweight aggregate blockwork Superglass Party Wall Roll (gypsum-based board) with minimum 75mm cavity
E-WM-28	masonry – lightweight aggregate blockwork Knauf Supafil® Party Wall (gypsum-based board) with minimum 100mm cavity
E-WM-29	masonry – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 75mm minimum insulated cavity
E-WM-30	masonry – aircrete blockwork Knauf Supafil® Party Wall (gypsum-based board) with 100mm min cavity
E-WM-31	masonry – H+H – Celcon Vertical Wall Panels (gypsum-based board) with 100mm minimum insulated cavity
E-WM-32	masonry – lightweight aggregate blockwork Knauf Earthwool Masonry Party Wall Slab (gypsum-based board) with minimum 75mm cavity
E-WM-33	masonry – lightweight aggregate blockwork Superglass Superwhite 34 (gypsum-based board) with 100mm minimum cavity
E-WM-34	masonry – Plasmor “Aglite Ultima’ lightweight aggregate blockwork (gypsum-based board) with full-fill cavity insulation
E-WM-35	masonry – aircrete blockwork Superglass Superwhite 34 (gypsum-based board) with 100mm minimum cavity

See over for timber and steel frame walls

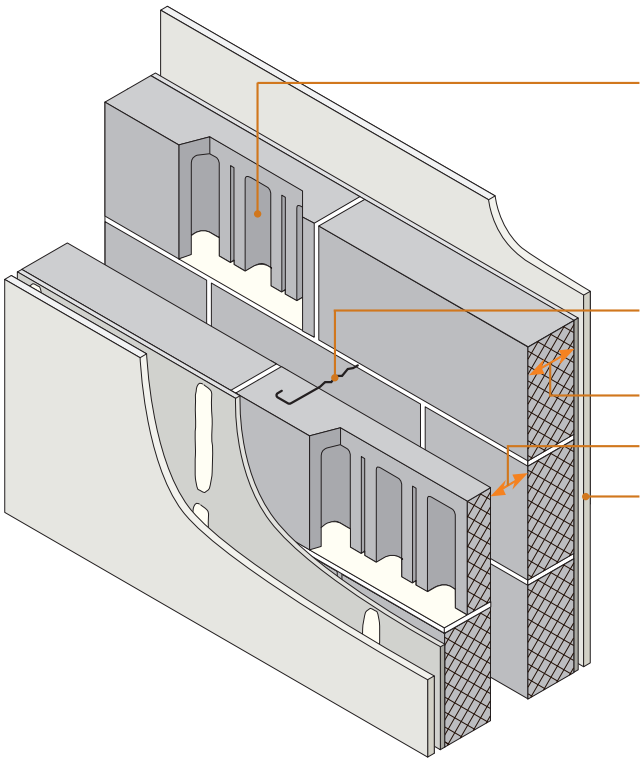
List of Robust Details

Table 1 (continued) – Separating walls

E-WT-1	timber frame – without sheathing board
E-WT-2	timber frame – with sheathing board
E-WT-3	Suspended from further registrations
E-WT-4	Suspended from further registrations
E-WS-1	steel frame – twin metal frame
E-WS-2	steel frame – British Gypsum Gypwall QUIET IWL
E-WS-3	steel frame – modular steel frame housing
E-WS-4	steel frame – twin metal frame - 250mm between linings
E-WS-5	steel frame – twin metal frame
E-WS-6	steel frame – modular steel frame volumetric housing

Separating Wall – Cavity Masonry E-WM-5

Holcim Star Performer® dense aggregate cellular blocks ■
Render and gypsum-based board on dabs ■



Block	Only Holcim Star Performer® 5-bridge cellular block (4-core, concrete density 1995 kg/m³, block density 1528 kg/m³, unit weight 14.5 kg)
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Block thickness	100mm (min), each leaf
Cavity width	75mm (min)
Wall finish	Gypsum based-board (nominal 8 kg/m²) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish Typical render mix 1:1:6 to 1:½:4. Render mix must not be stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

Alternative internal render specification

Either:

British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm)
or
Knauf Gypsum Parge Coat (nominal 8mm, minimum 6mm)

applied in accordance with the manufacturer's instructions, may be used instead of the cement:sand render mix.

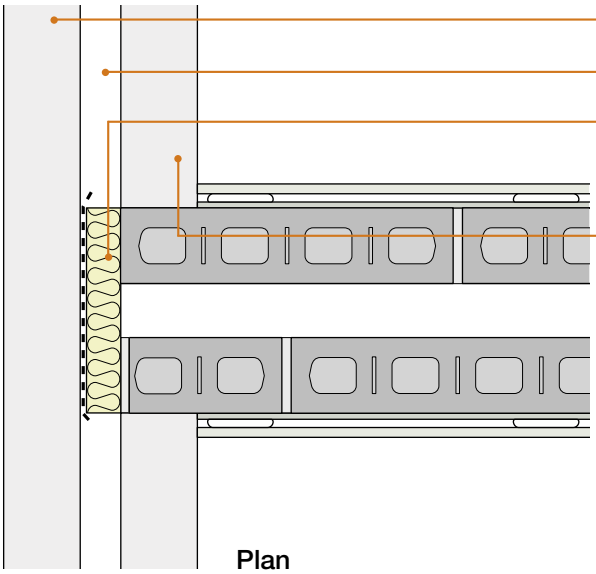
Separating wall cavity insulation (optional)

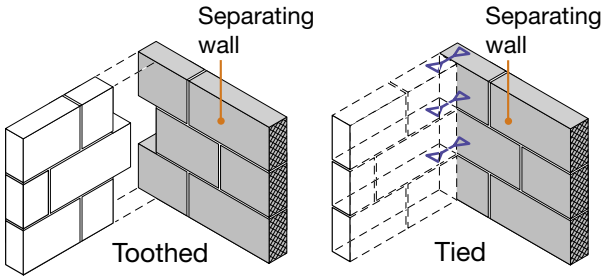
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

DO

- Place blocks with cellular holes open to lower mortar bed
- Keep cavity and wall ties (and insulation) 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 and foundation (and insulation)
- 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
- Ensure that render is applied to the complete face of each leaf with a scratch finish (it may be omitted within the floor joist/beam zone)
- Refer to Appendix A

1. External (flanking) wall junction





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)

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

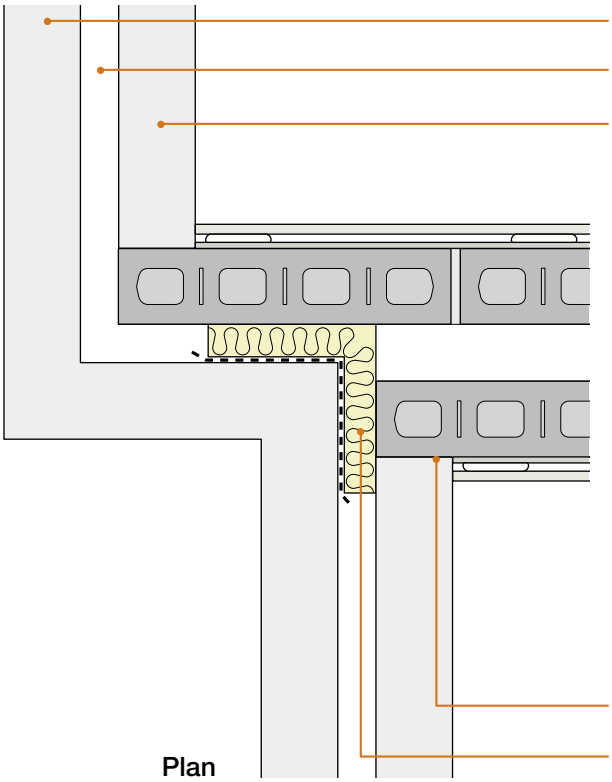
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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 or use Holcim Star Performer® block
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

2. Staggered external (flanking) wall junction



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) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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- 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 or use Holcim Star Performer® block
- if using floor requiring pre-completion testing, seek specialist advice

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)

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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.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks Holcim Star Performer® 5-bridge cellular blocks?			
4.	Are the blocks laid with the cells open to the lower bed?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties Approved Document E “Tie type A” (see appendix A)?			
7.	Are cavity stops installed?			
8.	Are joints fully filled?			
9.	Are voids around floor joists, chases, etc. fully filled/sealed?			
10.	Is render coat applied to the whole wall face (except where it may be omitted between floor joists/beams)?			
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 Holcim UK, manufacturer of Star Performer® dense aggregate cellular blocks:

Telephone: 01285 646900 **E-mail:** building.products@holcim.co.uk

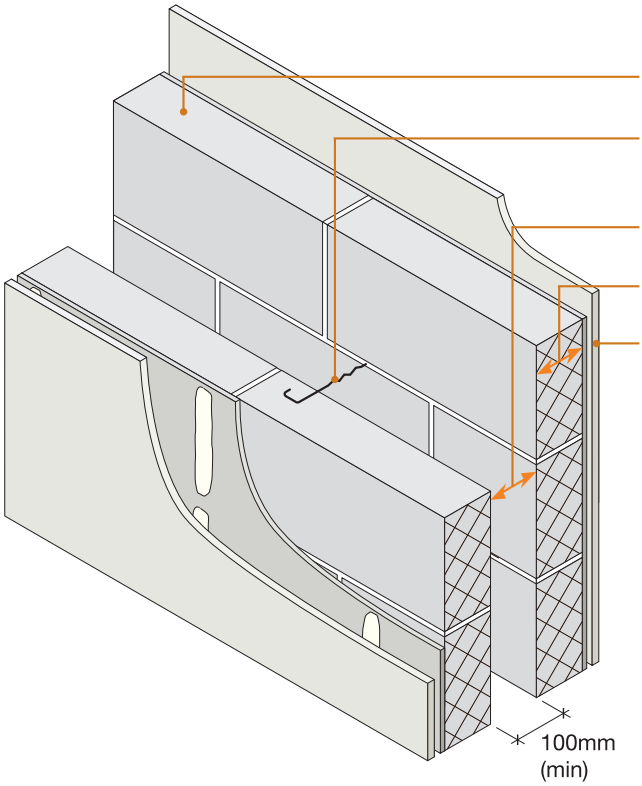
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

® UK registered trade mark no. 2291665

Separating Wall – Cavity Masonry E-WM-11

Lightweight aggregate, or nominated hollow or cellular blocks ■
Render and gypsum-based board on dabs ■
Minimum 100mm cavity ■



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 on cement:sand render (nominal 8mm) with scratch finish Typical render mix 1:1:6 to 1:½:4. Render mix must not be stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

Alternative internal renders

British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm)

Knauf Gypsum Parge Coat (nominal 8mm, minimum 6mm)

Lafarge Ecoat Parge Coat (nominal 8mm, minimum 6mm)

applied in accordance with the manufacturer's instructions.

Hollow or Cellular Blocks

The Holcim Star Performer® is the only block of this type currently accepted for use as an alternative to solid blocks in E-WM-11.

The separating wall **must not** be constructed using a mix of the block types.

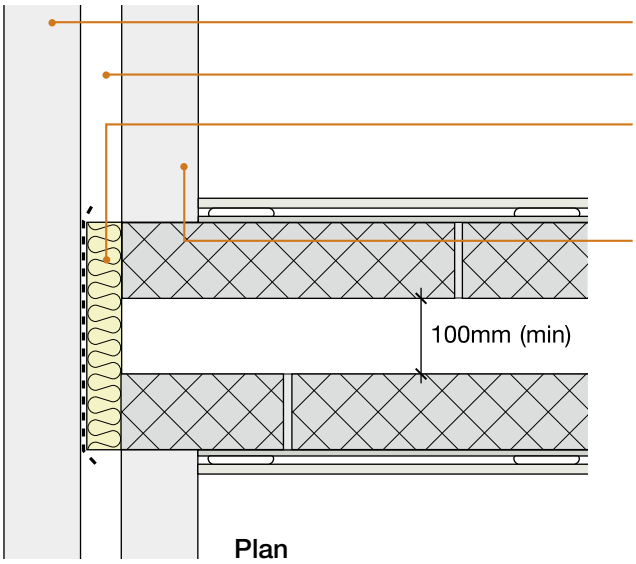
Separating wall cavity insulation (optional)

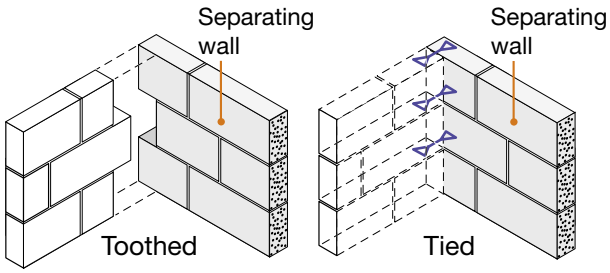
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

DO

- Keep cavity and wall ties (and insulation) 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 and foundation (and insulation)
- Ensure cavity is **minimum 100mm** wide and that correct wall ties are used
- Ensure that only solid blocks or the nominated hollow or cellular blocks are used in the construction of separating and flanking walls. Place blocks with cellular holes open to lower mortar bed
- 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
- Ensure that render is applied to the complete face of each leaf with a scratch finish (it may be omitted within the floor joist/beam zone)
- Refer to Appendix A

1. External (flanking) wall junction





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)

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

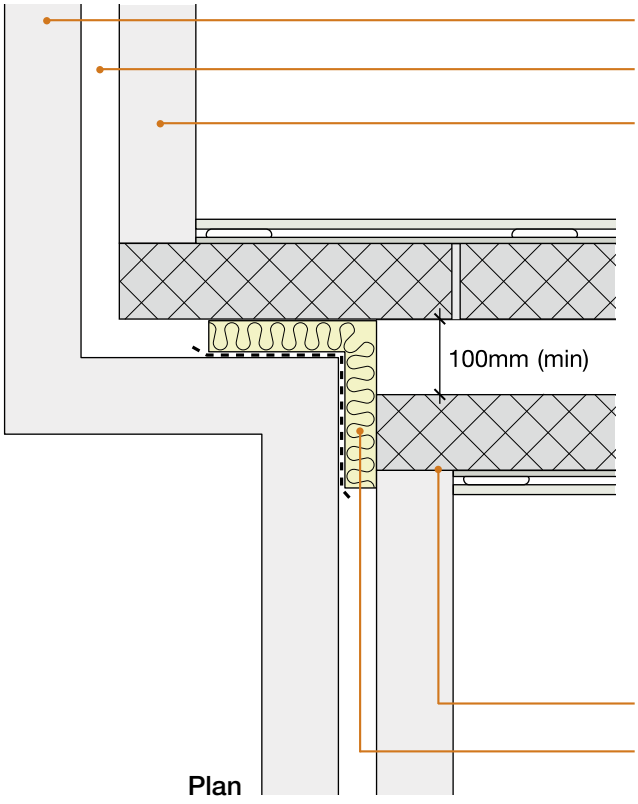
- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Holcim Star Perfomer® block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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 or use Holcim Star Performer® block
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Holcim Star Perfomer® block
- 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 or use Holcim Star Performer® block
- if using floor requiring pre-completion testing, seek specialist advice

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)

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

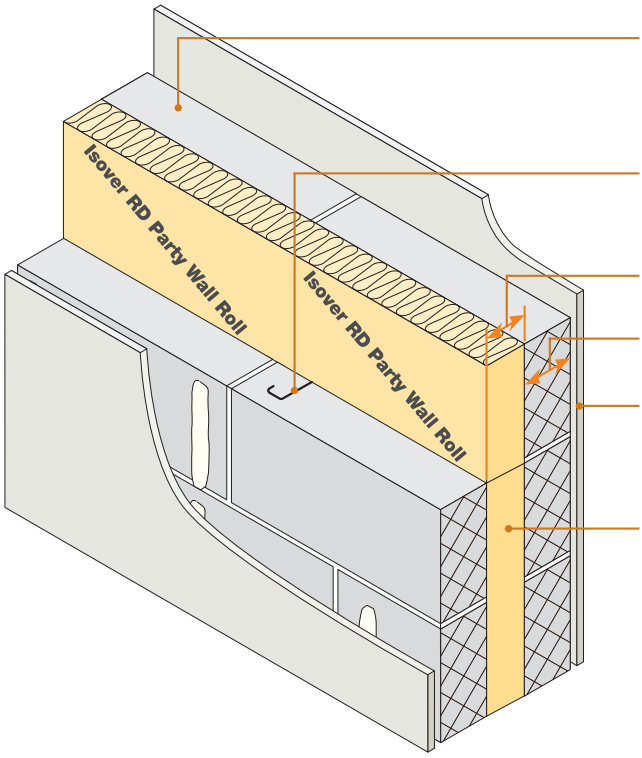
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3) or Holcim Star Performer®? Are blocks laid with the cells open to the lower bed?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties Approved Document E “Tie type A” (see appendix A)?			
6.	Are cavity stops installed?			
7.	Are joints fully filled?			
8.	Are voids around floor joists, chases, etc. fully filled/sealed?			
9.	Is render coat applied to the whole wall face (except where it may be omitted between floor joists/beams)?			
10.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
11.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
12.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

Lightweight aggregate, or nominated hollow or cellular blocks ■
Isover RD Party Wall Roll ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■



Block density	1350 to 1600 kg/m³ or Plasmor Aglite Ultima 1050 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Isover RD Party Wall Roll
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

DO

- Keep cavity, insulation rolls 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, or approved hollow or cellular blocks are used in the construction of separating and flanking walls
- Ensure all Isover RD Party Wall Rolls are tightly butted together and half cuts are made with a clean sharp knife
- Ensure that 'Isover RD Party Wall Roll' is printed on the insulation material
- Ensure RD Party Wall Roll is installed in accordance with manufacturer's recommendations
- 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

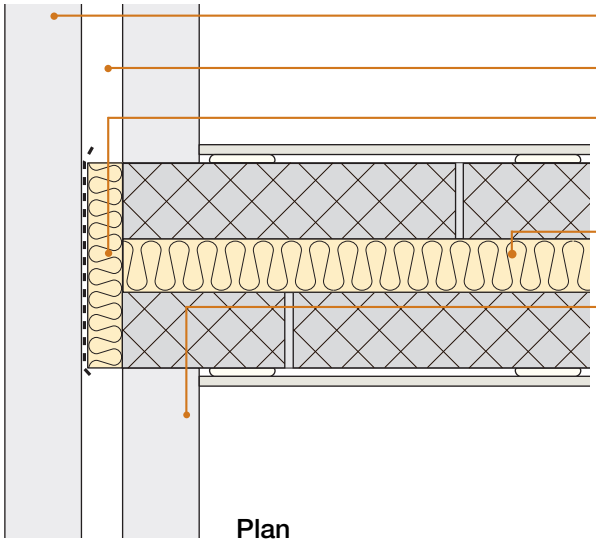
Hollow or Cellular Blocks - only for E-WM-17 100mm (min) cavity walls

The Holcim Star Performer® is the only block of this type currently accepted by Robust Details Limited for use as an alternative to solid blocks in E-WM-17.

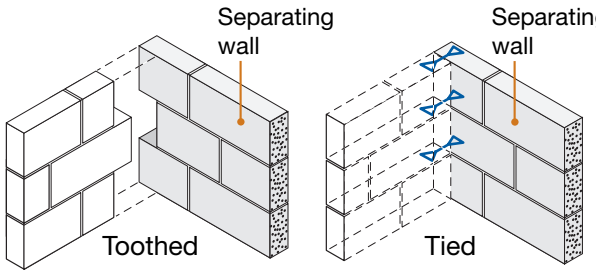
Ensure Star Performer blocks are laid with the cells open to the lower mortar bed only.

The separating wall **must not** be constructed using a mix of the block types.

