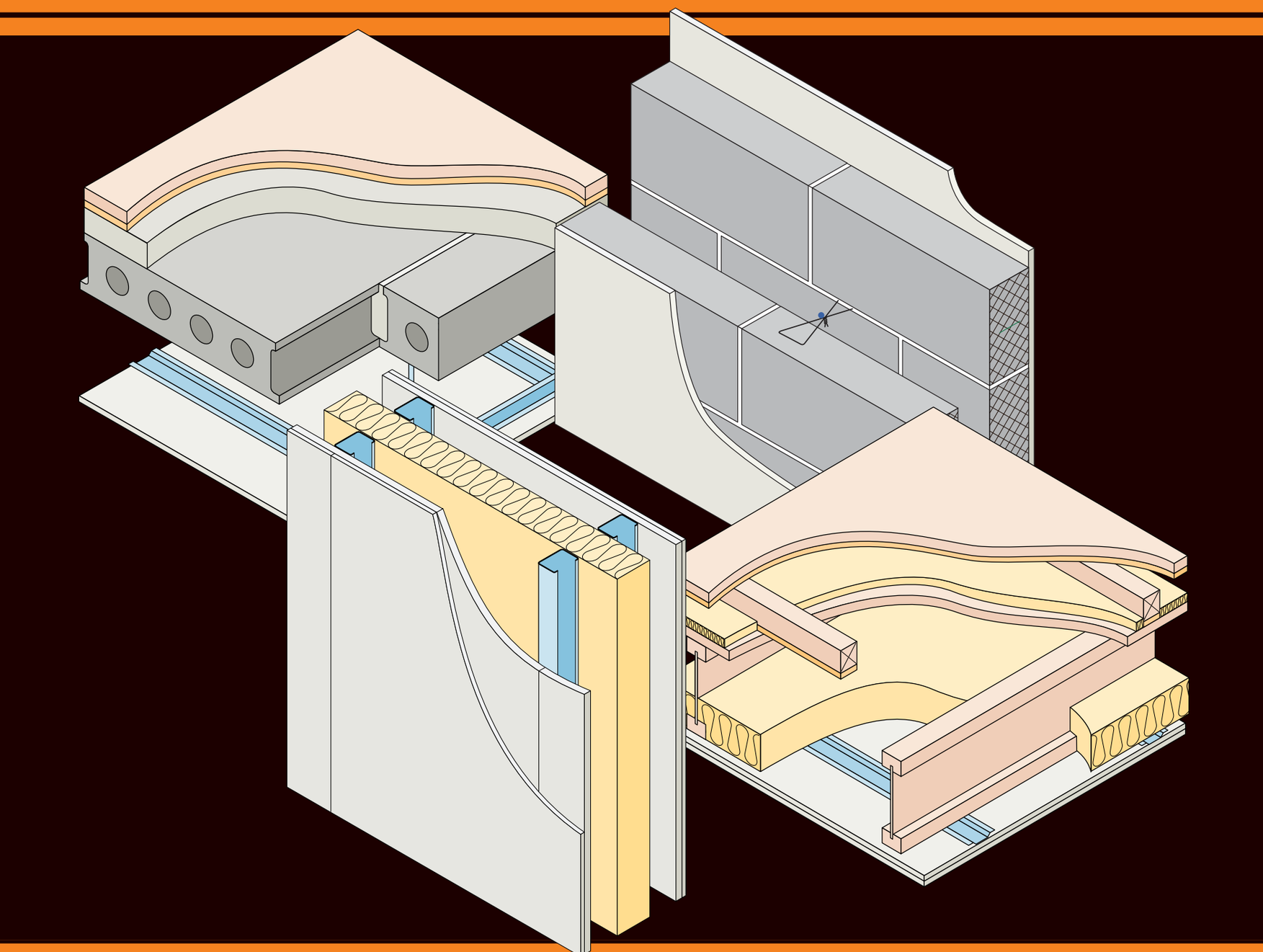
robustdetails®

PART E ROBUST DETAILS

September 2023
Revision



www.robustdetails.com

USING THE PART E ROBUST DETAILS SCHEME

1. Select the robust details™ you want to build to

Ensure you are able to meet the specifications and comply with the requirements

If selecting walls and floors for flats, refer to Table 3 in the Introduction to ensure compatibility

2. Register plots with Robust Details Limited (RDL)

Register all plots that will benefit from the robust details™, prior to commencement of work on site

Notify Building Control by forwarding them 1 set of the Purchase Statements issued to you by RDL

3. Construct in accordance with all relevant specifications

The specifications must be strictly followed. If in doubt contact the RDL Technical Helpline

Inspections may be carried out by Building Control and/or RDL Inspectors. Deviations from the specifications may result in pre-completion sound testing

PERFORMANCE MONITORING

To ensure the scheme continues to provide the expected high levels of performance, RDL conduct random visual inspections and tests on a proportion of sites registered.