1. External (flanking) wall junction



Plan



Tooth or tie walls together

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)

Isover RD Party Wall Roll (no gaps to remain)

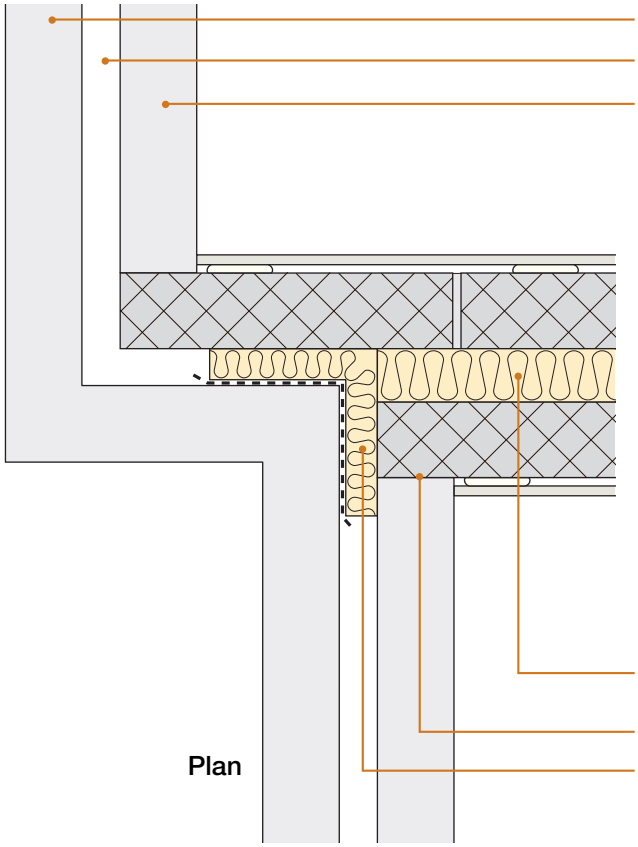
Inner leaf where there is no separating floor e.g. for houses

- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Plasmor Aglite Ultima (1050 kg/m³) or Holcim Star Performer®
- 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 or use Plasmor Aglite Ultima or Holcim Star Performer®
- if using floor requiring pre-completion testing, seek specialist advice

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) or Plasmor Aglite Ultima (1050 kg/m³) or Holcim Star Performer®
- 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

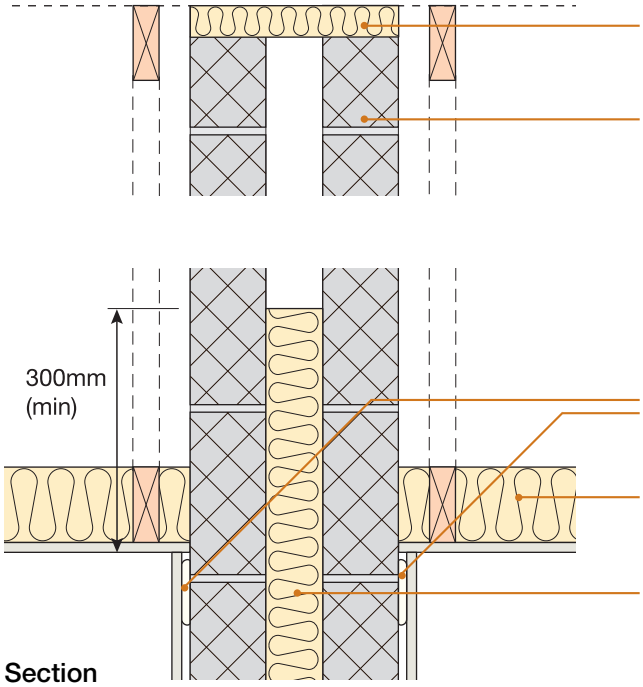
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction or use Plasmor Aglite Ultima or Holcim Star Performer®
- if using floor requiring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

Isover RD Party Wall Roll (no gaps to remain)

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)

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



Section

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

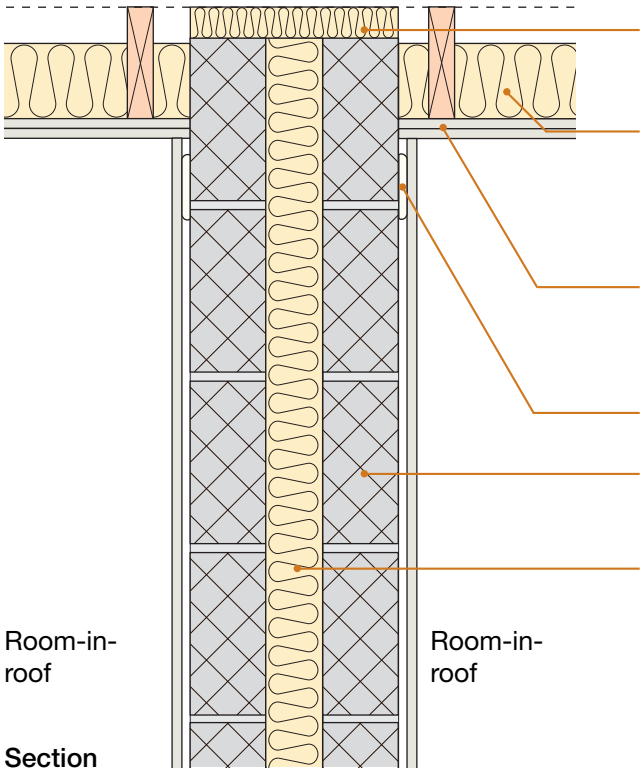
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Isover RD Party Wall Roll (no gaps to remain)

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



Section

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

Isover RD Party Wall Roll (no gaps to remain)

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 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3) or Plasmor Aglite Ultima (1050 kg/m^3)?			
4.	If using Holcim Star Performer®, is wall cavity 100mm (min), are blocks laid with cells open to lower bed?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties to Approved Document E “Tie type A” (see Appendix A)?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled?			
9.	Is Isover RD Party Wall Roll used?			
10.	Are insulation rolls tightly butted together?			
11.	Are voids around floor joists, chases, etc. fully filled/sealed?			
12.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
13.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
14.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from Saint Gobain-Isover, manufacturer of RD Party Wall Rolll:

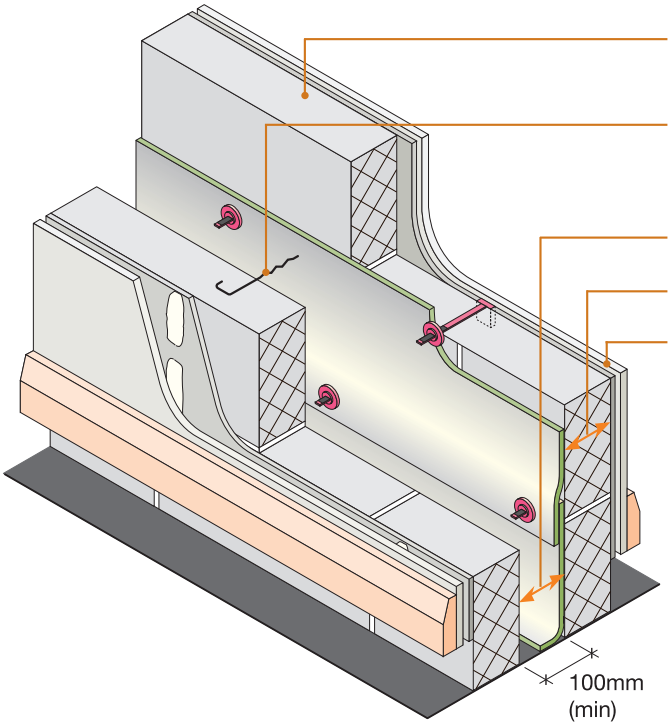
Telephone: 01159 451143 **Fax:** 0844 5618816 **E-mail:** isover.enquiries@saint-gobain.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

- Minimum 100mm cavity wall with the MONARFLOOR® BRIDGESTOP® system
- Dense or lightweight aggregate blocks or nominated hollow or cellular blocks
- Render and gypsum-based board on dabs
- Attached houses only



Block density	1350 to 1600 kg/m³ or 1850 to 2300 kg/m³
Wall ties	Wall ties must be Ancon Building Products Staifix HRT4
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish Typical render mix 1:1:6 to 1:½:4. Render mix must not be stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

Alternative internal renders

British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm)

Knauf Gypsum Parge Coat (nominal 8mm, minimum 6mm)

Lafarge Ecoat Parge Coat (nominal 8mm, minimum 6mm)

applied in accordance with the manufacturer's instructions.

Hollow or Cellular Blocks

The Holcim Star Performer® is the only block of this type currently accepted for use as an alternative to solid blocks in E-WM-19.

The separating wall **must not** be constructed using a mix of the block types.

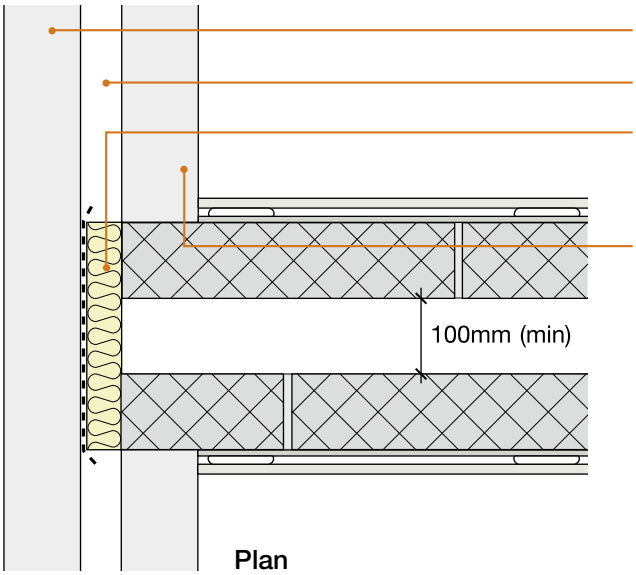
Separating wall cavity insulation (optional)

The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

DO

- Keep cavity and wall ties (and insulation) 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 and foundation (and insulation)
- Ensure cavity is **minimum 100mm** wide and that correct wall ties are used
- Ensure that only solid blocks or the nominated hollow or cellular blocks are used in the construction of separating and flanking walls. Place blocks with cellular holes open to lower mortar bed
- 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
- Ensure that render is applied to the complete face of each leaf with a scratch finish (it may be omitted within the floor joist/beam zone)
- Refer to Appendix A

1. External (flanking) wall junction



Plan

Masonry outer leaf

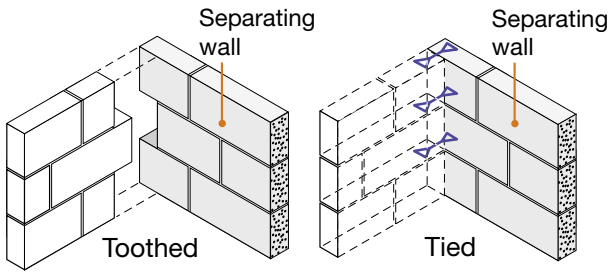
External wall cavity (min 50mm)

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

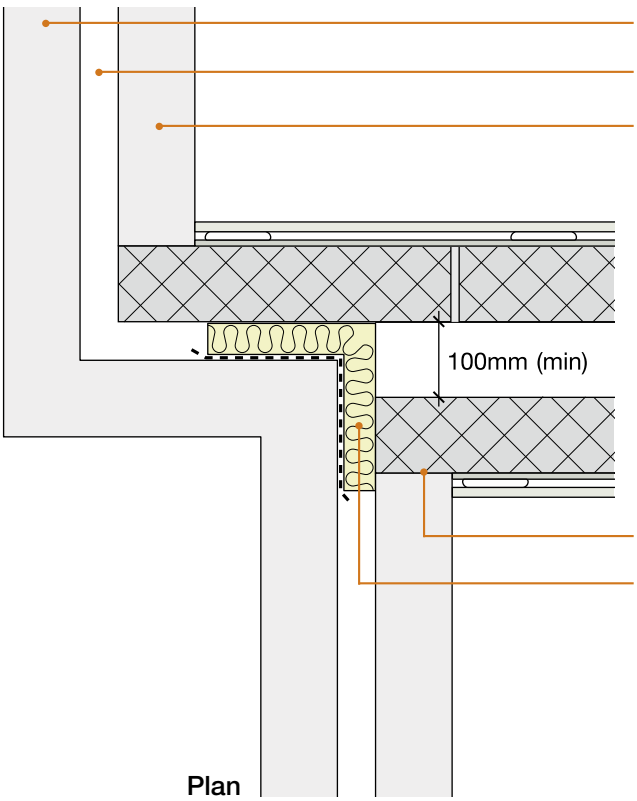
Inner leaf

- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

Tooth or tie walls together



2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

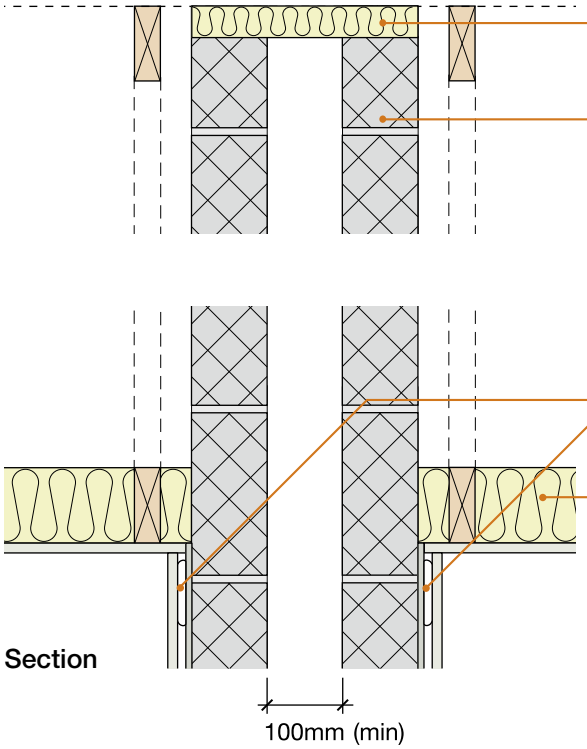
Inner leaf

- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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)

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



Junction between separating wall and roof filled with flexible closer

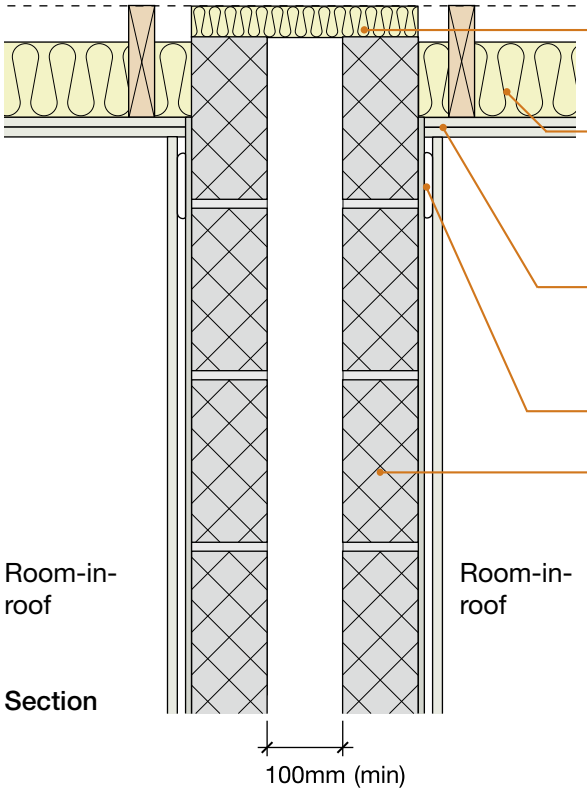
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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)

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 ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

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 solid aggregate (1350-1600 kg/m³ or 1850-2300 kg/m³) or Holcim Star Performer® (with cells open to lower bed)?			
4.	Has 500mm wide MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane been laid under the party wall over the dpm?			
5.	Has MONARFLOOR® BRIDGESTOP® Quilt been installed in 2 lifts with MONARFLOOR® BRIDGESTOP® Ties?			
6.	Is cavity above the quilt free from droppings and debris?			
7.	Are separating wall ties Staifix HRT4?			
8.	Are cavity stops installed?			
9.	Are all block joints fully filled?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Is render coat applied to the whole wall face (except where it may be omitted between floor joists/beams)?			
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 Icopal-MONARFLOOR®, manufacturer of the MONARFLOOR® BRIDGESTOP® system:

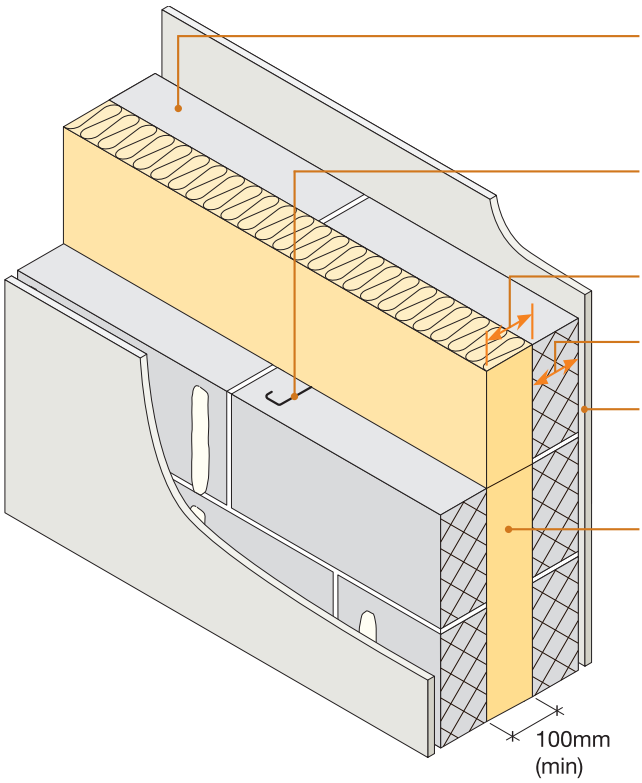
Telephone: 0161 866 6540 **Fax:** 0161 865 8433 **E-mail:** acoustics.uk@icopal.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-22

Lightweight aggregate blocks ■
Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll ■
or URSA Cavity Batt 35 or URSA PARTY WALL ROLL
Gypsum-based board (nominal 10 kg/m²) on dabs ■

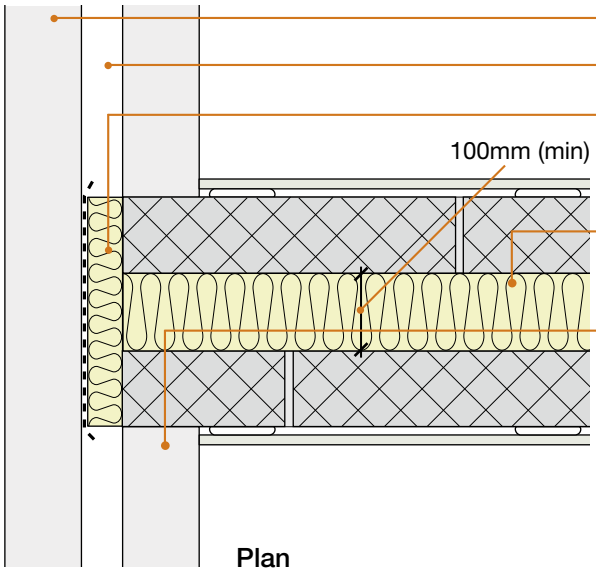


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	Full-fill Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

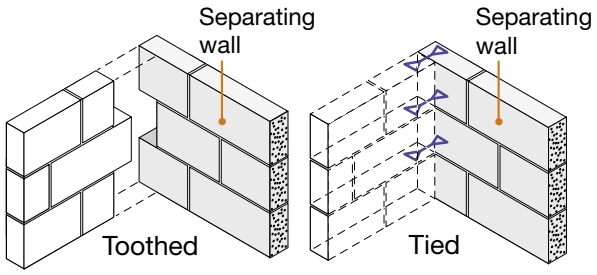
DO

- Keep cavity, insulation rolls 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
- Ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions
- 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
- Ensure that either 'KI MPWS' is printed on the insulation material where Knauf Insulation Masonry Party Wall Slab is specified; or 'Superglass Party Wall Roll' is printed on the insulation material where this is specified. Where URSA insulation is used, ensure it is branded with the URSA 'bear' logo

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)

Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

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

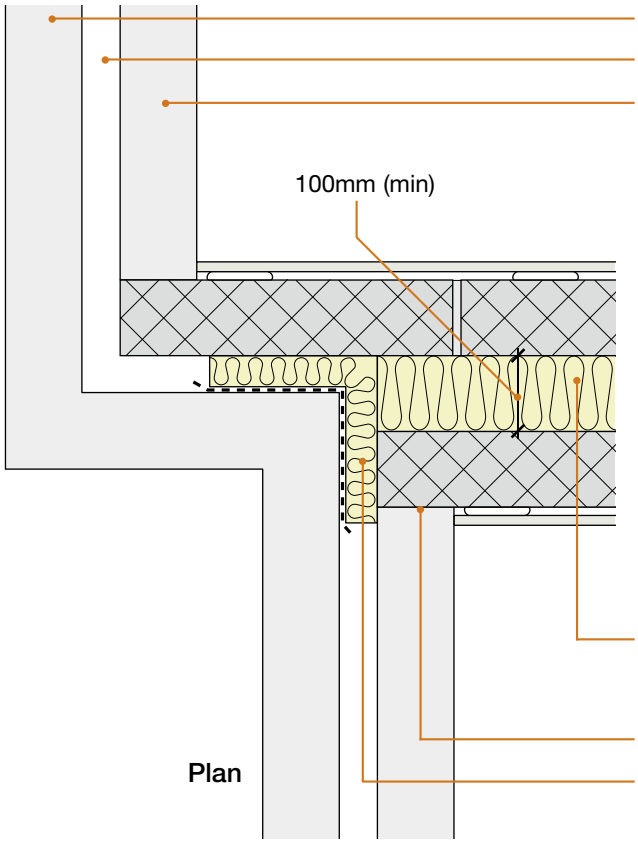
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

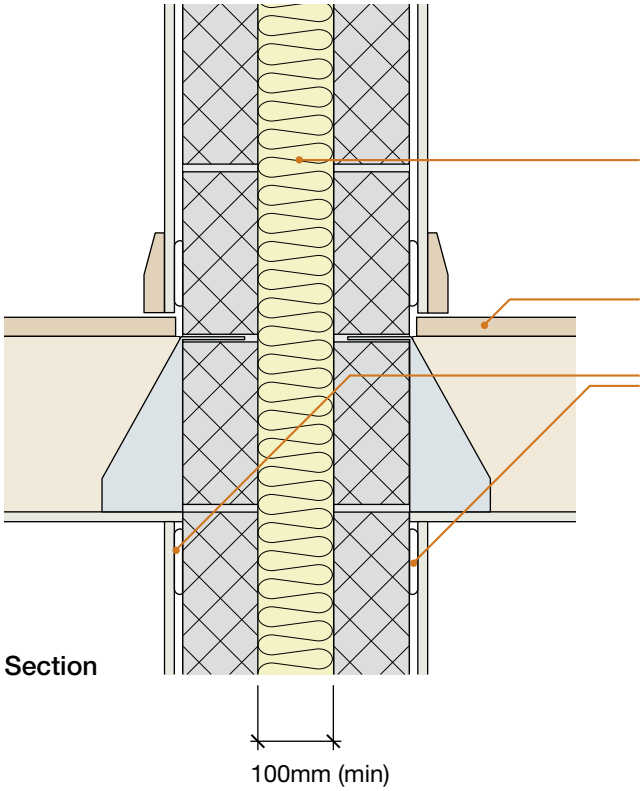
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

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

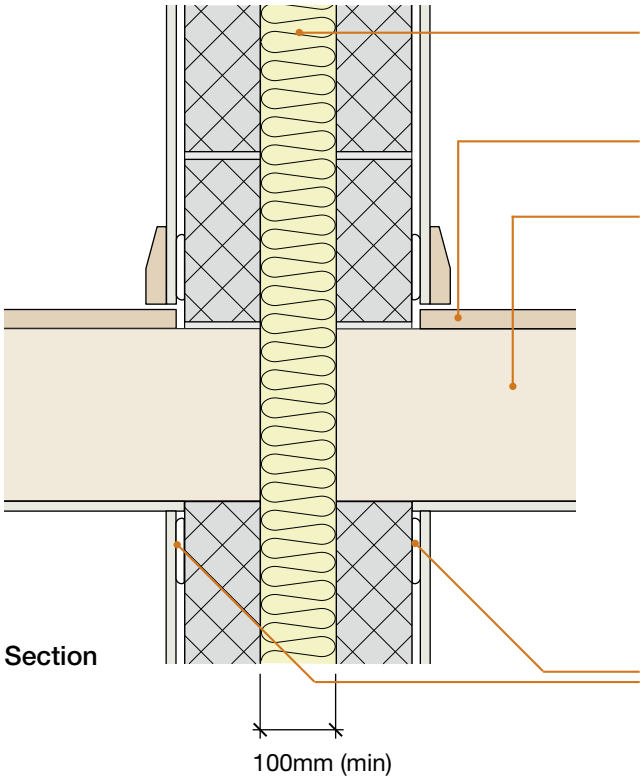


Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Continuous horizontal ribbon of adhesive

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



Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

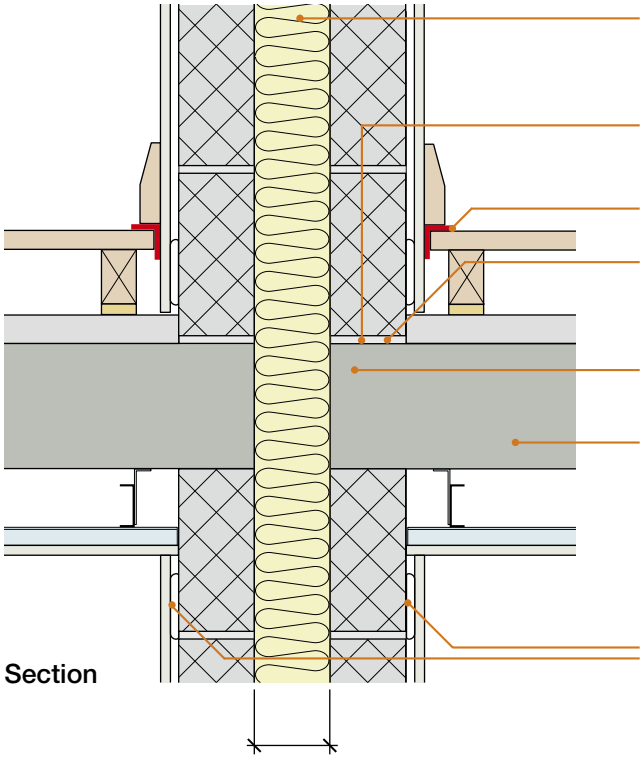
Floor construction:

- 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

Continuous horizontal ribbon of adhesive

Sketch shows timber joists built in

5. Separating floor junction

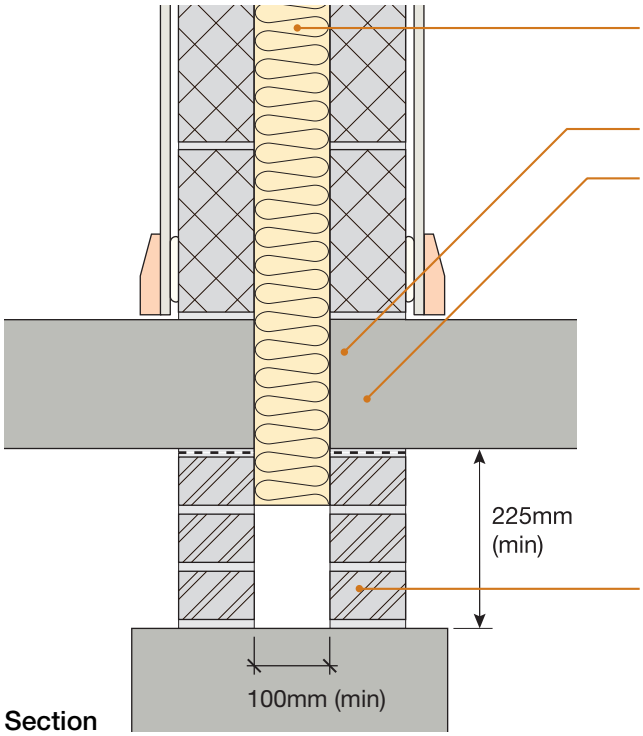


Section

- Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)
- 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

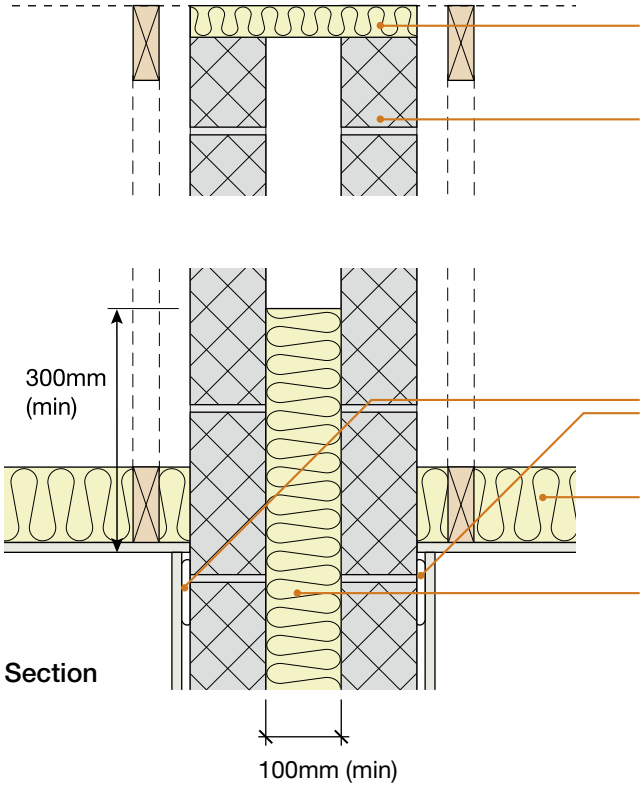


Section

- Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)
- 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. 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.

Alternatively if using continuous raft foundation, refer to Appendix A2.

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

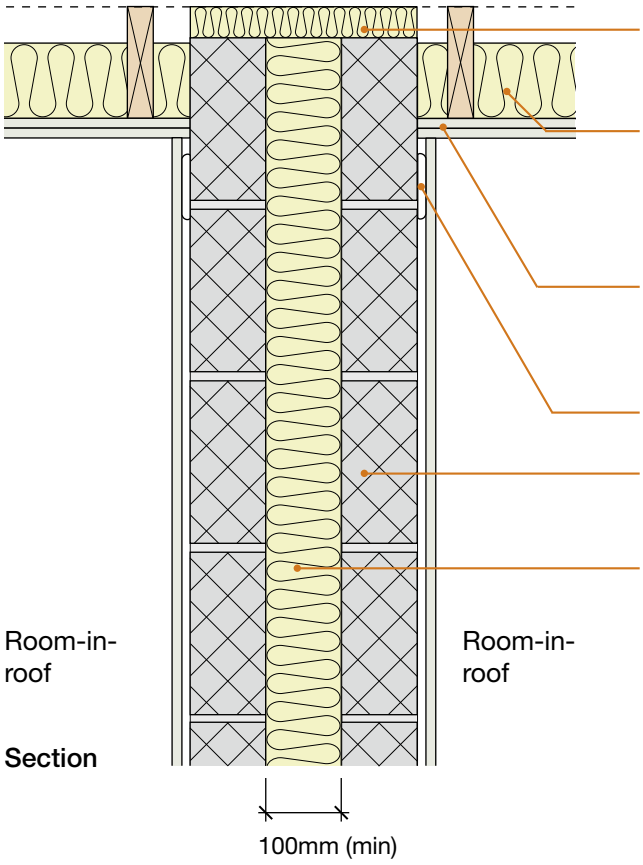
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

100mm (min) mineral wool insulation – 10 kg/m³ (min)

Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

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/m³ or 60mm (min) foil faced PUR or PIR insulation, minimum density 30 kg/m³ (See Appendix A)

2 layers of nominal 8 kg/m² 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

Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

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:

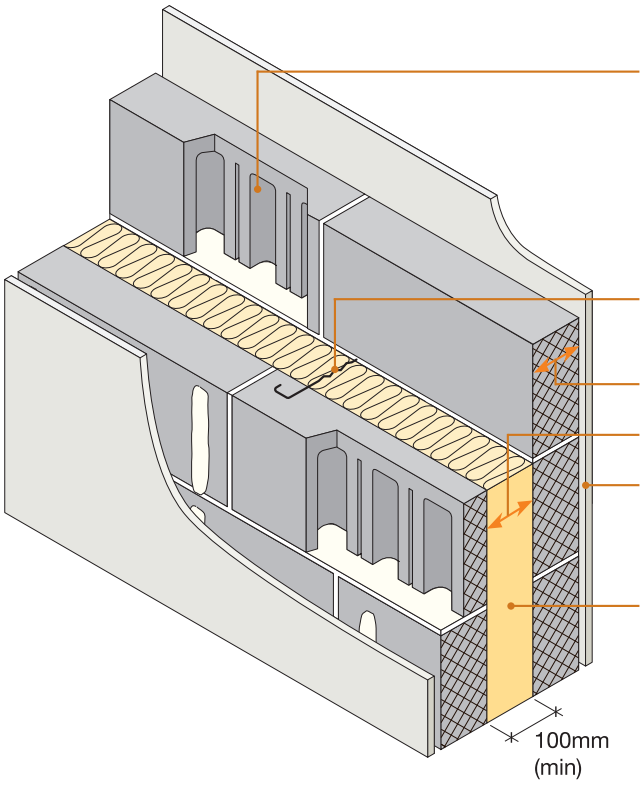
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall 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 Knauf Insulation Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL used to fully fill the cavity?			
9.	Are insulation sections tightly butted together?			
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?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-26

Holcim Star Performer® dense aggregate cellular blocks ■
Gypsum-based board on dabs ■

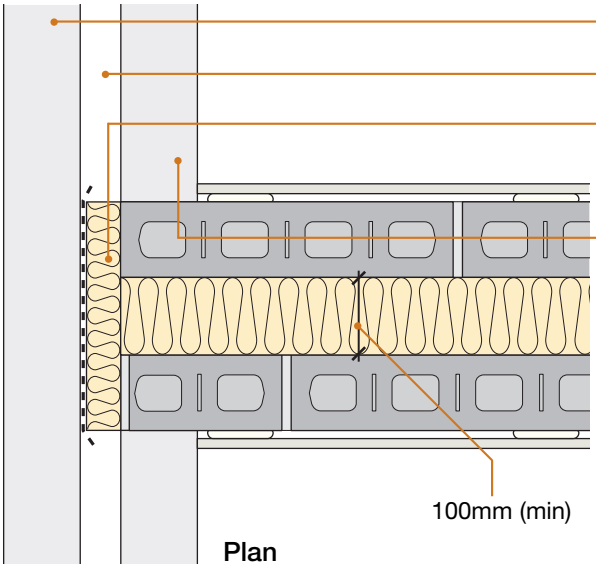


Block	Only Holcim Star Performer® 5-bridge cellular block (4-core, concrete density 1995 kg/m³, block density 1528 kg/m³, unit weight 14.5 kg)
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Block thickness	100mm (min), each leaf
Cavity width	100mm (min)
Wall finish	Gypsum based-board (nominal 10 kg/m²) mounted on dabs
Insulation	100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³ or blown mineral fibres with an installed density of max 25 kg/m³
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

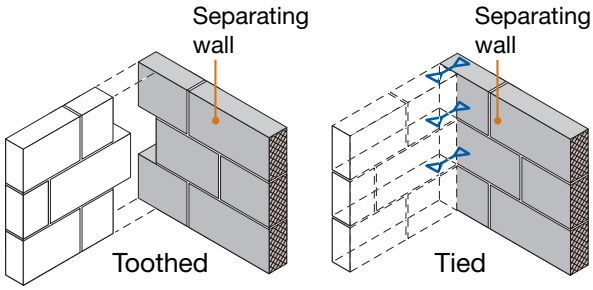
DO

- Place blocks with cellular holes open to lower mortar bed
- Keep cavity insulation 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 and foundation (and insulation)
- Ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife, and are installed in accordance with the manufacturer's instructions
- If using blown fibres, 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)

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

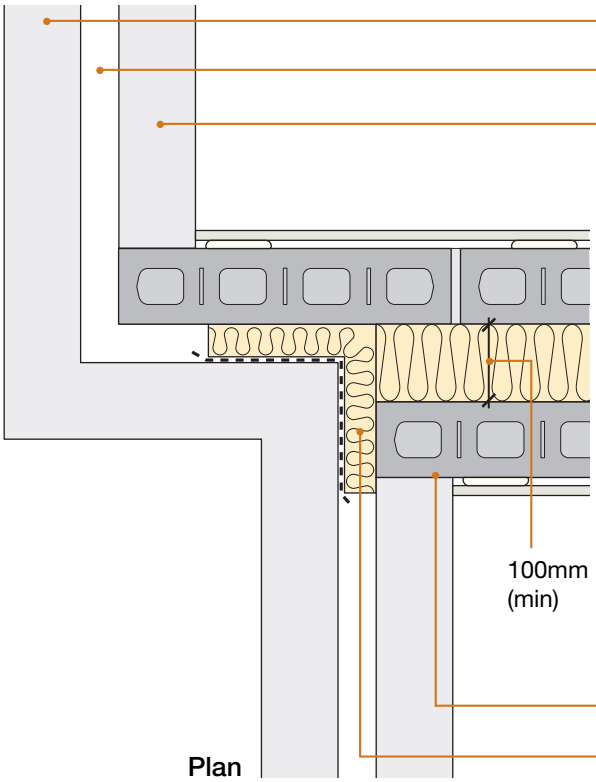
- 100mm (min) concrete block (1350 kg/m^3 to 1600 kg/m^3) or aircrete block (450 kg/m^3 to 800 kg/m^3) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m^2 gypsum-based board

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 or use Holcim Star Performer® block
- 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/m^3 to 1600 kg/m^3) or aircrete block (450 kg/m^3 to 800 kg/m^3) or Holcim Star Performer® block
- internal finish – 13mm plaster or nominal 8 kg/m^2 gypsum-based board

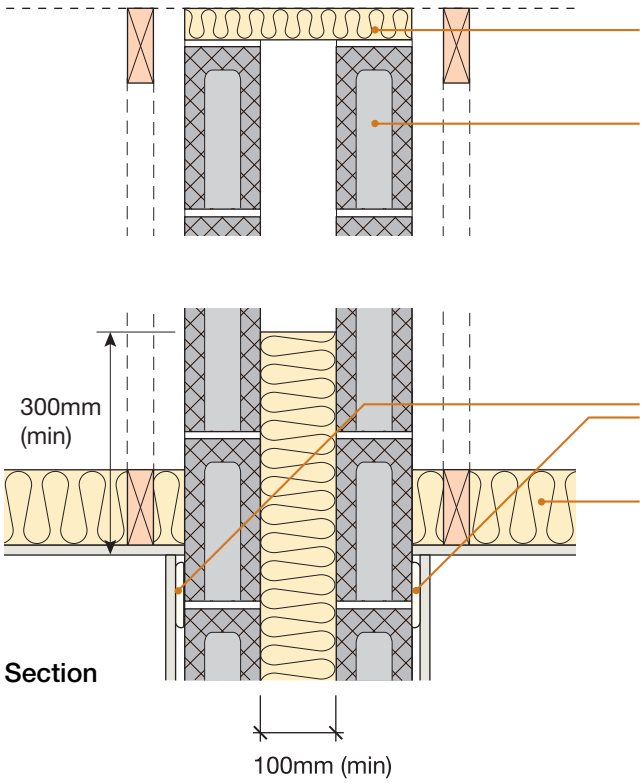
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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 or use Holcim Star Performer® block
- if using floor requiring pre-completion testing, seek specialist advice

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)

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



Junction between separating wall and roof filled with flexible closer

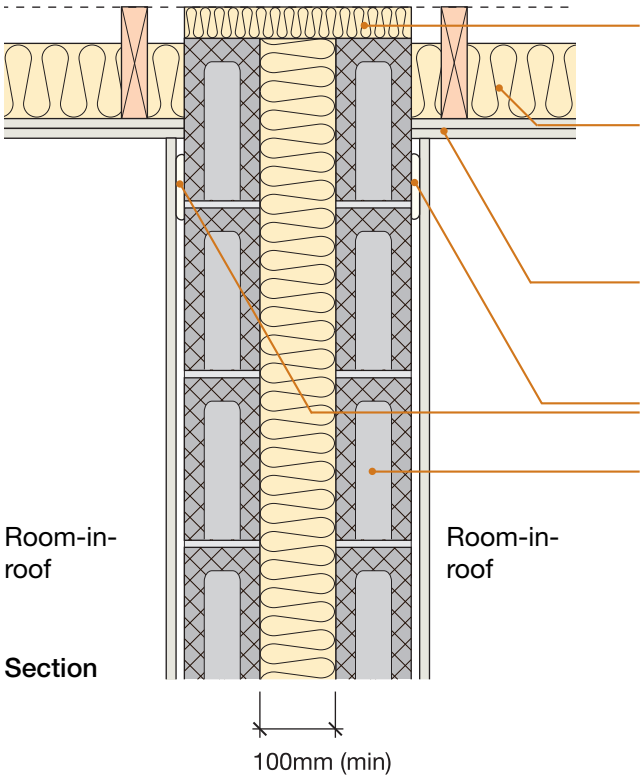
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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)

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 ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

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 Holcim Star Performer® 5-bridge cellular blocks?			
4.	Are the blocks laid with the cells open to the lower bed?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties Approved Document E “Tie type A” (see appendix A)?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled?			
9.	Are voids around floor joists, chases, etc. fully filled/sealed?			
10.	Is separating wall cavity fully filled with mineral wool insulation, with no gaps or voids?			
11.	Are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
12.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
13.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
14.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from Holcim UK, manufacturer of Star Performer® dense aggregate cellular blocks:

Telephone: 01285 646900 **E-mail:** building.products@holcim.co.uk

Notes (include details of any corrective action)

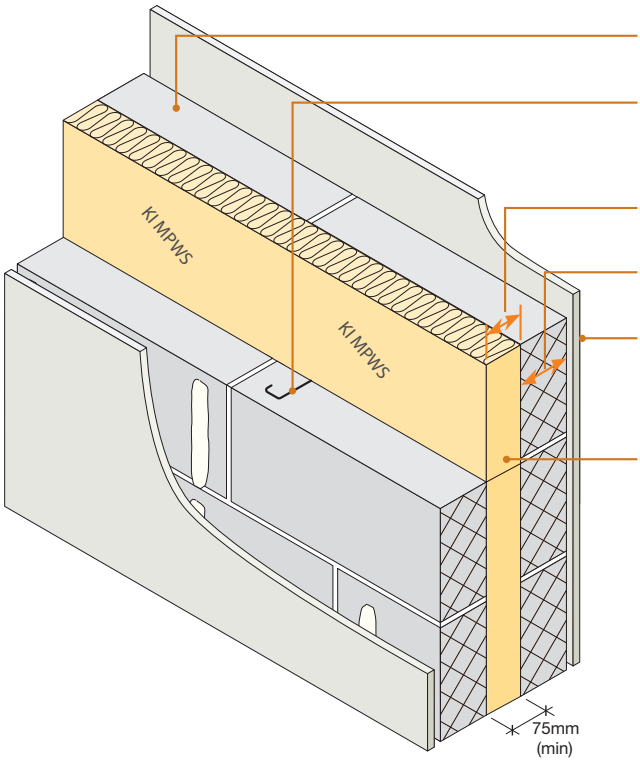
Site manager/supervisor signature . . . . . .

® UK registered trade mark no. 2291665

Separating Wall – Cavity Masonry

E-WM-32

- Lightweight aggregate blocks
- Knauf Insulation Masonry Party Wall Slab
- Gypsum-based board (nominal 10 kg/m²) on dabs

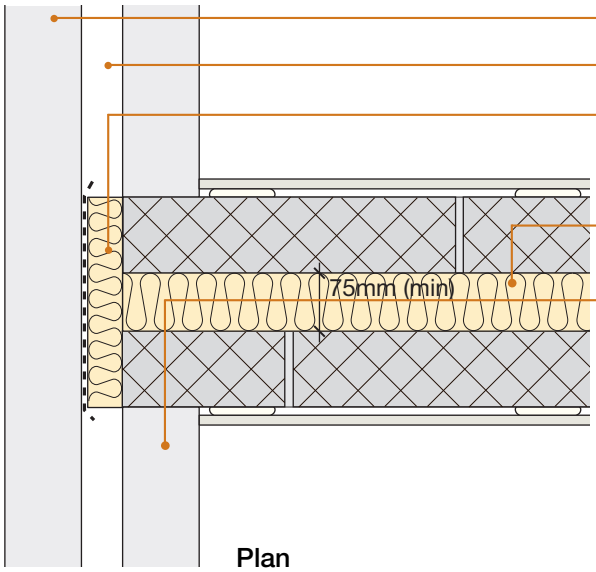


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	Full-fill Knauf Insulation Masonry Party Wall Slab
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

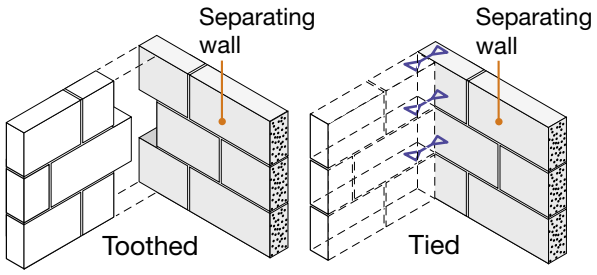
DO

- Keep cavity, insulation rolls 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
- Ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions
- 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
- Ensure that 'KI MPWS' is printed on the insulation material

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)

Knauf Insulation Masonry Party Wall Slab (no gaps to remain)

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

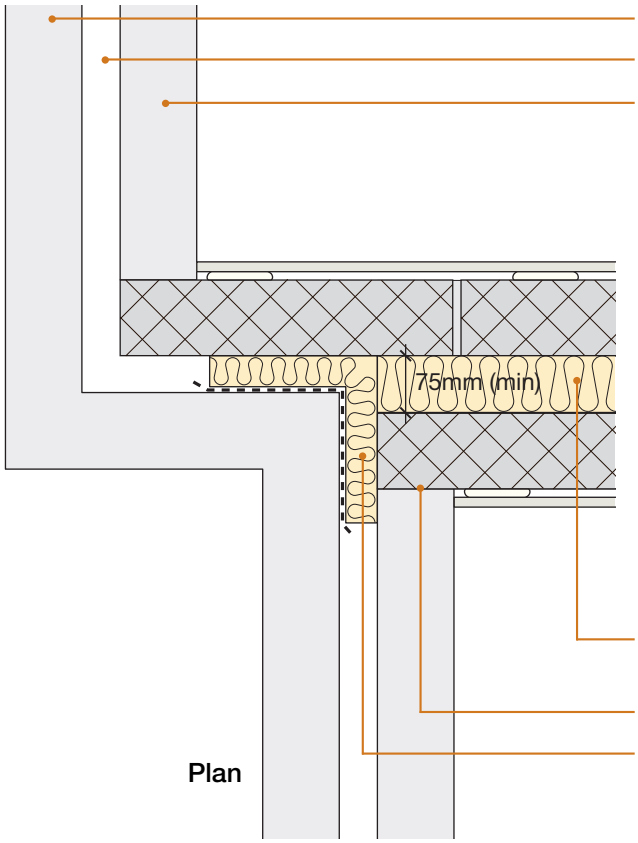
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

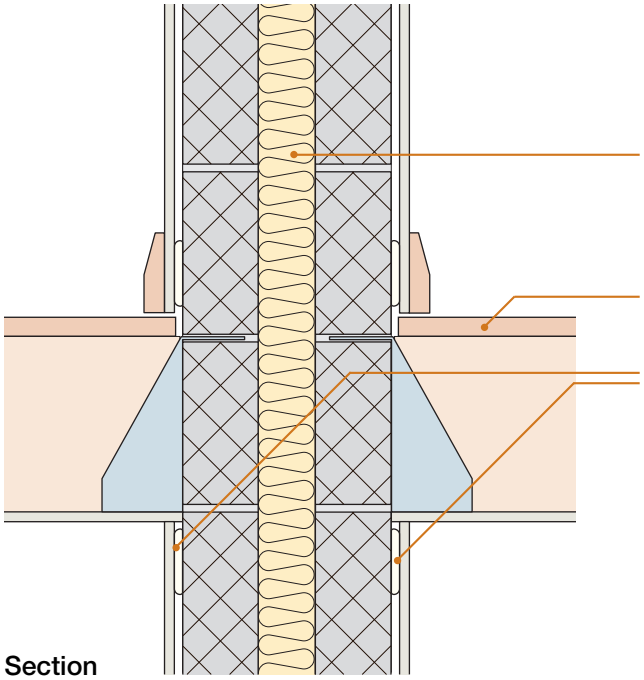
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Knauf Insulation Masonry Party Wall Slab (no gaps to remain)