OTHER FORMS OF CONSTRUCTION MAY ALSO BE AVAILABLE…

If you have designed a robust form of construction for separating walls or floors, it is possible to have it assessed for inclusion in this Handbook

This involves submitting details of the construction; and a number of sound tests conducted within dwellings on real developments. To meet the robust details™ performance criteria, the mean of the test results must be at least 5dB better than the Building Regulations minimum

For further information, please refer to our website, www.robustdetails.com, or for additional advice, phone the RDL Technical Helpline on 03300 882 140

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Robust Details

Separating walls

- Masonry
- Timber
- Steel

Separating floors

- Concrete
- Timber
- Steel-concrete composite

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Appendix A1	Additional guidance
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Appendix D	Determination of the acoustic performance requirements for floating floor treatments used with robustdetails® concrete and steel-concrete composite separating floors
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Appendix F	Determination of the acoustic performance of downlighters and recessed lighting in lightweight separating floors
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Introduction

This Handbook contains the separating wall and separating floor constructions that have achieved the status of Robust Details for Part E of the Building Regulations (England and Wales) and Part G of the Building Regulations (Northern Ireland), “Resistance to the passage of sound”.

The Robust Details have undergone an extensive sound insulation testing regime, robust design analysis and independent audit and have satisfied the Robust Details Limited Management Board that they should provide a level of sound insulation compliant with Part E (England and Wales) and Part G (Northern Ireland).

The use of the robustdetails® scheme provides an alternative to pre-completion testing for demonstrating compliance with the performance standards for new build dwellings. Every dwelling built using the robustdetails® scheme needs to be registered with Robust Details Limited and a plot registration fee paid. Further information on the scheme (including how to apply for new Robust Details) is available on the Robust Details Limited web site at:

www.robustdetails.com

or from:

Robust Details Limited
Unit 14, Shenley Pavilions
Chalkdell Drive
Shenley Wood
Milton Keynes
MK5 6LB

Telephone: 03300 882140 - Technical
03300 882141 - General

Each Robust Detail includes materials and construction details for the separating wall/floor and its key interfaces with other elements and should be read in conjunction with Appendix A. The final page of each Robust Detail is a checklist, which should be photocopied and used by the site manager/supervisor to confirm that the separating wall/floor has been built correctly. The building control body may ask to see the checklist.

It is important that separating walls/floors and their associated junctions and flanking conditions are constructed entirely in accordance with the relevant Robust Detail; otherwise the building control body may require pre-completion testing to be carried out.

The tables on pages 5, 6 and 7 show which robustdetails® separating floors and walls can be used in flats/apartments.

Note:

The contents of this Handbook relate only to compliance with specific aspects of Part E (England and Wales) and Part G (Northern Ireland). Building work will also have to comply with all other relevant legislation and Parts of the Building Regulations.

Where sound testing is required on a wall or floor, the user should seek expert acoustic advice prior to construction commencing.

Terms and Conditions:

Please refer to www.robustdetails.com for full terms and conditions.

Introduction

Special note for Robust Details constructed in Northern Ireland

Members of an expert panel convened to advise NI Government on the subject, consider that the following Robust Details will integrate most readily with NI standards and methods of construction.

Other Robust Details may be suitable for use in NI, however, it is recommended that Building Control be consulted to ensure full compatibility with other NI Regulations and Standards.

Masonry walls	**E-WM-1**
	E-WM-2
	E-WM-3
	E-WM-4
	E-WM-11
	E-WM-16
	E-WM-18
	E-WM-19
	E-WM-21

Timber walls	**E-WT-1**
	E-WT-2
	E-WT-4

Timber floors	**E-FT-1**
	E-FT-2
	E-FT-3
	E-FT-5
	E-FT-6

Steel floors	**E-FS-1**

Concrete floors	**E-FC-1**
	E-FC-2
	E-FC-4
	E-FC-5
	E-FC-6
	E-FC-8
	E-FC-9
	E-FC-10
	E-FC-11
	E-FC-12
	E-FC-13
	E-FC-14

Note:

Refer to Tables 3a, 3b and 3c in the Introduction for valid combinations of the Robust Details walls and floors.