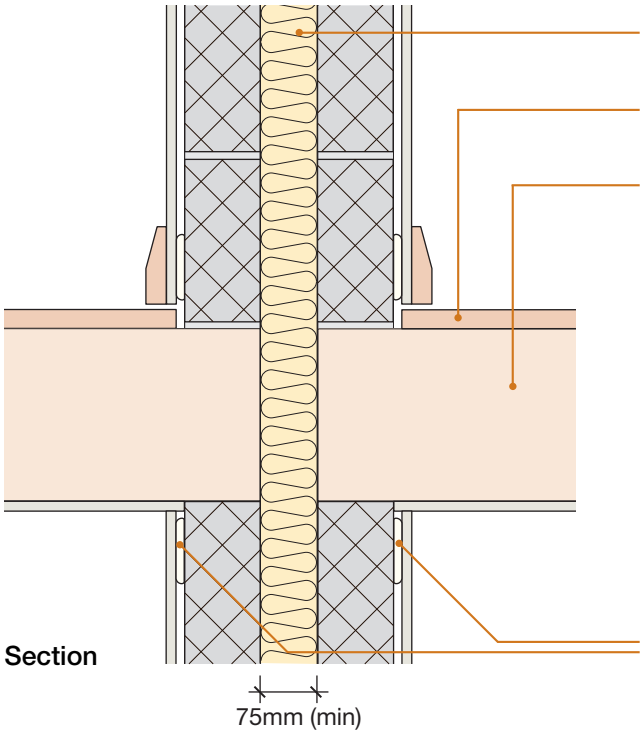
Tooth or tie walls together

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

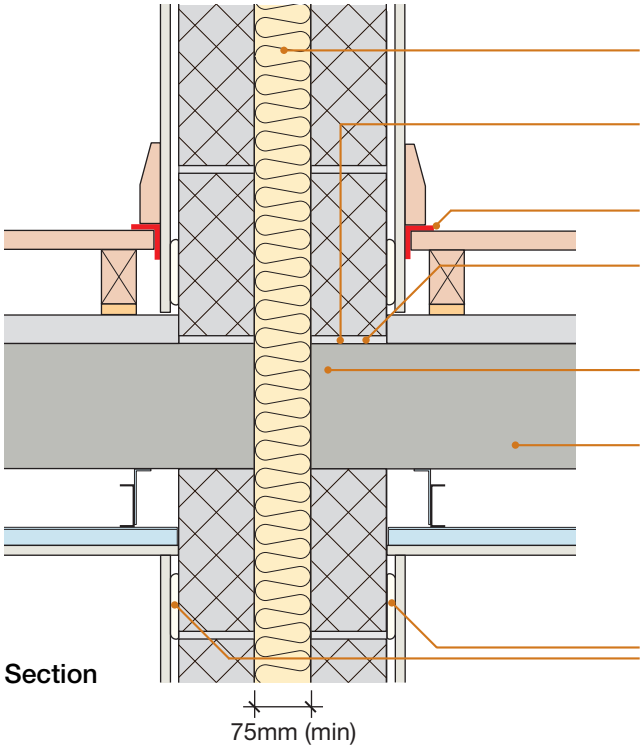


4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



Sketch shows timber joists built in

5. Separating floor junction

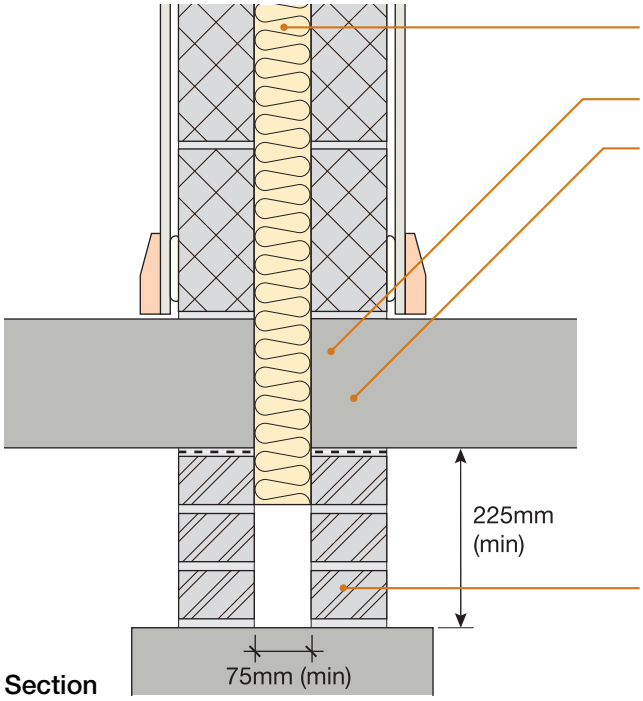


Section

- Knauf Insulation Masonry Party Wall Slab (no gaps to remain)
- 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

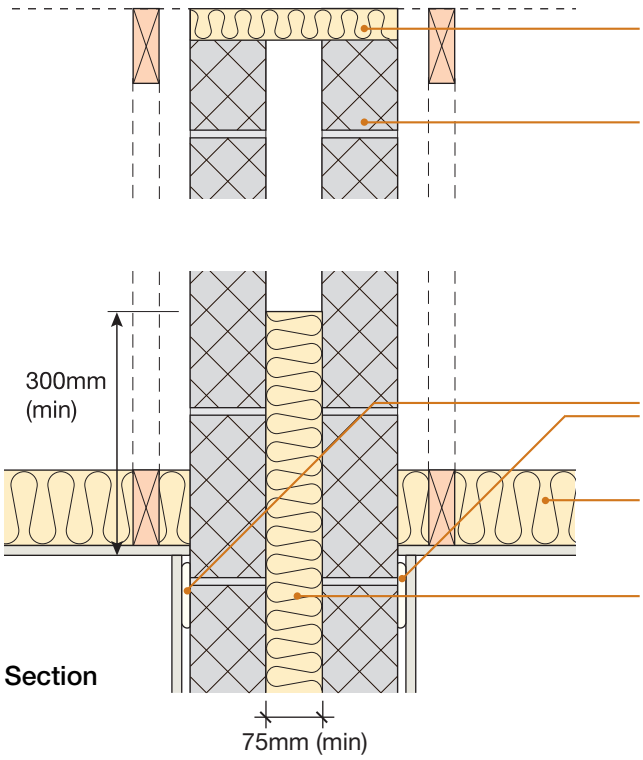


Section

- Knauf Insulation Masonry Party Wall Slab (no gaps to remain)
- 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. 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.

Alternatively if using continuous raft foundation, refer to Appendix A2.

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

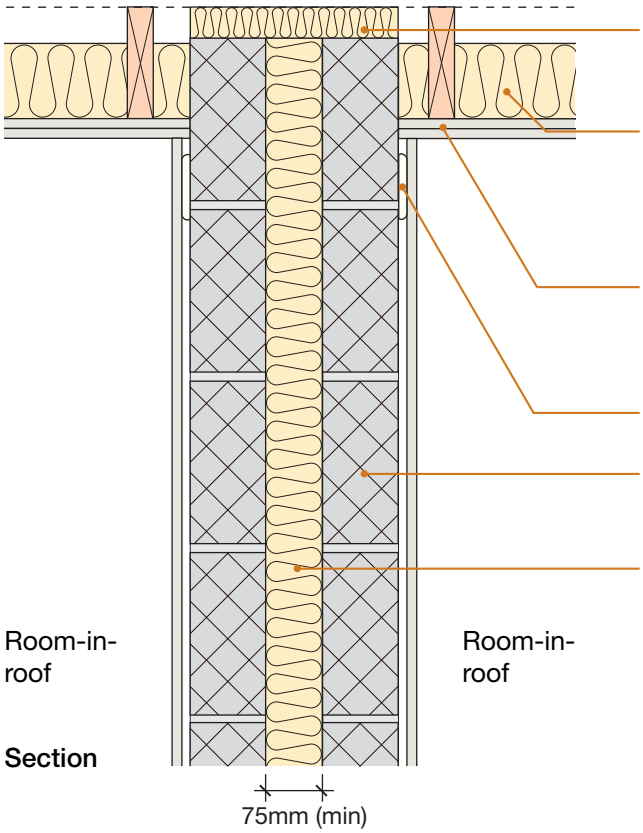
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

100mm (min) mineral wool insulation – 10 kg/m³ (min)

Knauf Insulation Masonry Party Wall Slab (no gaps to remain)

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/m³ or 60mm (min) foil faced PUR or PIR insulation, minimum density 30 kg/m³ (See Appendix A)

2 layers of nominal 8 kg/m² 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

Knauf Insulation Masonry Party Wall Slab (no gaps to remain)

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 75mm?			
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 Knauf Insulation Masonry Party Wall Slab used to fully fill the cavity?			
9.	Are insulation sections tightly butted together?			
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?			

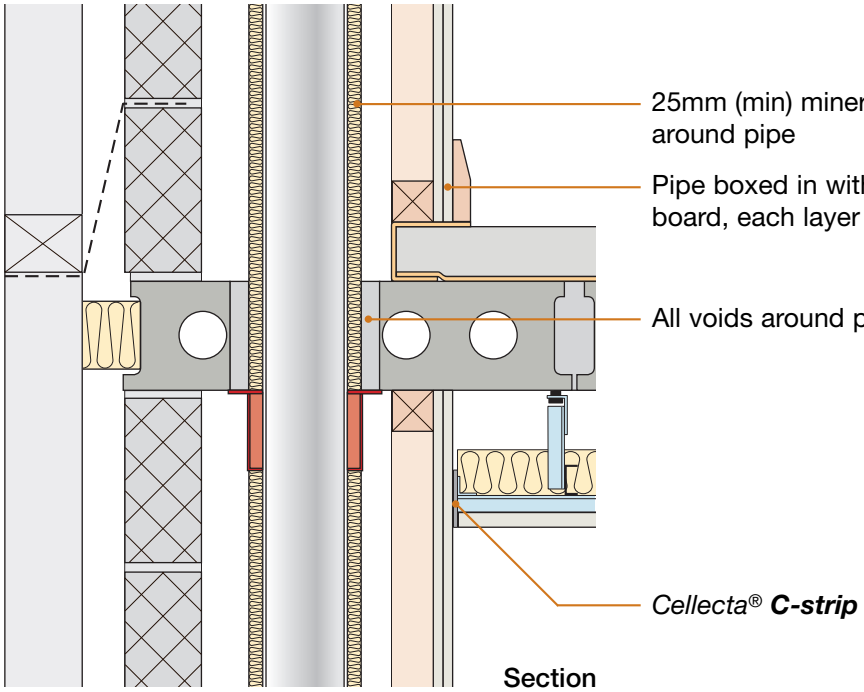
Contact details for technical assistance from Knauf Insulation Ltd, manufacturer of Masonry Party Wall Slab:

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

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

6. Services – Service pipes through separating floor



Sketch shows CT0 type ceiling treatment

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Has training been received from *Cellecta*®?			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m² (min)?			
3.	Are inner leaves to external (flanking) walls of the correct block density?			
4.	Are joints between precast concrete planks grouted and sealed?			
5.	Are precast concrete planks built into the masonry walls?			
6.	Is the ***E-strip*** perimeter edging installed around all room perimeter walls (including door openings, cupboards, across thresholds and into wall recesses) and service pipes and joints sealed with ***J-strip*** tape?			
7.	Are **YELO*fon*® HD10+** resilient layer joints formed as described in Section 4 and sealed with ***J-strip*** tape?			
8.	Is **YELO*fon*® HD10+** resilient layer overlapping the ***E-strip*** perimeter edging and joints sealed with ***J-strip*** tape?			
9.	Are the skirting boards isolated from the screed by the ***E-strip*** perimeter edging?			
10.	Are the *Cellecta*® **AH50** hangers installed with the rubber insert against the precast planks?			
11.	Is *Cellecta*® ***C-strip*** installed at all ceiling perimeters?			
12.	Is 50mm (min) **FIBRE*fon*® MICRO 50** or 100mm (min) mineral wool, 10 kg/m³ (min) installed in the ceiling void?			
13.	Are all ceiling board joints sealed with tape or caulked with sealant?			
14.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
15.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from *Cellecta*®, manufacturer of YELO*fon*® HD10+ resilient layer system:

Telephone: 01634 717174 **Fax:** 01634 717172 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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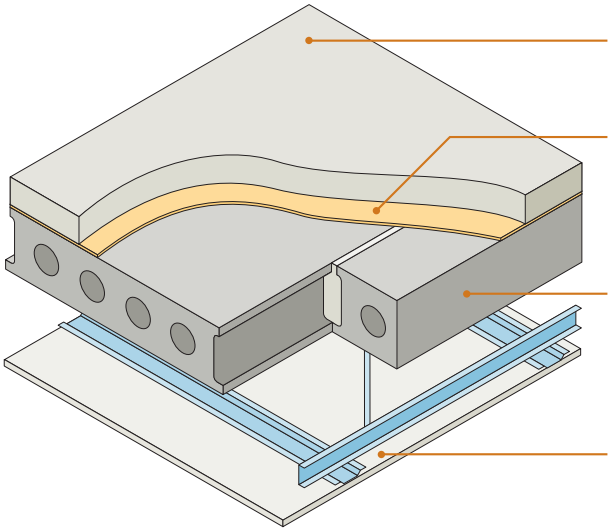
Separating Floor – Concrete

E-FC-19

Precast concrete plank ■
Screed laid on *Cellecta*® RUBBER*fon*® Impact 6 resilient layer system ■



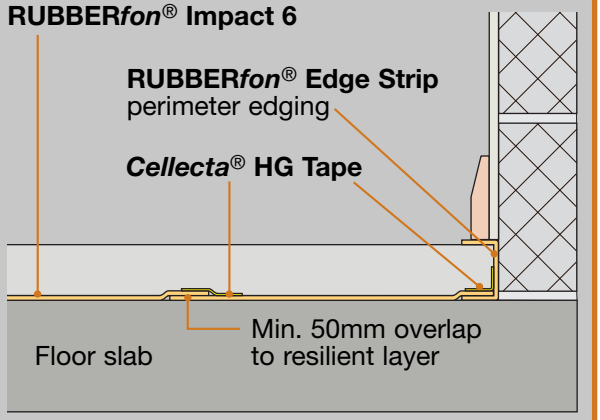
Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand
Resilient layer	**RUBBER*fon*® Impact 6** with **RUBBER*fon*® Edge Strip** and ***Cellecta*® HG 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

SYSTEM INSTALLATION:

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

1) **RUBBER*fon*® Impact 6** (resilient layer to be laid over entire floor area with min. 50mm overlaps)
2) **RUBBER*fon*® Edge Strip**
3) ***Cellecta*® HG Tape**



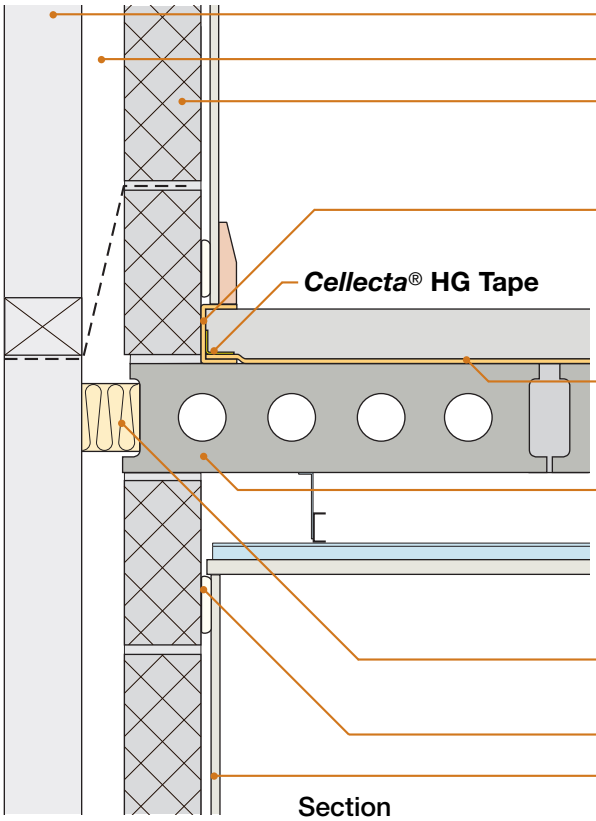
- **RUBBER*fon*® Edge Strip** to be installed at all room perimeters. See manufacturer's guidance.

Robust Details Limited can only accept registration of this floor once the builder agrees to receive training from *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 **RUBBER*fon*® Impact 6** resilient layer is laid over the entire floor surface and has overlapped joints of 50mm sealed with ***Cellecta*® HG Tape**. On no account should the screed come into contact with the floor slab
- Ensure **RUBBER*fon*® Impact 6** overlaps the **RUBBER*fon*® Edge Strip** and joints are sealed with ***Cellecta*® HG Tape**. On no account should screed come into contact with floor slab or perimeter walls
- Ensure the **RUBBER*fon*® 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



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).

RUBBER*fon*® Edge Strip perimeter edging must be overlapped by **RUBBER*fon*® Impact 6** resilient layer with joints sealed with ***Cellecta*® HG Tape** to isolate screed from perimeter walls and skirtings

RUBBER*fon*® Impact 6 resilient layer must have 50mm (min) overlapped joints and be sealed with ***Cellecta*® HG 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

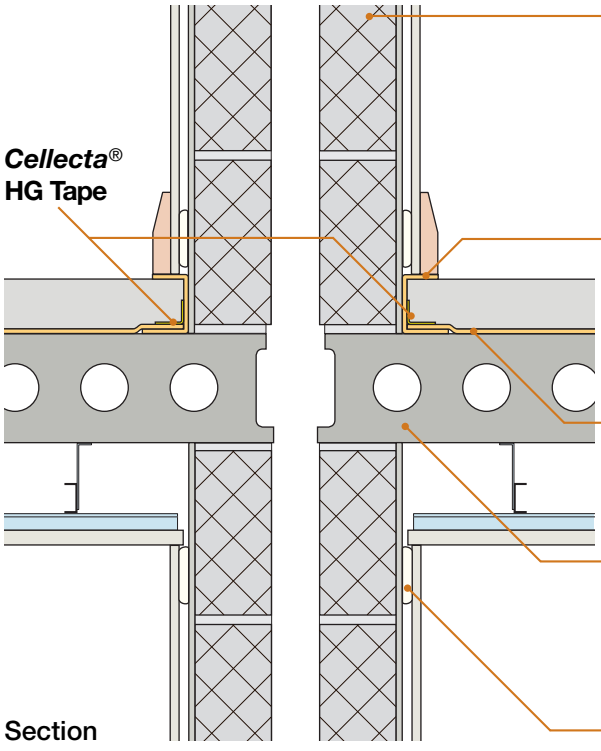
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

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

RUBBER*fon*® Edge Strip perimeter edging must be overlapped by **RUBBER*fon*® Impact 6** resilient layer with joints sealed with ***Cellecta*® HG Tape** to isolate screed from perimeter walls and skirtings

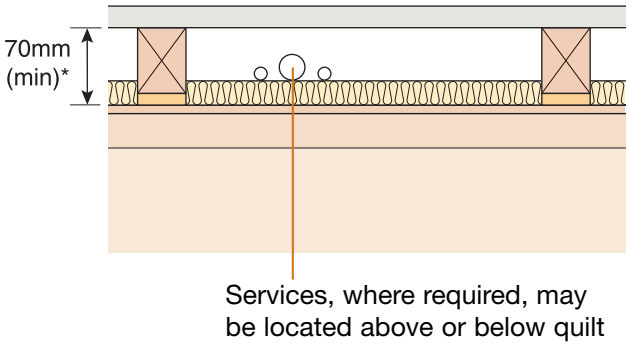
RUBBER*fon*® Impact 6 resilient layer must have 50mm (min) overlapped joints and be sealed with ***Cellecta*® HG Tape**

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

6. Floating floor treatment for E-FT-1



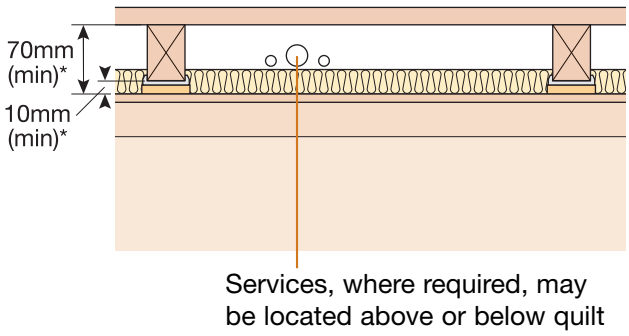
Appendix A3 – Resilient composite deep batten system for E-FT-1

Cellecta HiDECK Structural system

- refer to Appendix A3

JCW Soundboard One system

- refer to Appendix A3



FFT2 – Resilient cradle and batten system for E-FT-1
Ensure cradles are aligned over joist positions

- 18 mm (min) t&g flooring board
- cradle and batten – refer to Appendix C for performance requirement
- mineral wool quilt laid between battens
  – 13mm (min) 33-36 kg/m^3, or
  – 25mm (min) 10-36 kg/m^3
  or Cellecta MICRO 15
- ensure any services do not bridge the resilient layer

Cellecta HiDECK Structural system

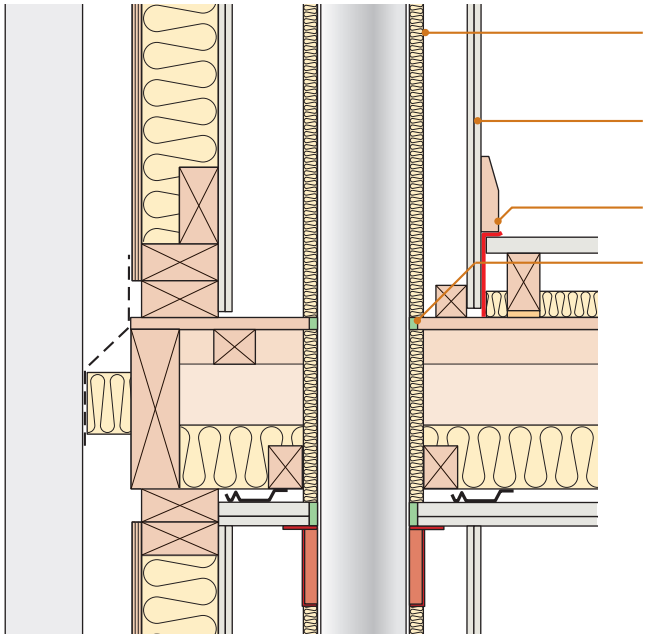
- refer to Appendix A3

JCW Soundboard One system

- refer to Appendix A3

***Note:** Void dimension indicated is when floor is loaded to 25 kg/m^2

7. Services – pipes through separating floor



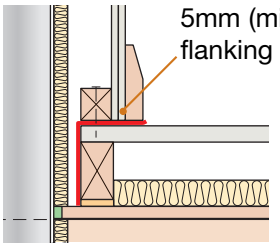
25mm (min) mineral wool quilt (10-36 kg/m^3) around pipe