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 – Besblock “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 – Besblock “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

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	timber frame – Openwall prefabricated panels
E-WT-4	timber frame – Excel Industries Warmcell 500 insulation - with sheathing board
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

Introduction

List of Robust Details

Table 2 – Separating floors

E-FC-1	precast concrete plank with directly applied screed and floating floor treatment
E-FC-2	in-situ concrete slab and floating floor treatment
E-FC-3	Suspended from further registrations
E-FC-4	precast concrete plank and Thermal Economics IsoRubber Base system and floating screed
E-FC-5	precast concrete plank and Cellecta Yelo*fon* HD10+ system and floating screed
E-FC-6	beam and block with concrete topping Regupol E48 system and floating screed
E-FC-7	beam and block with concrete topping and floating floor treatment
E-FC-8	precast concrete plank with floating screed and bonded resilient floor covering
E-FC-9	precast concrete plank with directly applied screed and Thermal Economics IsoRubber top bonded resilient floor covering
E-FC-10	in-situ concrete slab with Thermal Economics IsoRubber top bonded resilient floor covering
E-FC-11	precast concrete plank and Icopal-MONARFLOOR® Tranquilt and floating screed
E-FC-12	precast concrete plank and Thermal Economics IsoRubber Base HP3 system and floating screed
E-FC-13	precast concrete plank and InstaCoustic InstaLay 65 system and floating screed
E-FC-14	precast concrete plank and Thermal Economics IsoRubber Base system and floating screed
E-FC-15	precast concrete plank and Regupol Quietlay layer and floating screed
E-FC-16	precast concrete plank with directly applied screed and Thermal Economics IsoRubber CC3 bonded resilient floor covering
E-FC-17	precast concrete plank and Cellecta YELO*fon*® HD10+ system and floating screed and Cellecta ULTRA ceiling treatment
E-FC-18	in-situ concrete slab with floating screed or bonded resilient floor covering
E-FC-19	precast concrete plank and Cellecta RUBBER*fon* Impact 6 system and floating screed
E-FT-1	timber I-joists and floating floor treatment
E-FT-2	timber solid joists and floating floor treatment
E-FT-3	MiTek Posi-Joist, Prestoplan PresWeb, WOLF easi-joist, ITW Gang-Nail Ecojoist or ITW Alpine SpaceJoist metal web timber joist and floating floor treatment
E-FT-4	timber Finnjoists with Finnforest Acoustic layer and Gyvlon screed
E-FT-5	Cellecta ScreedBoard® 28 system on timber I-joists
E-FT-6	Cellecta ScreedBoard® 28 system on metal web joists
E-FT-7	timber I-joists and FFT80 floating floor treatment
E-FT-8	timber solid joists and FFT80 floating floor treatment
E-FS-1	steel deck and in-situ concrete and floating floor treatment
E-FS-2	UltraBEAM metal joists and floating floor treatment
E-FS-3	Cellecta ScreedBoard® 28 system on metal joists

Table 3a – Combinations of Robust Details separating walls and floors for flats/apartments in **loadbearing masonry** constructions

Separating walls		Separating floors					
		E-FC-1 E-FC-11 E-FC-12 E-FC-13 E-FC-14	E-FC-15 E-FC-16 E-FC-17 E-FC-19	E-FC-4	E-FC-5	E-FC-6 E-FC-7	E-FC-8 E-FC-9 E-FC-10
E-WM-1 E-WM-3	E-WM-16 E-WM-18	✔		✔	✔	✔	✔
E-WM-2 E-WM-4 E-WM-5 E-WM-11 E-WM-20 E-WM-21	E-WM-26 E-WM-27 E-WM-28 E-WM-32 E-WM-33	✔		✔	✔	F	✔
E-WM-6 E-WM-10 E-WM-13	E-WM-23 E-WM-24 E-WM-30	F		✔	✔ see note 1	F	✔
E-WM-12	E-WM-34	F		✔	F	F	F
E-WM-17	E-WM-22	✔ see note 2		✔	✔ see note 2	F	✔ see note 2
E-WM-25	E-WM-29	F		F	F	F	F

Key

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

1 Where this combination is selected, 200mm (min) thick precast concrete planks and ceiling treatment CT5 must be used.

2 This combination can only be selected where the separating wall construction does not include Plasmor Aglite Ultima blocks (1050 kg/m^3).

Combining robustdetails® loadbearing masonry walls and floors with robustdetails® lightweight framed separating walls

Upper storeys of blocks of flats may be constructed using lightweight steel or timber frame, where the lower storeys are loadbearing masonry.

The lightweight separating walls built directly off the uppermost concrete separating floors may be registered as Robust Details provided:

- the lightweight walls are in vertical alignment with the masonry walls below, such that they can follow the principles of the ground floor junction shown for the relevant robustdetails® separating wall;
- the external (flanking) wall construction above the separating floor meets the requirements on page 2 of the relevant robustdetails® separating wall, and has 2 layers of gypsum-based board;
- the junction between the bottom rail (or sole plate) is well sealed;
- all other relevant requirements in the Handbook are strictly followed.

The separating floor may be registered as a Robust Detail provided:

- the floor is constructed in accordance with the requirements of the published Detail;
- the external (flanking) wall below the precast concrete floor satisfies the requirements of detail 1 on page 2 of the relevant robustdetails® separating floor;
- all other relevant requirements in the Handbook are strictly followed.

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

Separating walls	Separating floors	
	E-FT-1 E-FT-2 E-FT-3 E-FT-4 E-FT-5 E-FT-6 E-FT-7 E-FT-8	E-FC-2 E-FC-18 E-FS-1
E-WT-1	✔	W see note 1
E-WT-2	✔	W see note 1
E-WT-3	F	W see note 1
E-WT-4	F	W see note 1

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

Separating walls	Separating floors					
	E-FC-2	E-FC-10	E-FC-18	E-FS-1	E-FS-2	E-FS-3
E-WS-1	W see note 1	W	W see note 1	W see note 1	✔	✔
E-WS-2	✔	W	✔ see note 2	W	W	W
E-WS-3	W	W	W	W	W	W
E-WS-4	W see note 1	W	W see note 1	W see note 1	✔	✔
E-WS-5	✔	✔	✔	W	W	W

Key for Table 3b and Table 3c

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

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

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

- they meet all other requirements of the Robust Detail, including flanking constructions;
- the principles of the raft foundation junction are followed. As such, the concrete of the floor must have a mass of 365 kg/m^2 (min), and a floating floor treatment must be provided to shield the base of the wall, as shown in the Separating Wall junction in the floor Robust Detail;
- Walls constructed to the soffit of in-situ poured concrete floors cannot be registered as Robust Details and may be subject to pre-completion sound testing.

2 A floating screed must be installed up to the separating wall as shown in the separating floor detail.

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

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

Loadbearing masonry

E-WM-1	F1	E-WM-21	F1
E-WM-2	F1	E-WM-22	F1
E-WM-3	F1	E-WM-23	F1
E-WM-4	F1	E-WM-24	F1
E-WM-5	F1	E-WM-25	F1
E-WM-6	F1	E-WM-26	F1
E-WM-10	F1	E-WM-27	F1
E-WM-11	F1	E-WM-28	F1
E-WM-12	F1	E-WM-29	F1
E-WM-13	F1	E-WM-30	F1
E-WM-16	F1	E-WM-31	F1
E-WM-17	F1	E-WM-32	F1
E-WM-18	F1	E-WM-33	F1
E-WM-20	F1	E-WM-34	F1

Timber frame		Light steel frame	
E-WT-1	F2	E-WS-1	F3
E-WT-2	F2	E-WS-2	F4
E-WT-3	F2	E-WS-3	F3
E-WT-4	F2	E-WS-4	F3
		E-WS-5	F4

Key

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

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

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

F4 Only the separating floor requires pre-completion testing provided the wall is being used in a concrete frame building and the floor has the required floor treatment (see notes under Table 3c). Otherwise both the wall and floor need testing.

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

Loadbearing masonry

E-FC-1	W1	E-FC-11	W1
E-FC-4	W2	E-FC-12	W1
E-FC-5	W2	E-FC-13	W1
E-FC-6	W1	E-FC-14	W1
E-FC-7	W1	E-FC-15	W1
E-FC-8	W2	E-FC-16	W1
E-FC-9	W2	E-FC-17	W1
E-FC-10	W2	E-FC-19	W1

Timber frame		RC frame	
E-FT-1	W3	E-FC-2	W4
E-FT-2	W3	E-FC-10	W4
E-FT-3	W3	E-FC-18	W4
E-FT-4	W3		
E-FT-5	W3	Light steel frame	
E-FT-6	W3	E-FS-1	W4
E-FT-7	W3	E-FS-2	W5
E-FT-8	W3	E-FS-3	W5