Pipe boxed in with two layers of gypsum-based board combined nominal 16 kg/m^2

5mm (min) resilient flanking strip

All voids around pipe sealed

Section

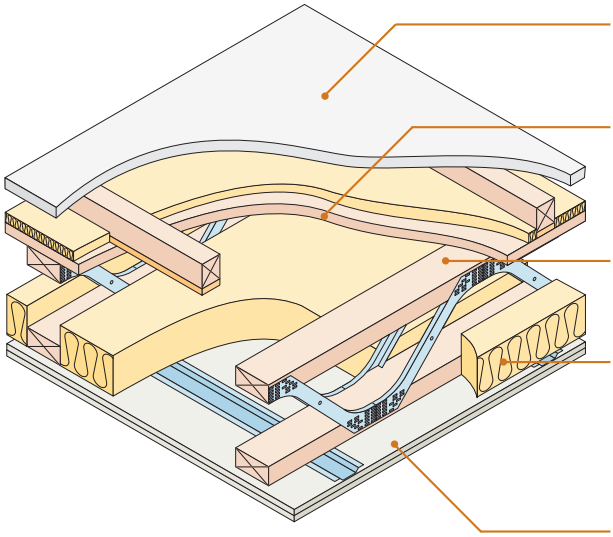


5mm (min) polyethylene foam flanking strip

Alternative detail

Separating Floor – Metal Web Joists E-FT-3

Timber flange and metal web joists ■
Use with timber frame walls only ■



Floating floor	See section 10 for suitable floating floor treatment
Floor decking	18mm thick (min) wood based board, density min 600 kg/m^3
Joists	253mm (min) metal web joists (see joist type below)
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m^3) or Cellecta MICRO 50 between joists
Ceiling	See section 9 for suitable ceiling treatment

Joist type

IMPORTANT

Only the following metal web joists may be used in E-FT-3:

- MiTek Posi-Joist
- WOLF easi-joist
- ITW Gang-Nail Ecojoist
- ITW Alpine SpaceJoist

Notes:

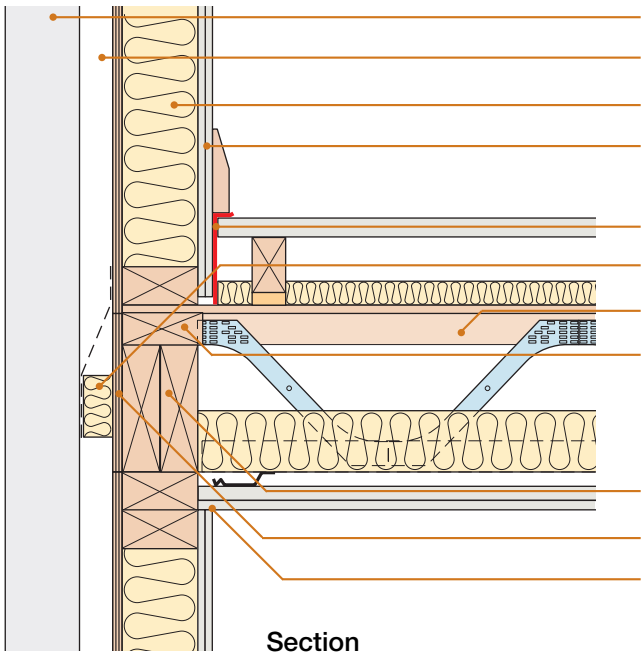
Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

Metal web joists can be **top chord/flange** supported or **fully built-in** and supported on the panel and this is permitted, however, all dimension specifications within this Robust Detail must be adhered to.

DO

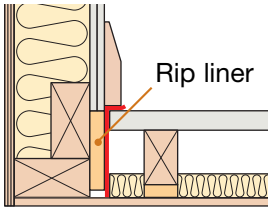
- Ensure correct metal web joists are being used (see joist type)
- Lay quilt between joists ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions (See page 7)
- Ensure quilt within floating floor is laid between and not under flooring battens
- Install resilient flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure timber floor ceiling treatment is fixed correctly (see page 6)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction (top chord supported)



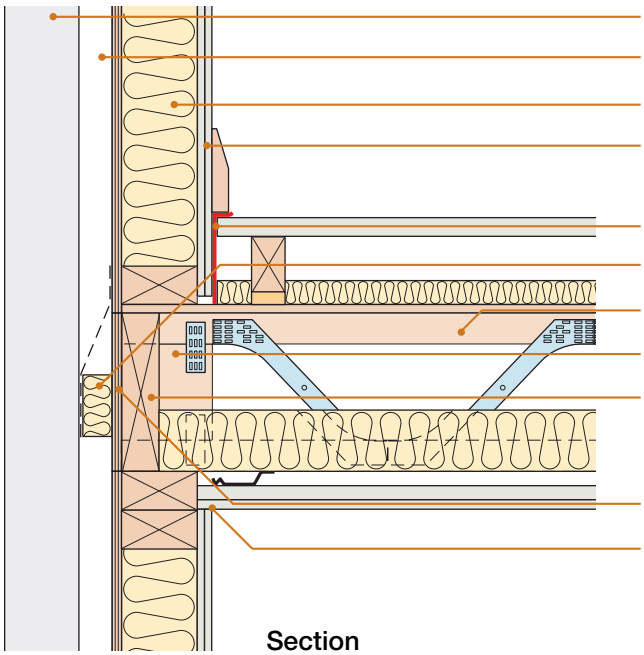
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Softwood timber infill between supporting top chords/flanges of joists built into frame to support floor (Bottom chord not built into frame)
- Ring beams packed to stud width
- Site fixed sheathing board for depth of floor
- Seal all perimeter joints with tape or caulk with sealant

Section



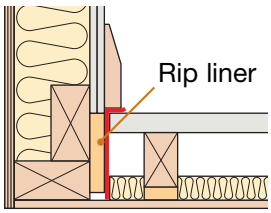
Alternative detail

2. External (flanking) wall junction (fully built-in)



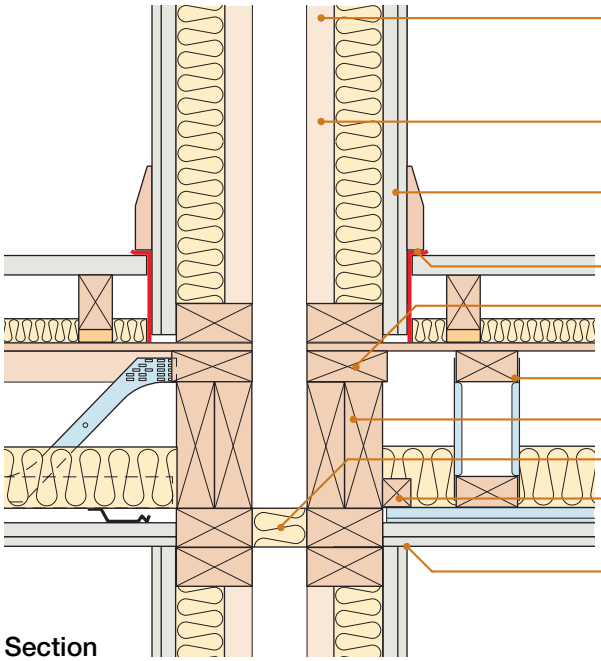
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Trimmable blocking to end of joist
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
- Site fixed sheathing board for depth of floor
- Seal all perimeter joints with tape or caulk with sealant

Section



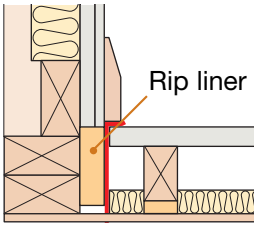
Alternative detail

3. Separating wall junction (top chord supported)



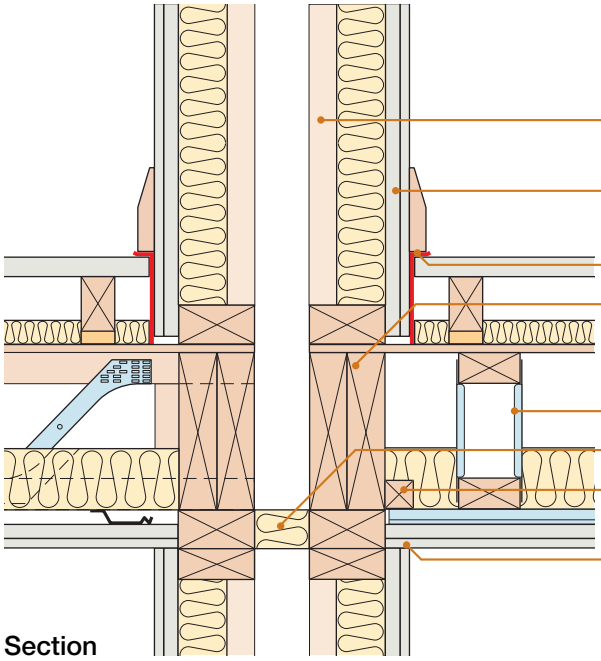
Section

- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- 5mm (min) resilient flanking strip
- Softwood timber infill between supporting top chords/flanges of joists
- Joists may span in either direction
- Ring beams packed to stud width
- Close cavity with a cavity stop (see Appendix A)
- Softwood timber nogging for resilient bar support (leave a small gap at end of resilient bar)
- Seal all perimeter joints with tape or caulk with sealant



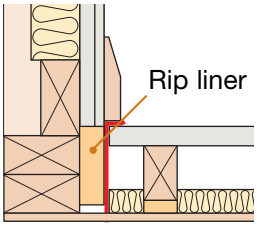
Alternative detail

4. Separating wall junction (fully built-in)



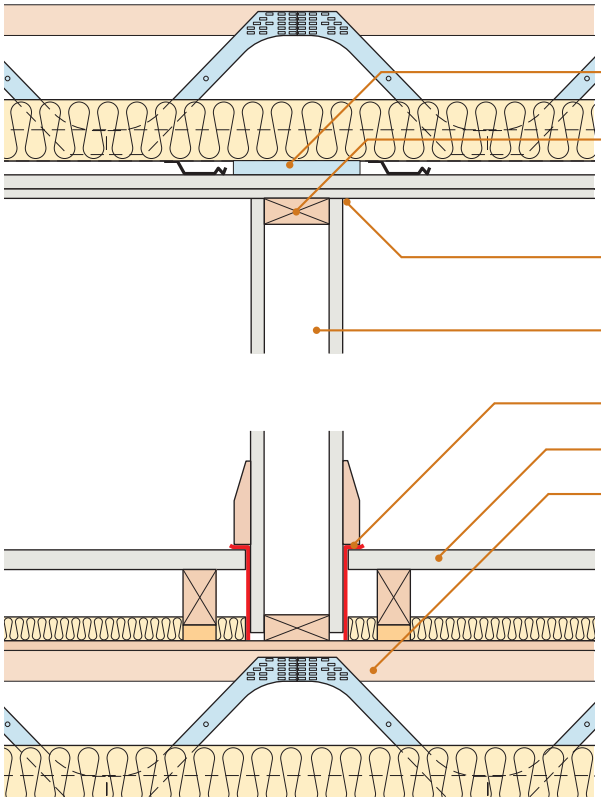
Section

- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- 5mm (min) resilient flanking strip
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- Softwood timber nogging for resilient bar support (leave a small gap at end of resilient bar)
- Seal all perimeter joints with tape or caulk with sealant



Alternative detail

5. Non loadbearing internal wall perpendicular to joists



Resilient bar nogging

Headplate fixed to resilient bar nogging

Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

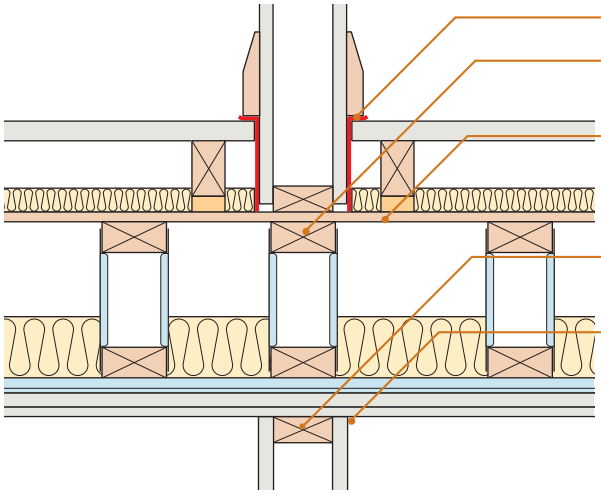
5mm (min) resilient flanking strip

Floating floor

Metal web joist (see joist type, page 1)

*Note - non loadbearing partitions may also be taken directly off the floating floor treatment, check with manufacturer's instructions for installation (see Appendix A)

6. Non loadbearing internal wall parallel to joists



5mm (min) resilient flanking strip

Extra metal web joist (see joist type, page 1) under internal wall

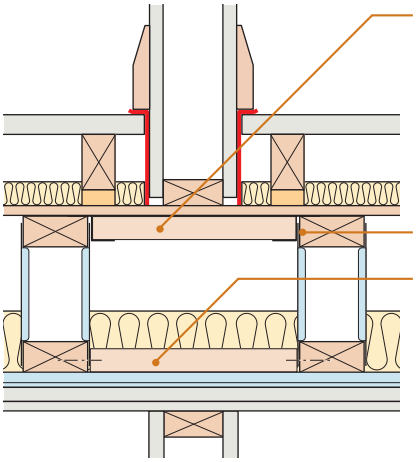
Floor decking

Headplate fixed to resilient bar through ceiling

Seal all perimeter joints with tape or caulk with sealant

*Note - non loadbearing partitions may also be taken directly off the floating floor treatment, check with manufacturer's instructions for installation (see Appendix A)

Alternative detail

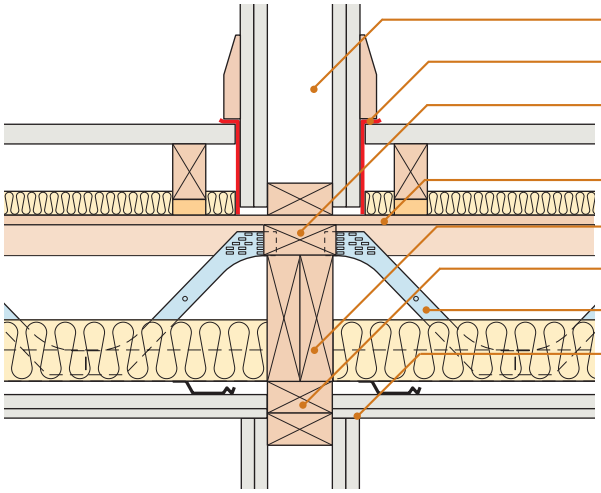


89 x 38mm (min) noggings hung on Z Clips at each end at 600mm c/c (max)

Z Clip

Partition head noggings at 400mm c/c to support resilient bar

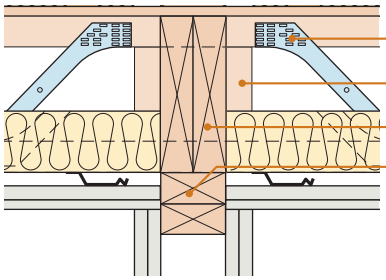
7. Loadbearing internal wall perpendicular to joists



- Internal loadbearing wall
- 5mm (min) resilient flanking strip
- Softwood timber infill between supporting top chords/flanges where required
- Floor decking
- Internal wall beams
- Headplate fixed to internal wall beams
- Metal web joist (see joist type, page 1)
- Seal all perimeter joints with tape or caulk with sealant

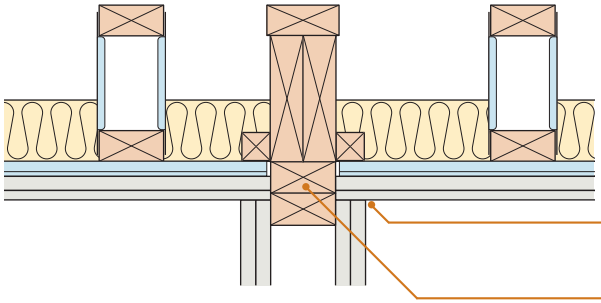
Note: Detail shows top chord/flange supported

Alternative detail

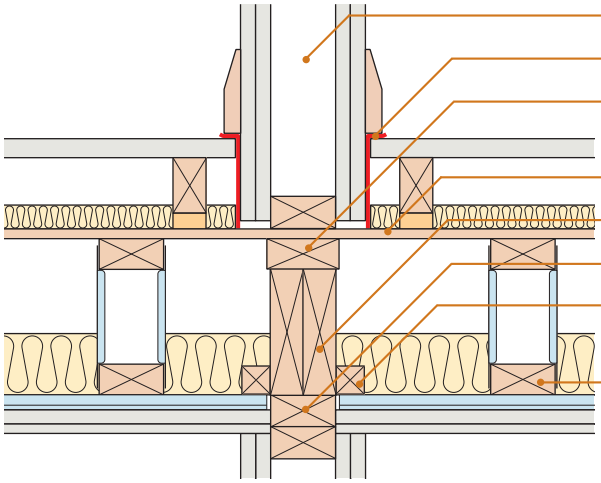


- Metal web joist (see joist type, page 1)
- Timber blocking to joist
- Internal wall beam
- Headplate fixed to internal wall beams

8. Loadbearing internal wall parallel to joists



- Seal all perimeter joints with tape or caulk with sealant
- Headplate fixed to internal wall beams



- Internal loadbearing wall
- 5mm (min) resilient flanking strip
- Softwood timber infill between supporting top chords/flanges where required
- Floor decking
- Internal wall beams
- Headplate fixed to internal wall beams
- Softwood timber noggings for resilient bar support (leave a small gap at end of resilient bar)
- Metal web joist (see joist type, page 1)

Note: Detail shows top chord/flange supported

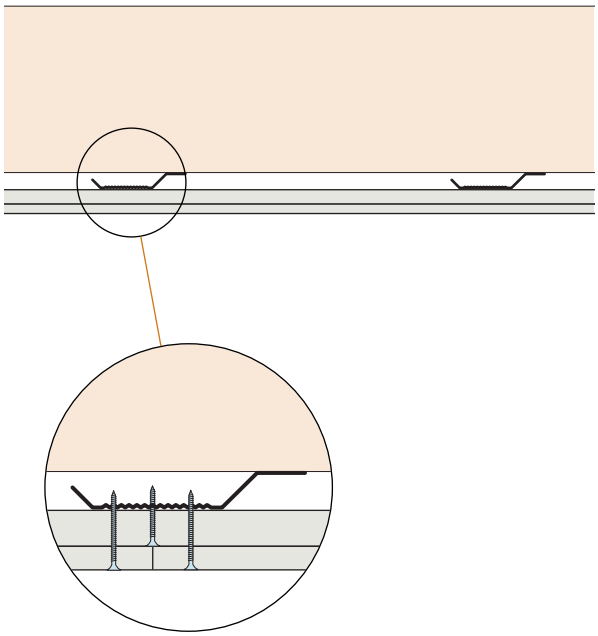
9. Ceiling treatment for E-FT-3

Timber floor ceiling treatment must be either CT1 or CT2 (see below). All joints to outer layers of ceiling must be sealed with tape or caulked with sealant.

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

Ensure ceiling layers have staggered joints.

Services must not puncture ceiling linings (except cables, which should be sealed around with flexible sealant)



Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room unless the use of a greater density of light fittings is supported by testing undertaken in accordance with 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

Note: Only downlighters which have been satisfactorily assessed in accordance with the procedure described in Appendix F "*Determination of the acoustic performance of downlighters and recessed lighting in timber separating floors*" are acceptable.

CEILING BOARD FIXINGS MUST NOT PENETRATE OR TOUCH JOISTS

16mm (min) resilient bars with CT1 and CT2

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of rdΔRw+Ctr=17dB and rdΔLw=16dB) – see Appendix E

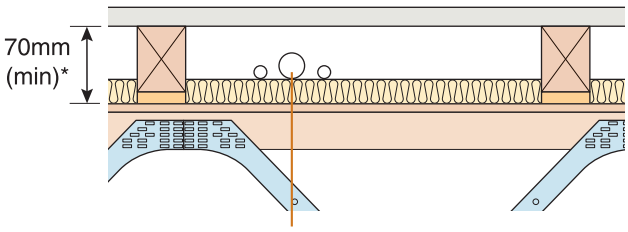
Ceiling treatment CT1

Two layers of gypsum-based board, composed of 19mm (nominal 13.5 kg/m²) fixed with 32mm screws, and 12.5mm (nominal 10 kg/m²) fixed with 42 mm screws

Ceiling treatment CT2

Two layers of gypsum-based boards composed of 15mm (nominal 11.7 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 11.7 kg/m²) fixed with 42mm screws

10. Floating floor treatment for E-FT-3



Services, where required, may be located above or below quilt

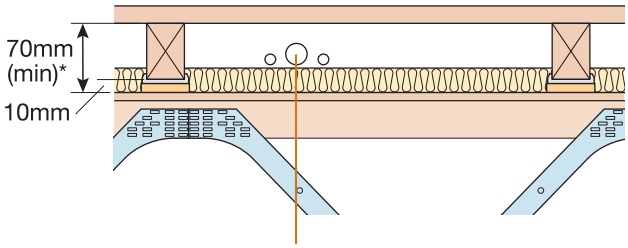
Appendix A3 – Resilient composite deep batten system for E-FT-3

Cellecta HiDECK Structural system

- refer to Appendix A3

JCW Soundboard One system

- refer to Appendix A3



Services, where required, may be located above or below quilt

FFT2 – Resilient cradle and batten system for E-FT-3
Ensure cradles are aligned over joist positions

- 18 mm (min) t&g flooring board
- cradle and batten – refer to Appendix C for performance requirement
- mineral wool quilt laid between battens
  – 13mm (min) 33-36 kg/m^3, or
  – 25mm (min) 10-36 kg/m^3
  or Cellecta MICRO 15
- ensure any services do not bridge the resilient layer

Cellecta HiDECK Structural system

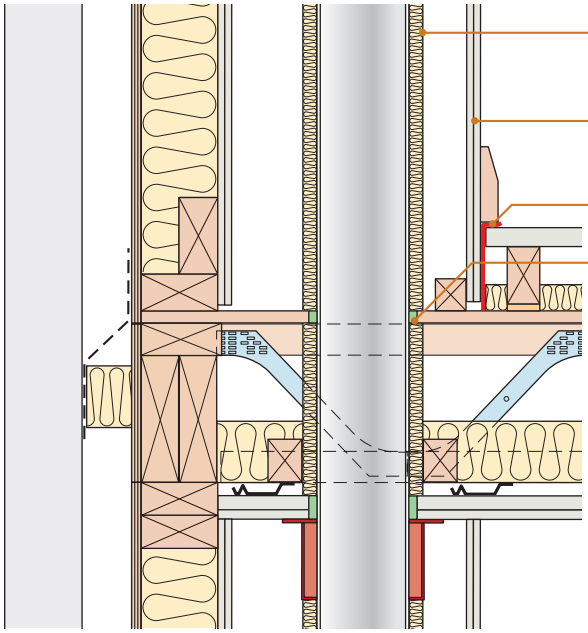
- refer to Appendix A3

JCW Soundboard One system

- refer to Appendix A3

***Note:** Void dimension indicated is when floor is loaded to 25 kg/m^2

11. Services – pipes through separating floor



25mm (min) mineral wool quilt (10-36 kg/m^3) around pipe

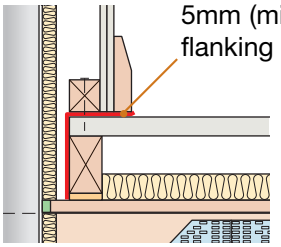
Pipe boxed in with two layers of gypsum-based board, combined nominal 16 kg/m^2

5mm (min) resilient flanking strip

All voids around pipe sealed

Section

Sketch shows top chord supported external (flanking) wall junction detail, for fully built-in arrangement see section 2

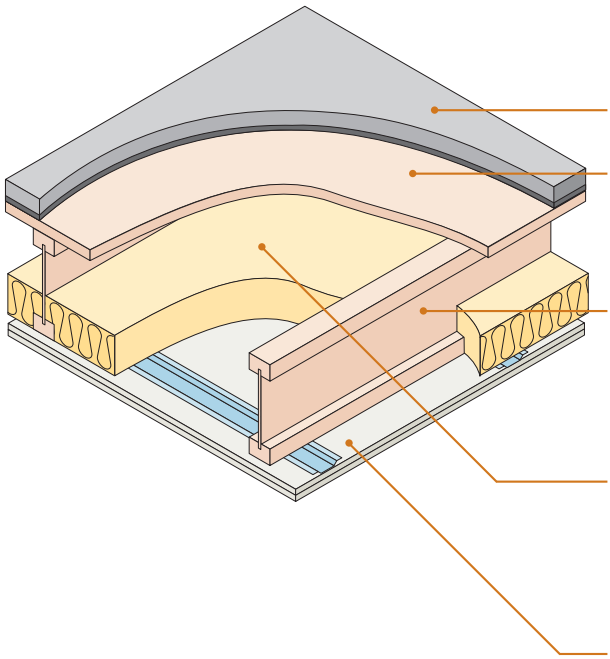


5mm (min) polyethylene foam flanking strip

Alternative detail

Separating Floor – Timber I-Joists E-FT-5

Cellecta® ScreedBoard® 28 on timber sub-floor ■
Timber I-Joists ■
Use with timber frame walls only ■



Floating floor	*Cellecta*® ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	235mm (min) timber I-joist, 240mm (min) where no second ceiling is included. See section 5
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or *Cellecta*® MICRO 50 between joists
Ceiling	See section 5 for ceiling treatment

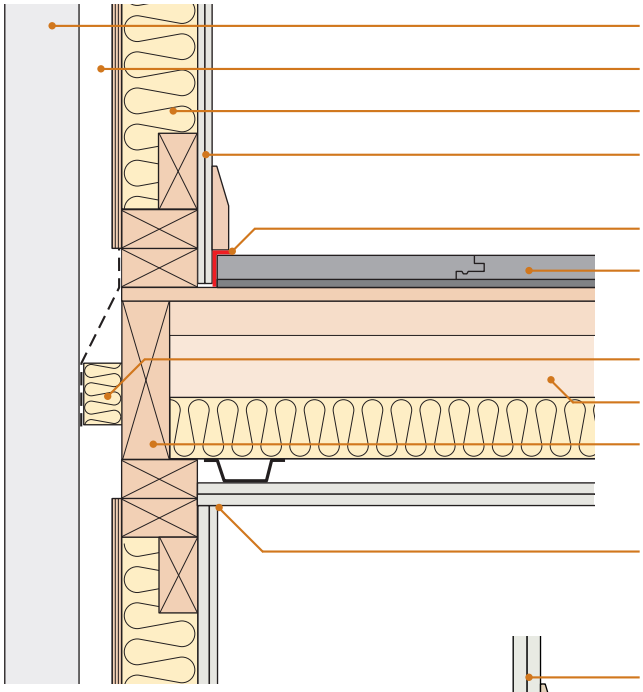
Note: Structural framing details may vary slightly between different manufacturers and this is permitted, however, all dimension specifications within this Robust Detail must be adhered to.

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

DO

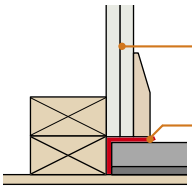
- Lay quilt (min 100mm thick) or *Cellecta*® MICRO 50 between all joists, including doubled up timber I-joists, ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all *Cellecta*® ScreedBoard® 28 decking joints
- Install *Cellecta*® YELO*fon*® FS50 flanking angle around the perimeter of the *Cellecta*® ScreedBoard® 28 to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure ceiling treatment is fixed correctly (see section 5)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction



Masonry outer leaf
External wall cavity (min 50mm)
Mineral wool insulation 10 kg/m³ (min)
Two layers gypsum-based board nominal 8 kg/m² each layer
YELO*fon*® FS50 flanking angle
ScreedBoard® 28
Close cavity with a cavity stop (see Appendix A)
Joists may span in either direction
Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
Seal all perimeter joints with tape or caulk with sealant

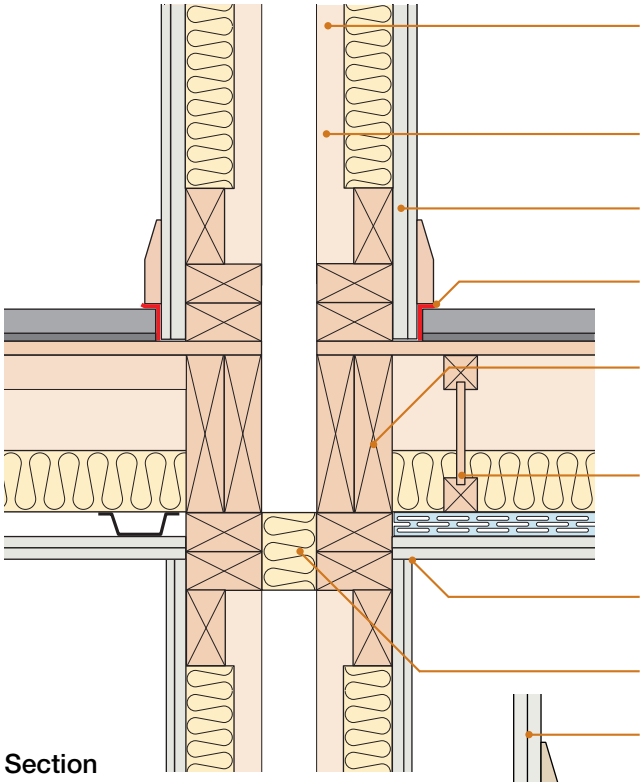
Section



Two layers gypsum-based board nominal 8 kg/m² each layer
YELO*fon*® FS50 flanking angle

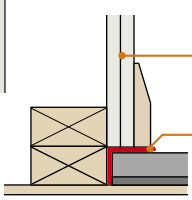
Alternative detail

2. Separating wall junction



If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
If using wall requiring pre-completion testing - seek specialist advice
Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
YELO*fon*® FS50 flanking angle
Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
Joists may span in either direction
Seal all perimeter joints with tape or caulk with sealant
Close cavity with a cavity stop (see Appendix A)

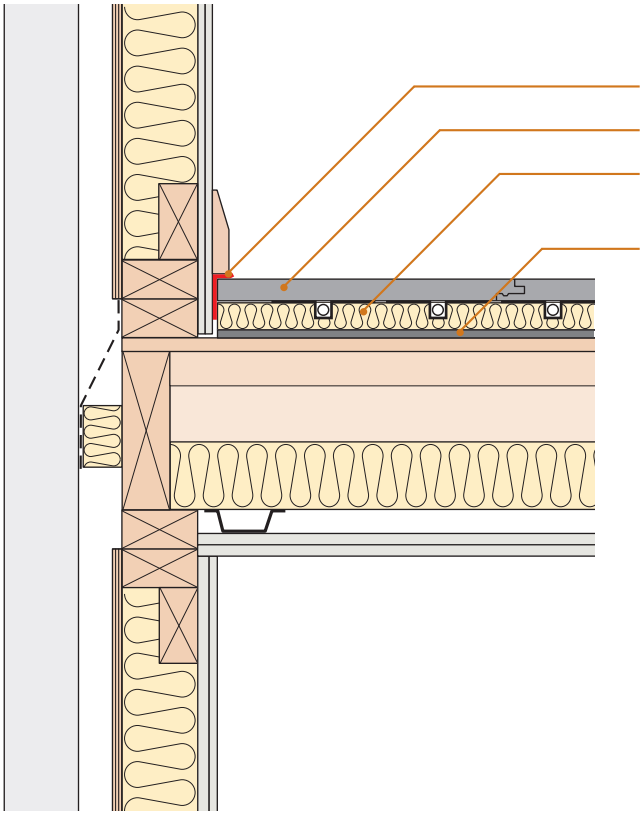
Section



Two layers gypsum-based board nominal 8 kg/m² each layer
YELO*fon*® FS50 flanking angle

Alternative detail

6. Underfloor heating systems below ScreedBoard®

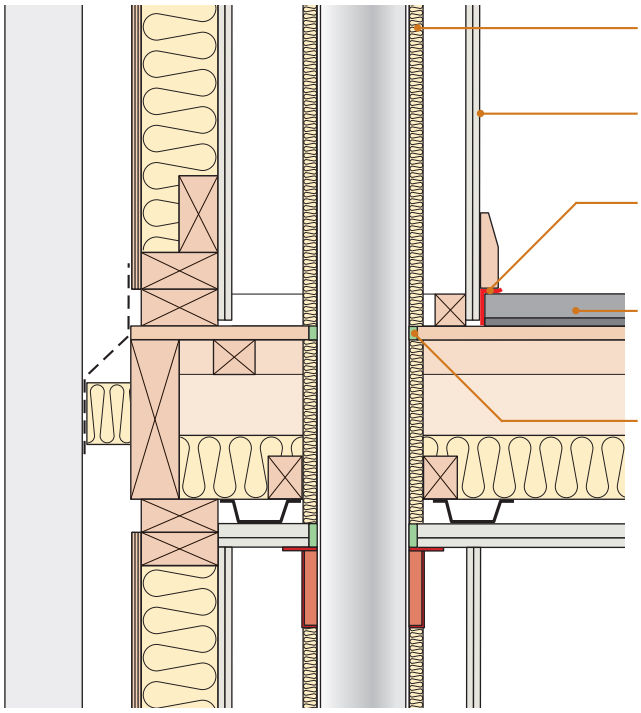


Cellecta® Mojave® S1-8 or S2-8 system;
or use the following components:

- YELO*fon*® FS50 flanking angle
- 20mm ScreedBoard® 20
- 25mm (min) extruded or expanded polystyrene panel with underfloor heating pipes
- 8mm *Cellecta*® FIBRE*fon*® 8 resilient layer

Section

7. Services – pipes through separating floor



- 25mm (min) mineral wool quilt (10-36 kg/m^3) around pipe
- Pipe boxed in with two layers of gypsum-based board combined nominal 16 kg/m^2
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- All voids around pipe sealed

Section

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Has training been received from *Cellecta*?			
2.	Are timber I-joists minimum 235mm deep? (see also point 6 below)			
3.	Is sub-deck minimum 18mm, 600 kg/m^3?			
4.	Are YELO*fon*® FS50 flanking angles installed correctly?			
5.	Has the ScreedBoard® 28 floating floor treatment been fitted in accordance with the manufacturer's instructions?			
6.	Where underfloor heating is used, is FIBRE*fon*® 8 installed in addition to the ScreedBoard® 20?			
7.	Are the correct type of resilient ceiling bars used and fitted, in accordance with the manufacturer's instructions, at right angles to the joists (*Cellecta*® HP30 bars and min. 240mm joists must be used if second ceiling is not included)?			
8.	Has the specified quilt been fitted between the joists?			
9.	Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
10.	For CT1 or CT2 is secondary ceiling void minimum 150mm?			
11.	Are all joints sealed with tape or caulked with sealant?			
12.	Are vertical service pipes wrapped in quilt and boxed in with two layers of gypsum-based board combined nominal mass per unit area of 16 kg/m^2?			
13.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from *Cellecta*®, manufacturer of ScreedBoard® 28 system:

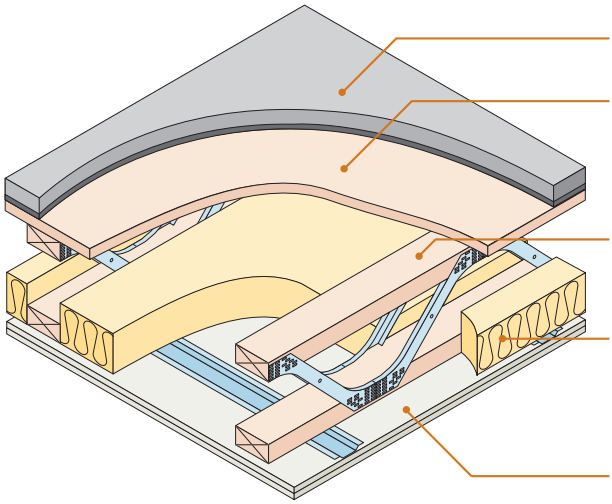
Telephone: 01634 296677 **Fax:** 01634 226630 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Metal Web Joists E-FT-6

Cellecta® ScreedBoard® 28 on timber sub-floor ■
Timber flange and metal web joists ■
Use with timber frame walls only ■



Floating floor	*Cellecta*® ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density min 600 kg/m³
Joists	253mm (min) metal web joists (see joist type below)
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) between joists
Ceiling	See section 9 for suitable ceiling treatment

Joist type

IMPORTANT

Only the following metal web joists may be used in E-FT-6:

- MiTek Posi-Joist
- WOLF easi-joist
- ITW Gang-Nail Ecojoist
- ITW Alpine SpaceJoist

Notes:

Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

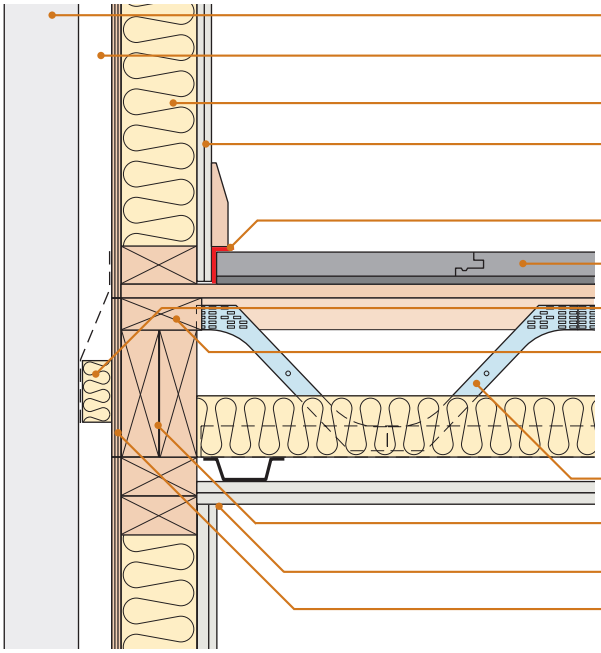
Metal web joists can be **top chord/flange** supported or **fully built-in** and supported on the panel and this is permitted, however, all dimension specifications within this Robust Detail must be adhered to.

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

DO

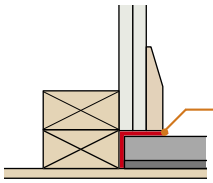
- Ensure correct metal web joists are being used (see joist type)
- Lay quilt (min 100mm thick) between joists ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all ScreedBoard® 28 decking joints
- Install *Cellecta*® YELO*fon*® FS50 flanking angle around the perimeter of the ScreedBoard® 28 to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure timber floor ceiling treatment is fixed correctly (see section 9)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction (top chord supported)



- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Close cavity with a cavity stop (see Appendix A)
- Softwood timber infill between supporting top chords/flanges of joists built into frame to support floor (Bottom chord not built into frame)
- Joists may span in either direction
- Ring beams packed to stud width
- Seal all perimeter joints with tape or caulk with sealant
- Site fixed sheathing board for depth of floor

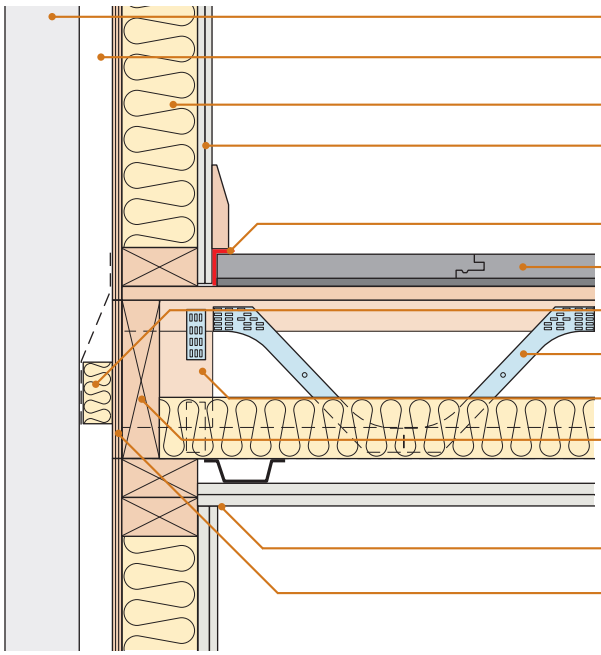
Section



- YELO*fon*® FS50 flanking angle

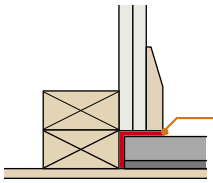
Alternative detail

2. External (flanking) wall junction (fully built-in)



- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Trimmable blocking to end of joist
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
- Seal all perimeter joints with tape or caulk with sealant
- Site fixed sheathing board for depth of floor

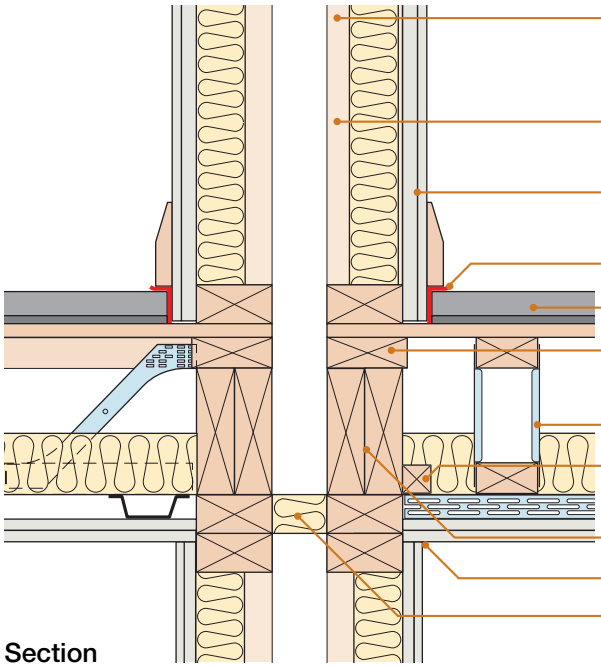
Section



- YELO*fon*® FS50 flanking angle

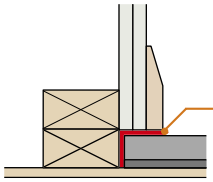
Alternative detail

3. Separating wall junction (top chord supported)



Section

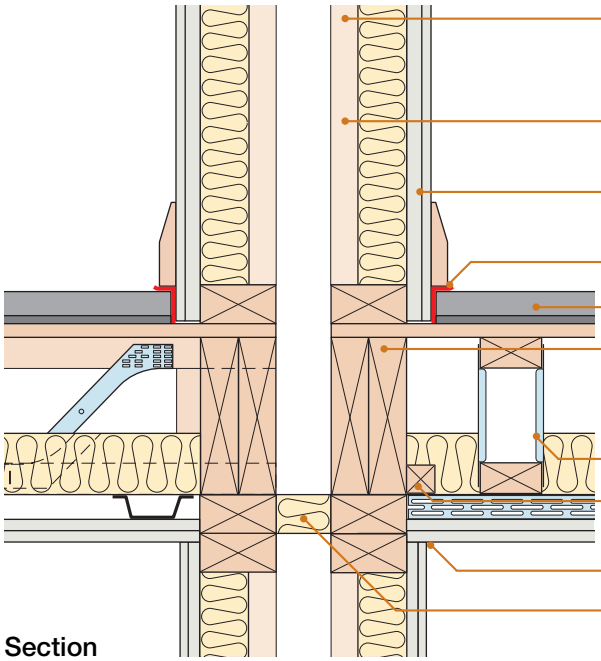
- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Softwood timber infill between supporting top chords/flanges of joists
- Joists may span in either direction
- Softwood timber nogging for resilient bar support (leave a small gap at end of resilient bar)
- Ring beams packed to stud width
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)