Key

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

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

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

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

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

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

Table 6a – Robust Detail separating walls which can be used together with the specific flanking constructions contained in Appendix A2

		BRIDGESTOP® system	Smartroof system	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Donaldson Timber Single Leaf Spandrel	**NTS**ROOF *RAPID FIT SYSTEM*	Nu-Span Spantherm
Masonry walls	E-WM-1	✔		✔		✔		✔	✔
	E-WM-2	✔		✔		✔		✔	✔
	E-WM-3	✔	✔	✔	✔	✔		✔	✔
	E-WM-4	✔	✔	✔	✔	✔		✔	✔
	E-WM-5	✔	✔	✔	✔	✔		✔	✔
	E-WM-6		✔	✔	✔				✔
	E-WM-9								
	E-WM-10		✔	✔	✔				✔
	E-WM-11	✔	✔	✔	✔	✔		✔	✔
	E-WM-12	✔	✔	✔	✔	✔		✔	✔
	E-WM-13		✔	✔	✔				✔
	E-WM-16	✔	✔	✔	✔	✔		✔	✔
	E-WM-17	✔	✔	✔	✔	✔		✔	✔
	E-WM-18	✔		✔		✔		✔	✔
	E-WM-19	✔ see note 1				✔		✔	
	E-WM-20	✔	✔	✔	✔	✔		✔	✔
	E-WM-21	✔		✔		✔		✔	✔
	E-WM-22	✔	✔	✔	✔	✔		✔	✔
	E-WM-23	✔ see note 1	✔	✔	✔				✔
	E-WM-24	✔ see note 1	✔	✔	✔				✔
	E-WM-25			✔					✔
	E-WM-26	✔	✔	✔	✔	✔		✔	✔
	E-WM-27	✔	✔	✔	✔	✔		✔	✔
	E-WM-28	✔	✔	✔	✔	✔		✔	✔
	E-WM-29			✔					✔
	E-WM-30	✔ see note 1	✔	✔	✔				✔
	E-WM-31		✔	✔	✔				✔
	E-WM-32	✔	✔	✔	✔	✔		✔	✔
	E-WM-33	✔	✔	✔	✔	✔		✔	✔
	E-WM-34	✔	✔	✔	✔	✔		✔	✔

Key

1 When constructing these walls off raft foundations, the raft must have insitu concrete with 150mm minimum thickness.

See over for timber and steel frame walls

Table 6a (continued) – Robust Detail separating walls which can be used together with the specific flanking constructions contained in Appendix A2

		Smartroof system	Kingspan TEK	Prestoplan PresPeak 60	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Donaldson Timber Single Leaf Spandrel	**NTS**ROOF *RAPID FIT SYSTEM*	Lightweight external cladding systems	Nu-Span Spantherm
Timber walls	E-WT-1	✔	✔	✔	✔	✔		✔	✔	✔	✔
	E-WT-2	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	E-WT-3	✔			✔	✔					✔
	E-WT-4	✔			✔	✔					✔
Steel walls	E-WS-1					✔					✔
	E-WS-2										
	E-WS-3										
	E-WS-4				✔						✔
	E-WS-5										

Table 6b – Robust Detail separating floors which can be used together with the specific flanking constructions contained in Appendix A2

		BRIDGESTOP® system	Kingspan TEK	Wall Cap RDA2	Private stairs
Concrete floors	E-FC-1			✔	
	E-FC-2				
	E-FC-4			✔	✔
	E-FC-5			✔	✔
	E-FC-6			✔	
	E-FC-7			✔	
	E-FC-8			✔	✔
	E-FC-9			✔	
	E-FC-10			✔ see note 1	
	E-FC-11			✔	✔
	E-FC-12			✔	✔
	E-FC-13			✔	✔
	E-FC-14			✔	✔
	E-FC-15			✔	✔
	E-FC-16			✔	
	E-FC-17			✔	✔
	E-FC-18				
	E-FC-19			✔	✔
Timber floors	E-FT-1			✔	
	E-FT-2			✔	
	E-FT-3			✔	
	E-FT-4			✔	
	E-FT-5			✔	
	E-FT-6			✔	
	E-FT-7			✔	
	E-FT-8			✔	
Steel-concrete and steel floors	E-FS-1				
	E-FS-2			✔	
	E-FS-3			✔	