Alternative detail

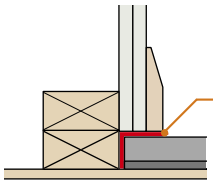
- YELO*fon*® FS50 flanking angle

4. Separating wall junction (fully built-in)



Section

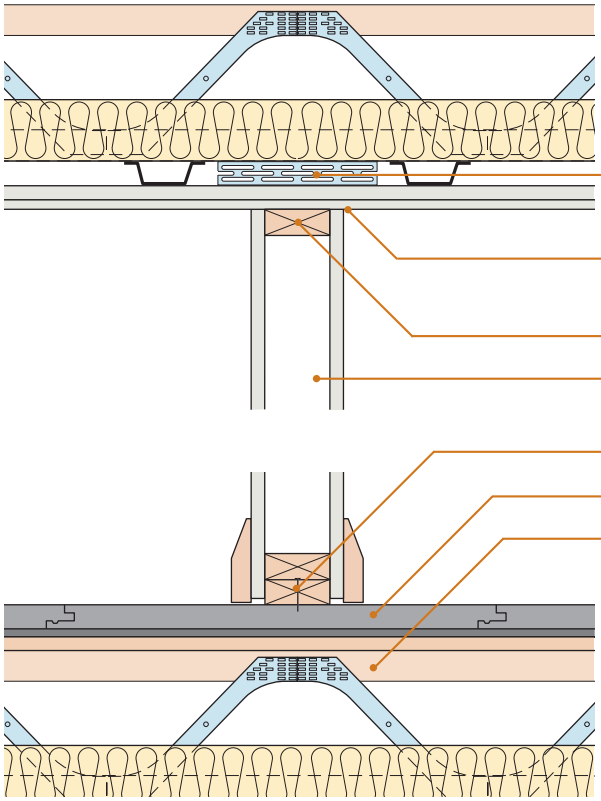
- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
- Joists may span in either direction
- Softwood timber nogging for resilient bar support (leave a small gap at end of resilient bar)
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)



Alternative detail

- YELO*fon*® FS50 flanking angle

5. Non loadbearing internal wall perpendicular to joists



Resilient bar nogging

Seal all perimeter joints with tape or caulk with sealant

Headplate fixed to resilient bar nogging through ceiling

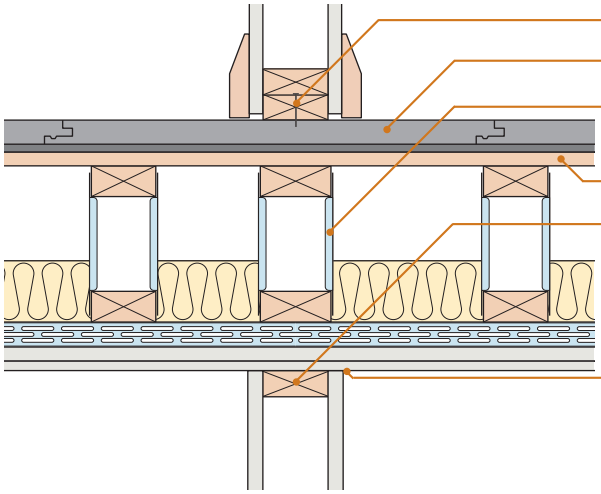
Where required internal wall to comply with Building Regulations Requirement E2

Ensure fixings do not penetrate the resilient layer

ScreedBoard® 28

Metal web joist (see joist type, page 1)

6. Non loadbearing internal wall parallel to joists



Ensure fixings do not penetrate the resilient layer

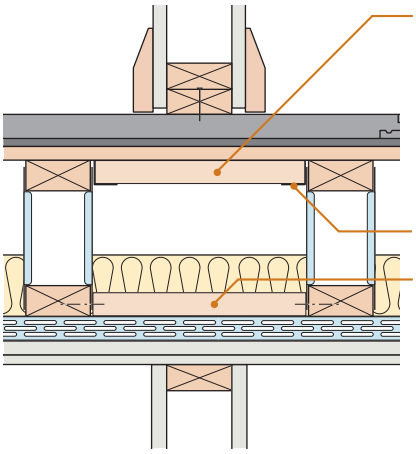
ScreedBoard® 28

Extra metal web joist (see joist type, page 1) under internal wall

Floor decking

Headplate fixed to resilient bar through ceiling

Seal all perimeter joints with tape or caulk with sealant



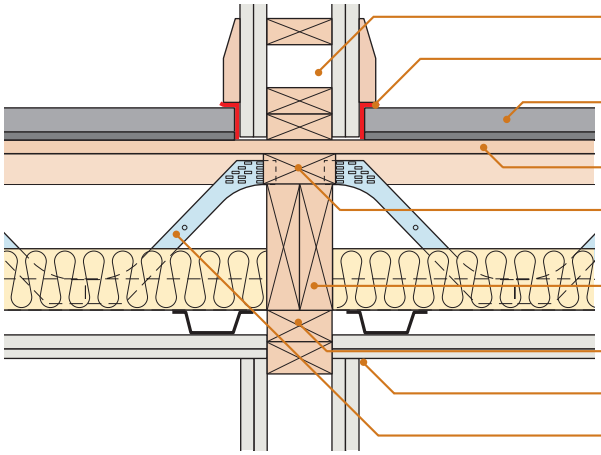
89 x 38mm (min) noggings hung on Z Clips at each end at 600mm c/c (max)

Z Clip

Partition head noggings at 400mm c/c to support resilient bar

Alternative detail

7. Loadbearing internal wall perpendicular to joists

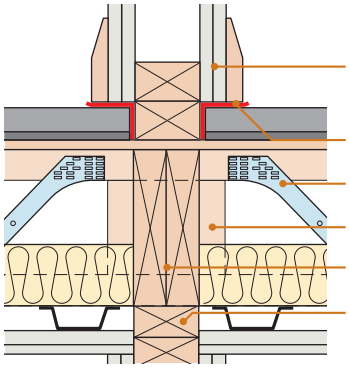


- Internal loadbearing wall
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Floor decking
- Softwood timber infill between supporting top chords/flanges where required
- Internal wall beams
- Headplate fixed to internal wall beams
- Seal all perimeter joints with tape or caulk with sealant
- Metal web joist (see joist type, page 1)

Note:

Main detail shows top chord/flange supported

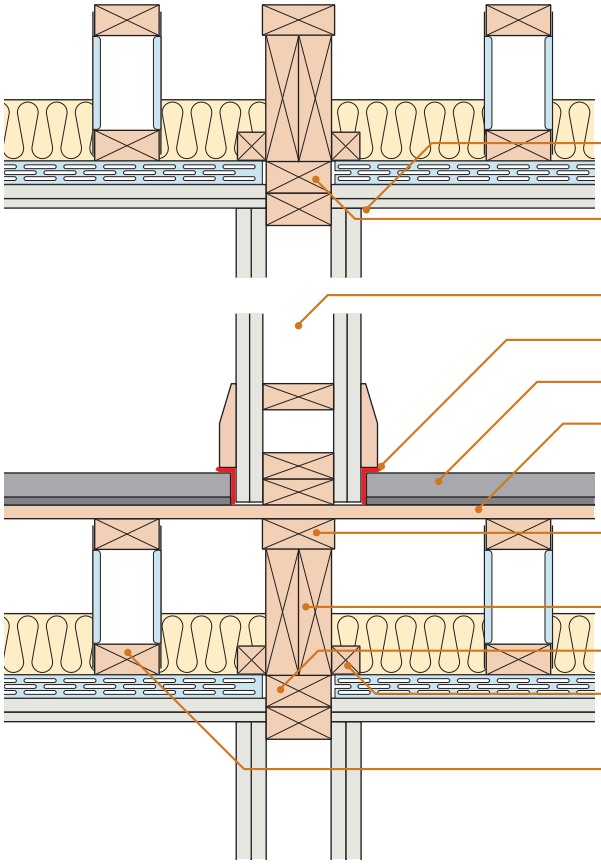
Alternative detail shows bottom chord supported



Alternative detail

- Two layers gypsum-based board nominal 8 kg/m^2 each layer
- YELO*fon*® FS50 flanking angle
- Metal web joist (see joist type, page 1)
- Timber blocking to joist
- Internal wall beams
- Headplate fixed to internal wall beams

8. Loadbearing internal wall parallel to joists



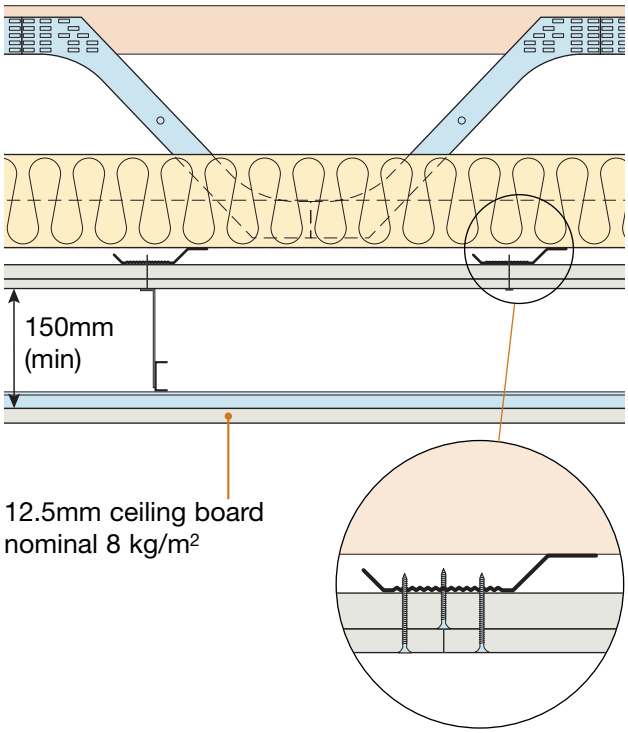
- Seal all perimeter joints with tape or caulk with sealant
- Headplate fixed to internal wall beams
- Internal loadbearing wall
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Floor decking
- Softwood timber infill between supporting top chords/flanges where required
- Internal wall beams
- Headplate fixed to internal wall beams
- Softwood timber noggings for resilient bar support (leave a small gap at end of resilient bar)
- Metal web joist (see joist type, page 1)

Note: Detail shows top chord/flange supported

9. Ceiling treatment for E-FT-6

- The maximum load on resilient bars should not exceed that specified in the manufacturer's instructions
- Ensure ceiling layers have staggered joints.
- Services must not puncture ceiling linings (except cables, which should be sealed around with flexible sealant)

CT1 and CT2 – Must include second ceiling



CEILING BOARD FIXINGS MUST NOT PENETRATE OR TOUCH JOISTS

16mm (min) resilient bars with CT1 and CT2

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of rdΔRw+Ctr=17dB and rdΔLw=16dB) – see Appendix E

Ceiling treatment CT1

Two layers of gypsum-based board, composed of 19mm (nominal 13.5 kg/m²) fixed with 32mm screws, and 12.5mm (nominal 10 kg/m²) fixed with 42 mm screws

Ceiling treatment CT2

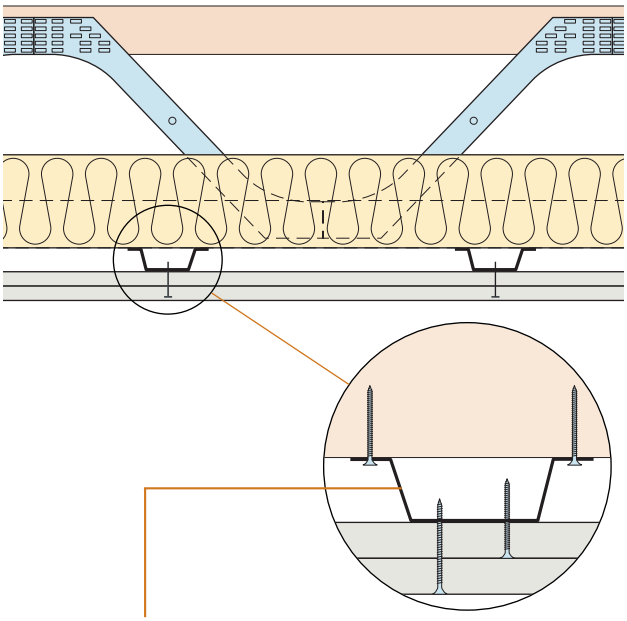
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the second ceiling in accordance with the manufacturer's instructions

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

CT3 – Optional second ceiling



Cellecta® HP30 30mm deep metal resilient bar fixed perpendicular to floor joists at 600mm (max) centres

Ceiling treatment CT3

Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

Downlighters and recessed lighting

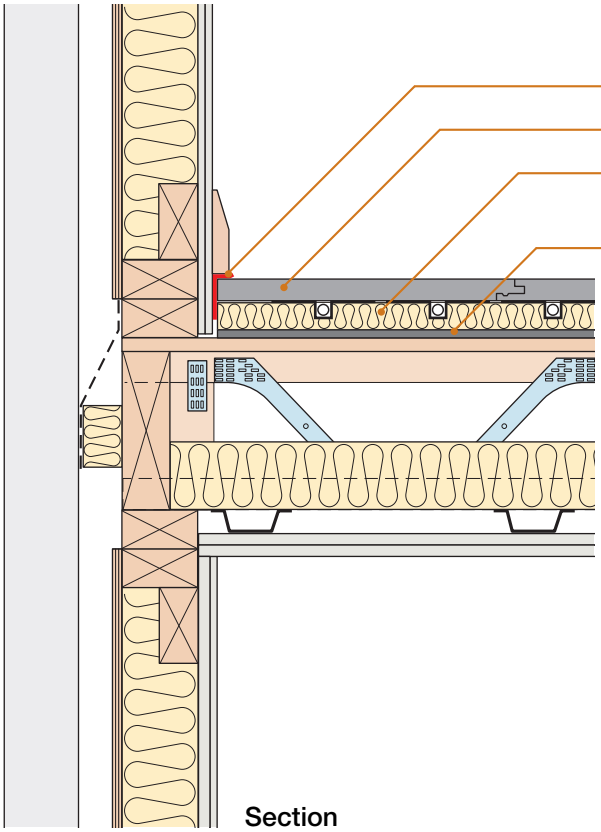
Downlighters or recessed lighting may be installed in the primary ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room unless the use of a greater density of light fittings is supported by testing undertaken in accordance with 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

Note: Only downlighters which have been satisfactorily assessed in accordance with the procedure described in Appendix F *"Determination of the acoustic performance of downlighters and recessed lighting in lightweight separating floors"* are acceptable.

10. Underfloor heating systems below ScreedBoard®

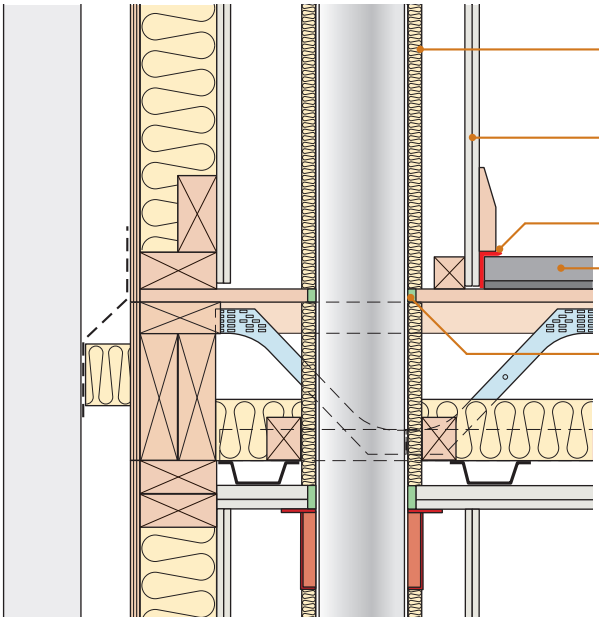


Section

Cellecta® Mojave® S1-8 or S2-8 system;
or use the following components:

- YELO*fon*® FS50 flanking angle
- 20mm ScreedBoard® 20
- 25mm (min) extruded or expanded polystyrene panel with underfloor heating pipes
- 8mm *Cellecta*® FIBRE*fon*® 8 resilient layer

11. Services – pipes through separating floor



Section

- 25mm (min) mineral wool quilt (10-36 kg/m^3) around pipe
- Pipe boxed in with two layers of gypsum-based board, combined nominal 16 kg/m^2
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- All voids around pipe sealed

Sketch shows top chord supported external (flanking) wall junction detail, for fully built-in arrangement see section 2

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Has training been received from *Cellecta*?			
2.	Are correct metal web joists being used (see page 1 of Robust Detail)?			
3.	Which of the permitted metal web joist types are being used?			
4.	Are joists at least 253mm deep?			
5.	Are YELO*fon*® FS50 flanking angles installed correctly?			
6.	Has the ScreedBoard® 28 floating floor treatment been fitted in accordance with the manufacturer's instructions?			
7.	Where underfloor heating is used, is FIBRE*fon*® 8 installed in addition to the ScreedBoard® 20?			
8.	Are the correct type of resilient ceiling bars used and fitted, in accordance with the manufacturer's instructions, at right angles to the joists (*Cellecta*® HP30 bars must be used if second ceiling is not included)?			
9.	Has quilt (min 100mm thick) been fitted between the joists			
10.	Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
11.	For CT1 or CT2 is secondary ceiling void minimum 150mm?			
12.	Are all joints sealed with tape or caulked with sealant?			
13.	Are vertical service pipes wrapped in quilt and boxed in with two layers of gypsum-based board combined nominal mass per unit area of 16 kg/m^2?			
14.	Is separating floor satisfactorily complete?			

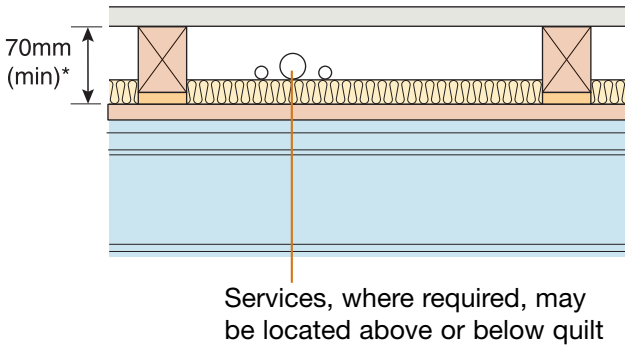
Contact details for technical assistance from *Cellecta*®, manufacturer of ScreedBoard® 28 system:

Telephone: 01634 296677 **Fax:** 01634 226630 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

6. Floating floor treatment for E-FS-2



Appendix A3 – Resilient composite deep batten system

Cellecta HiDECK Structural system

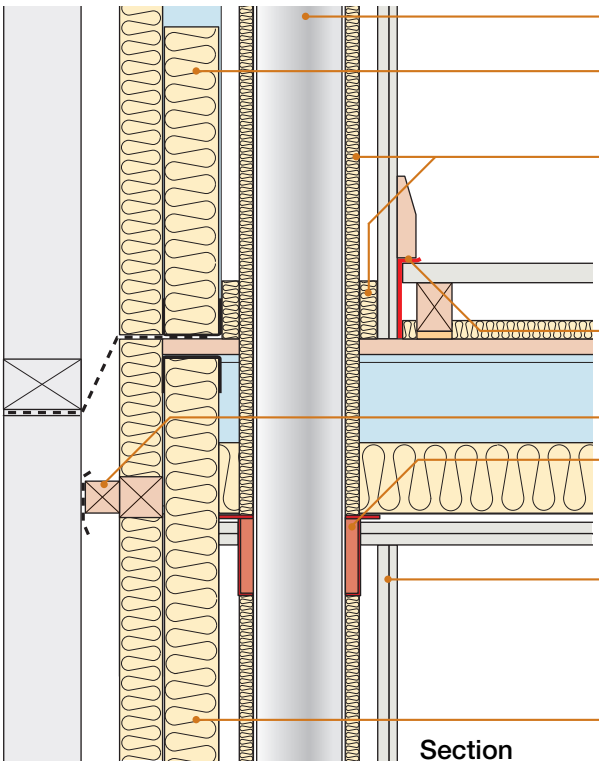
- refer to Appendix A3

JCW Sounboard One system

- refer to Appendix A3

***Note:** Void dimension indicated is when floor is loaded to 25 kg/m^2

7. Services – pipes through separating floor



Section

Service pipe

Mineral wool insulation batts, 33-60 kg/m^3, between studs of steel frame

25mm mineral fibre quilt insulation (10-36kg/m^3) installed around the complete perimeter of the service pipe. Where the service pipe penetrates the separating floor, all voids are to be packed with insulation quilt

5mm (min) resilient flanking strips installed at perimeter and turned under skirting board

Close cavity with a cavity stop (see Appendix A)

Proprietary fire collar fitted around pipe and fixed to underside of steel joists

2 layers of gypsum-based board nominal 20 kg/m^2 combined fixed to 45mm metal frame stud forming duct. Joints to be staggered and taped

Mineral wool insulation batts, 33-60 kg/m^3, between studs to 600mm (min) below ceiling level

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are UltraBEAM metal joists at least 225mm deep?			
2.	Has the specified quilt been fitted between the joists?			
3.	Are resilient ceiling bars fitted at right angles to the joists?			
4.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
5.	Has floating floor treatment been fitted in accordance with the manufacturer's instructions?			
6.	Has the specified quilt been fitted between the floor battens?			
7.	Is ceiling treatment fixed to the resilient bars with correct screws?			
8.	Are all joints sealed with tape or caulked with sealant?			
9.	Are vertical service pipes wrapped in quilt and boxed in with two layers of gypsum-based board combined nominal mass per unit area of 20 kg/m^2?			
10.	Have all resilient flanking strips been fitted?			
11.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Hadley Group, manufacturer of UltraBEAM metal joists:

Telephone: 0121 555 1300 **Fax:** 0121 555 1301 **E-mail:** info@hadleygroup.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Appendix A1 – Additional Guidance

Contents

Wall ties in cavity masonry separating walls

Cavity masonry separating wall Robust Details must have no greater than a Type A connection of one leaf to the other. This is achieved by using wall ties specifically tested for Type A status over the cavity width being built, positioned 900mm horizontally (staggered) and 450mm vertically to give 2.5 ties/m^2. If a greater number of ties is required, check with the tie manufacturer that a Type A connection can still be achieved.

Special consideration should be given in respect of movement joints, where de-bonded ties should be used across the movement joint to allow fewer wall ties across the cavity (see Movement Joints section on page 2).

Approved Document E clause 2.19 describes the requirements for Tie Type A (separating walls) as follows:

> ***Tie Type A***
> Connect the leaves of a masonry cavity wall only where necessary by butterfly ties as described in BS 1243: 1978 Metal ties for cavity wall construction, and spaced as required for structural purposes (BS 5628-3: 2001 Code of practice for use of masonry. Materials and components, design and workmanship, which limits this tie type and spacing to cavity widths of 50mm to 75mm with a minimum masonry leaf thickness of 90mm). Alternatively, use wall ties with an appropriate measured dynamic stiffness for the cavity width. The specification for wall ties of dynamic stiffness, $k_X$mm in MN/m with a cavity width of X mm and *n* ties/m^2 is $n.k_X\text{mm} < 4.8$ MN/m^3.
>
> When using wall ties for masonry separating walls the specifier should ensure that the wall tie manufacturer has a test report that demonstrates compliance with the required ADE criteria.

Wall ties in cavity masonry external walls

In relation to the wall tie requirements for external walls tie “Type A” may be used if it satisfies the requirements of Building Regulation Part A – Structure. However, where tie “Type A” does not meet these requirements for external walls tie “Type B” wall ties should be used.

Approved Document E clause 2.20 describes the requirements for Tie Type B (external walls).

Appendix A1 – Additional Guidance

Cavity stops

The flexible cavity stops at the junction of the separating wall and the external (flanking) wall are shown in the Robust Details as a single piece of material (diagram a). It is acceptable for these to be provided as two separate pieces (diagram b), or three separate pieces (diagram c). Diagram d shows an alternative option where a cavity stop is required at the junction of two blown-fibre cavity walls.

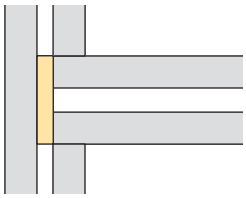


Diagram a

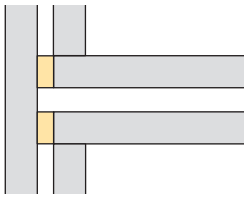


Diagram b

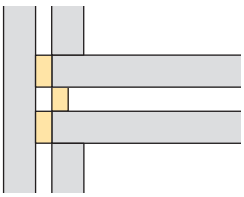


Diagram c

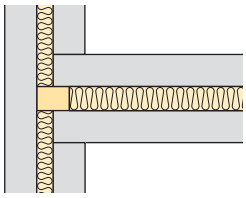


Diagram d

The following types of cavity stop may be used:

- single mineral wool batt cavity stops
- dual rigid cavity stops on either side of the external wall cavity (not for masonry separating walls)
- single rigid cavity stop attached to one leaf of the separating wall only (not for masonry separating walls)
- flexible single cavity stop such as the mineral wool “tubular style”
- flexible double cavity stops such as the mineral wool “tubular style” where one is fitted in line with each leaf of the separating wall.

Single rigid cavity stops which structurally couple both leaves of the separating wall are not permitted.

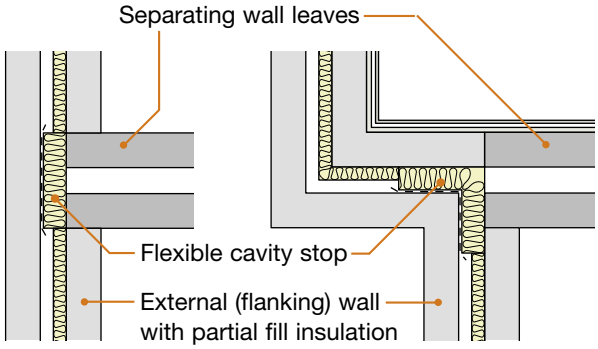


Diagram e

Partial fill insulation should be installed up to the cavity stop.

Cavity trays

The cavity trays shown above the cavity stops are included for illustrative purposes only and not for acoustic reasons.

Movement joints in cavity masonry separating walls

Separating walls with a gypsum-based board finish

Where possible, movement joints should be avoided in separating walls with a gypsum-based board finish. Where they are essential, they should be formed as follows:

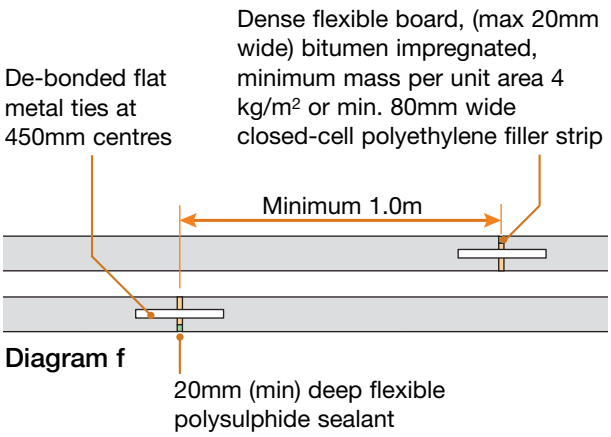


Diagram f

Where possible, movement joints should be located in bathrooms or other minor rooms or behind cupboards, etc.

Separating walls with wet plaster finish

Movement joints are not acceptable in robustdetails® separating walls with a wet plaster finish unless they are strategically placed behind internal wall junctions or service pipe casings.

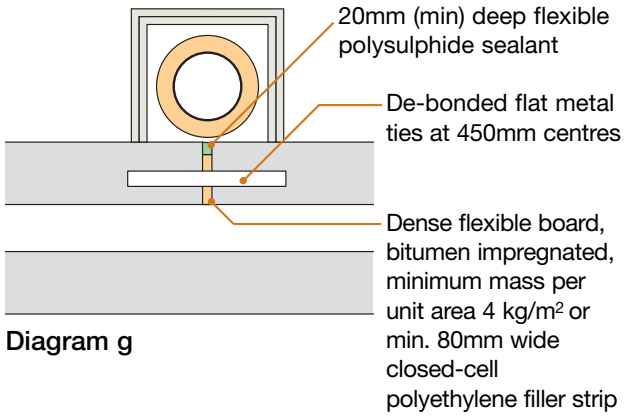


Diagram g

The movement joints must also be staggered and spaced not less than 1m apart, as shown in Diagram f above.

Appendix A1 – Additional Guidance

Spandrel panels

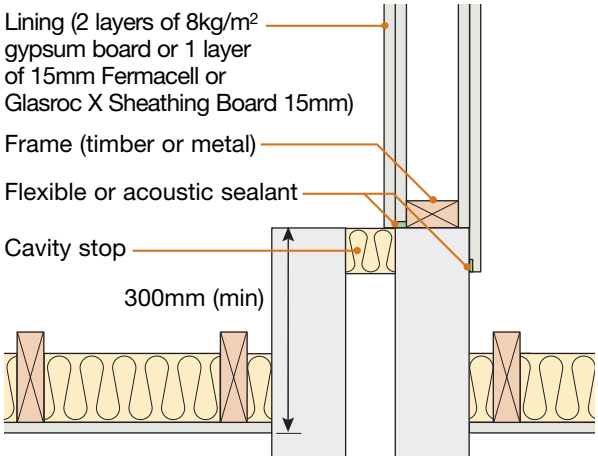
Where stated in the Robust Detail, spandrel panels are an acceptable alternative to continuing the separating wall to the underside of the roof covering in non-room-in-roof situations.

When adopting spandrel panels, particular attention should be paid to Building Regulations Part B - Fire Safety. Below is the minimum specification required to maintain just the acoustic integrity.

The spandrel panel should comprise:
2 layers of nominal 8 kg/m^2 gypsum-based board (staggered joints) or 1 layer of 15mm Fermacell board or Glasroc X Sheathing Board 15mm (tight butted joints) fitted each side of a timber or lightweight steel frame. Frame sizes to be in accordance with structural design requirements and a supporting fire test, but no less than 45mm between board linings. Lapped joints or those backed by timber members do not require sealing, but gaps should be treated with sealant or cover strips. Cover strips should be provided over the abutment joint of two adjoining spandrel panels.

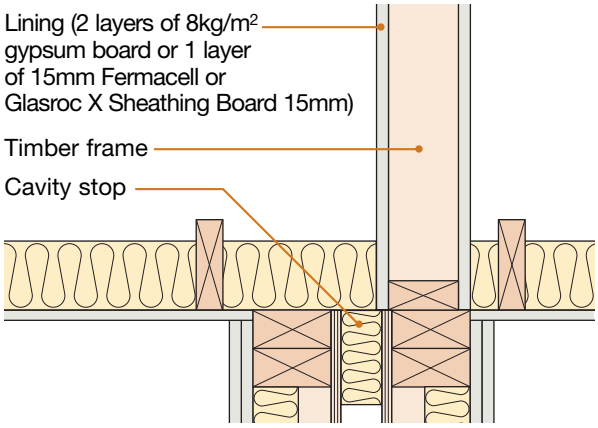
Two panels may be adopted provided a 50mm (min.) cavity is maintained between the sheathing faces, or the stud frames where no sheathing is fitted. Spandrel panels must not connect the wall leafs.

Masonry construction



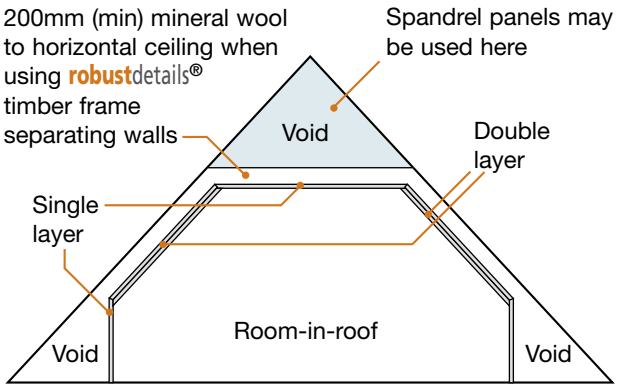
The spandrel panel may be mounted on a layer of mineral wool laid along the blockwork leaf as an alternative to the flexible or acoustic sealant.

Timber frame construction



Room-in-roof – requirements for gypsum-based boards

Where stated in the Robust Detail, the separating wall can continue up to form a room-in-roof. Where the ceiling to the room is directly beneath the roof structure, typically the sloping areas, two layers of gypsum-based board are required, as per the relevant room-in-roof detail for the adopted separating wall. A single layer of gypsum-based board may be adopted in other areas. See also Gypsum-based board section below.



Section through room-in-roof

Gypsum-based board

Gypsum-based boards may be either plaster gypsum-based or cement gypsum-based.

The mass per unit area or surface density specified is a nominal minimum value in kilograms per square metre (kg/m^2): the use of a higher density board will increase the sound insulation performance.

Boards should be tightly abutted, and final layer boards facing into a room should have all joints sealed with tape or caulked with sealant. Where two or more layers of gypsum-based board are required, all joints should be staggered.

Thermal laminate boards may be used as the wall finish to masonry walls, provided the nominal mass per unit area indicated in the Robust Detail is maintained.

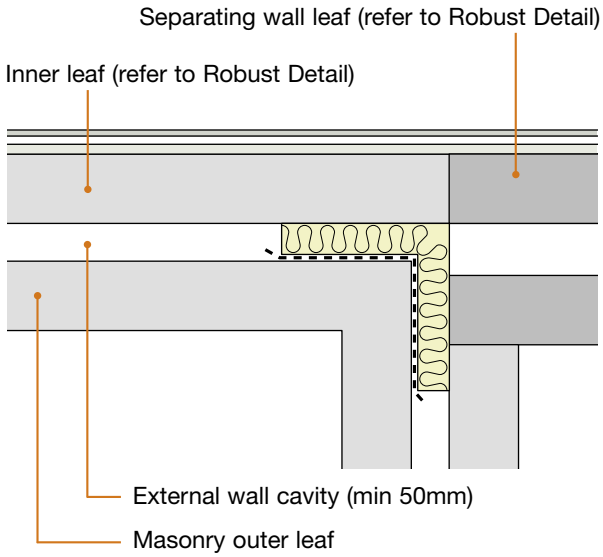
Gypsum coving is an acceptable alternative to caulking or sealing the joint between the wall and the ceiling.

Installation instructions and further guidance should also be sought from the board manufacturer.

Appendix A1 – Additional Guidance

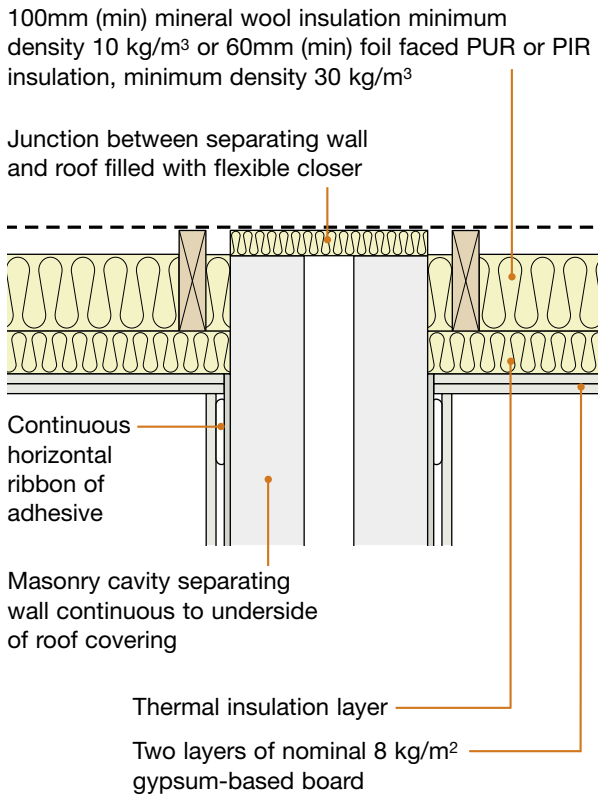
Cavity masonry separating walls – staggered external (flanking) wall junction

As an alternative to the junction shown in the Robust Detail, it is acceptable for the inner leaf blockwork to extend to the inner face of the external wall cavity, as shown below.



Roof junctions – thermal insulation

Additional layers of thermal insulation may be added as follows:



Building Regulations Part A (2004) – disproportionate collapse

Masonry construction

Lateral restraint straps may be used at floor junctions, roof level and other junctions, if necessary to meet the requirements of Part A, provided they do not bridge the cavity separating wall leaves and that no voids remain at the mortar joints.

Internal walls (minimum mass requirements)

Junctions with cavity masonry separating walls

- masonry internal walls where there is no separating floor (e.g. houses) – no restrictions
- masonry internal walls where there is a separating floor (e.g. flats/apartments) – internal wall should have a minimum mass per unit area of 120 kg/m² (including the finish) OR at least that of the approved flanking wall inner leaf, if this is less.
- timber frame and steel frame internal walls – no restrictions.

Junctions with timber and steel frame separating walls

No minimum mass requirements.

Junctions with concrete or steel-concrete composite separating floors

- masonry internal walls – internal wall should have a minimum mass per unit area of 120 kg/m² (including the finish) OR at least that of the approved flanking wall inner leaf, if this is less.
- timber frame and steel frame internal walls – no restrictions.

Junctions with timber or light steel separating floors

No minimum mass requirements.

Junctions between internal partition walls and concrete separating floors

The junction between internal partition walls and concrete separating floors should be formed as follows:

1. Install internal lightweight stud partitions either up to the ceiling lining or through the ceiling lining, provided the head channel of metal stud partitions or timber frame, as appropriate, fully seals the void between the wall linings, such that there are no air paths from the ceiling void to the partition void.
2. Install loadbearing masonry internal partition walls up to the underside of the floor, provided the floor is continuous over the wall and the wall has a minimum mass per unit area of 120kg/m² (including the finish) OR at least that of the approved flanking wall inner leaf, if this is less.

3. Construct the internal wall directly off core floor with the floating floor treatment (FFT) or screed installed around the internal walls, provided:
   - the 5mm (min) resilient flanking strip or isolating edge strip, as appropriate for the Robust Detail adopted, is correctly installed to all perimeters of the FFT or screed to isolate the floor from all the walls and skirtings
4. Construct the internal wall off the floating floor treatment flooring board or screed, provided:
   - the floating floor treatment is installed in accordance with the manufacturer's instructions, including the provision of additional battens to support the internal walls if necessary

Subfloor ventilation

Where possible it would be preferable to avoid providing ventilation for the sub floor void through the separating walls.

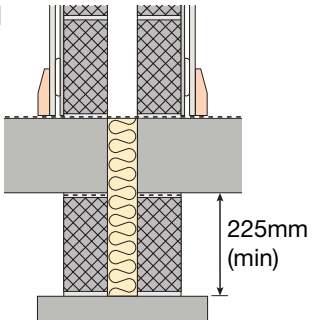
However, where necessary, the ventilation of the sub floor void of Part E Robust Detail separating walls may be achieved through the installation of ducts through the separating wall, provided:

- the top of the duct is at least 300mm below the finished floor surface of the ground floor structure
- the number of ducts passing through the separating wall is kept to the minimum necessary.

Radon and methane barriers

It is acceptable to install a radon or methane barrier and comply with the Robust Details. The ground floor junction detail would need to follow that described in the Robust Detail and as such the 225mm (min) clear cavity indicated in the ground floor junction to masonry separating walls would need to be maintained. Alternatively, refer to Appendix A2.

The cavity below the finished floor level may be filled with low density rigid insulation only where necessary to support a membrane. Particular attention should be given to the avoidance of debris accumulations above any membrane crossing the cavity of a separating wall.



Ground floor junctions

5mm (min) flanking strips are recommended to isolate floating floor finishes, where provided, from walls and skirtings.

Screed thickness

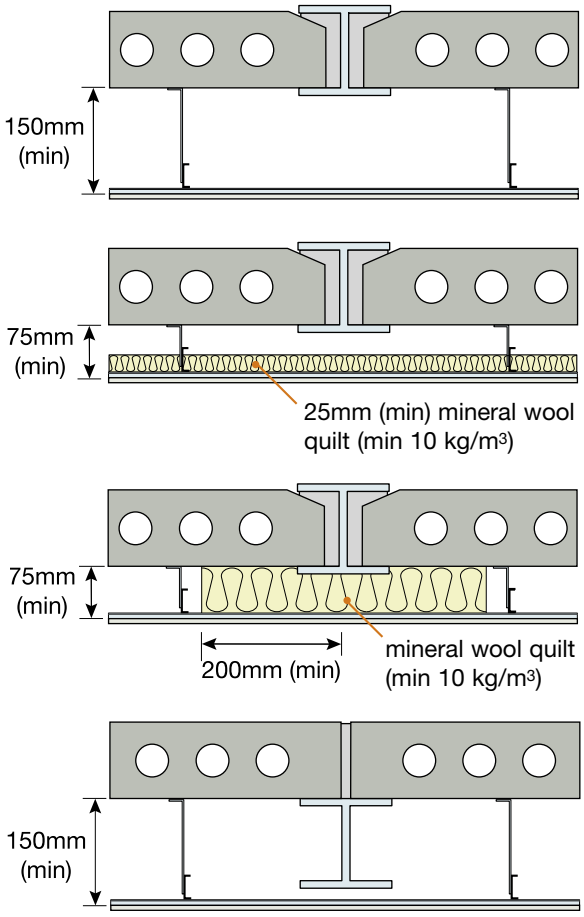
The screed thickness stated is the minimum thickness at any point and a greater thickness should be specified to take account of deviations in the finished levels of the surfaces of bases and any reinforcement provided.

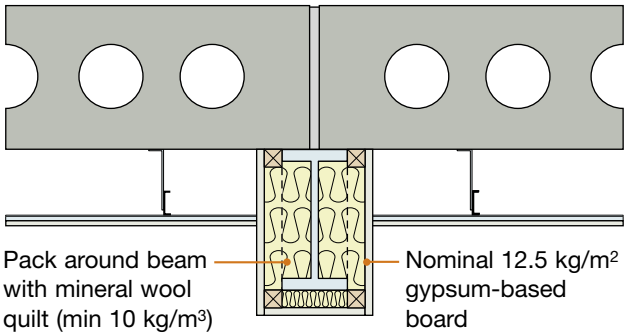
Cement:sand screed should be at least 50mm to comply with BS 8204. Concrete screed is acceptable.

Precast concrete plank separating floors with steel beams

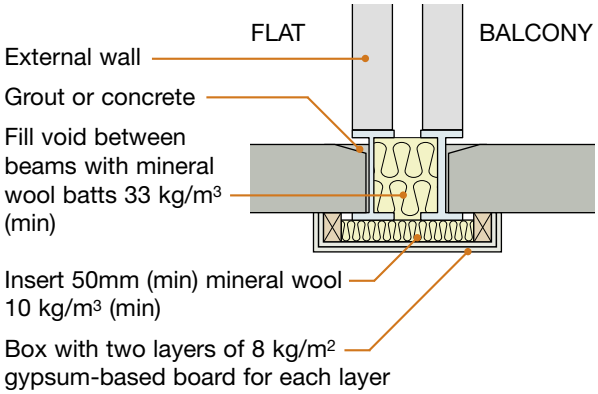
In some situations precast concrete planks may require intermediate support by steel beams supported on masonry.

- cavity masonry separating walls must not be built off steel beams – where necessary, external cavity walls may be built off steel beams
- all voids between the steel beam and the slabs should be fully filled with grout or concrete, and
- the supports for the ceiling treatment and the ceiling lining should not come into contact with the steel beam, and
- the depth of the ceiling void from the underside of the plank should be as shown in the following diagrams and in accordance with the corresponding separating floor Robust Detail
- mineral wool quilt should be provided if shown in the following diagrams





An alternative detail where two steel beams are required to support the external cavity wall is as follows:



Separating walls should not be constructed off steel beams.

Services in separating floors

Downlighters or recessed lighting

Where possible, downlighters or recessed lighting should not be built into the separating floor. If they must be built in, they should be kept to a minimum and the guidance included in the Robust Detail followed. For timber separating floors, see Appendix F also.

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

Other services

Electrical and plumbing services may be installed in the separating floor. All penetrations through the ceiling lining, floor decking and flooring board should be cut carefully. The gap around the service should be carefully sealed with flexible sealant.

Where services are installed within a floating floor treatment, the manufacturer's instructions should be followed. It is acceptable to leave a gap of up to 50mm in the batten to allow services to cross at right angles.

Ducts for extract ventilation, etc. may run within the separating floor, provided the acoustic integrity is maintained.

Ducting which drops from the ceiling void needs to be enclosed in boxing of gypsum-based board of the same composition and mass per unit area as the relevant Robust Detail ceiling treatment.

It is permissible to install services within the screed of concrete floors, provided that:

- the minimum thickness and mass per unit area of the screed is maintained as detailed in the relevant Robust Detail
- the minimum cover on services is maintained
- the services do not break into or bridge the resilient layer(s). In the case of floors which also have a floating timber floor treatment (FFT), it is permissible for services to rise vertically out of the screed and through the FFT, provided the FFT flooring boards do not touch the services and the gaps around the services are sealed with a flexible sealant.

Services may be installed within a secondary ceiling lining system that is only supported from the resilient bars of a ceiling treatment, provided:

- the resilient bars can support the full load;
- the resilient bars achieve the minimum laboratory performance of Appendix E.

Particular attention should also be paid to Building Regulations Part B – Fire Safety. Secondary ceilings to timber floors may also be supported by perimeter channels.

Underfloor heating (UFH) systems in separating floors

With timber floating floor treatments

UFH may be fitted between the battens of FFT1, FFT2 and FFT3; or underneath FFT4 or FFT5. UFH may only be incorporated within FFT4 or FFT5 provided the complete build-up, using all intended components, has been tested to Appendix D.

Where underfloor heating is supported by mineral wool or foil-wrapped quilt, this may be used in place of the mineral wool that is specified between the battens on certain floors. Where underfloor heating is supported on rigid insulation (e.g. polystyrene), this may be used in addition to the mineral wool specified on certain floors. If this results in the batten void being filled, a polythene layer should be included to prevent direct contact with the underside of the floating deck. On floors where no mineral wool is specified, rigid insulation may be used alone, provided it does not bridge the resilient layer by providing a connection between the structural floor and any of the floating elements.