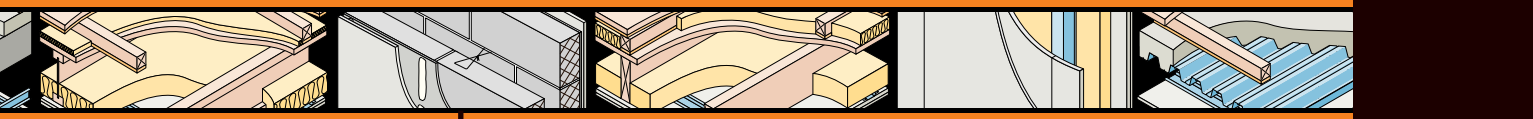
Key

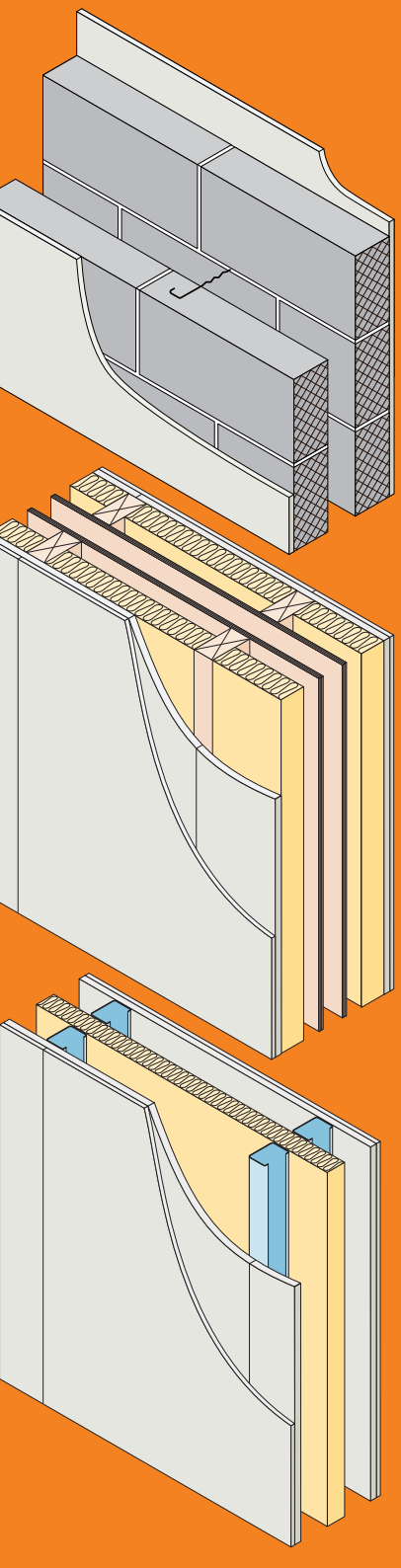
1 Applies only to loadbearing masonry constructions.

Table 7 – Robust Detail separating floors which can be used together with alternative products contained in Appendix A3

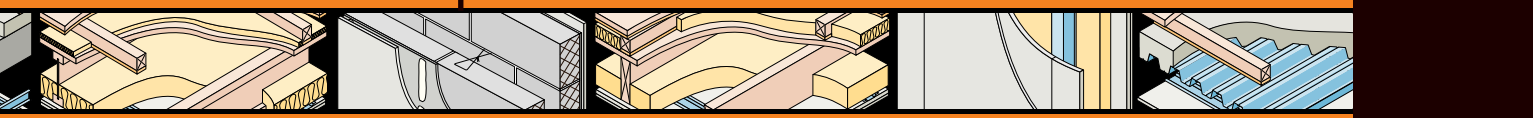
		British Gypsum GypFloor	Insumate insulation tray	Cellecta HiDECK Structural
Concrete floors	E-FC-1	✔		
	E-FC-2	✔		
	E-FC-4			
	E-FC-5			
	E-FC-6			
	E-FC-7	✔		
	E-FC-8			
	E-FC-9			
	E-FC-10			
	E-FC-11			
	E-FC-12			
	E-FC-13			
	E-FC-14			
	E-FC-15			
	E-FC-16			
	E-FC-17			
	E-FC-18			
	E-FC-19			
Timber floors	E-FT-1		✔	✔
	E-FT-2		✔	✔
	E-FT-3		✔	✔
	E-FT-4			
	E-FT-5			
	E-FT-6			
	E-FT-7		✔	
	E-FT-8		✔	
Steel-concrete and steel floors	E-FS-1	✔		
	E-FS-2			✔
	E-FS-3			

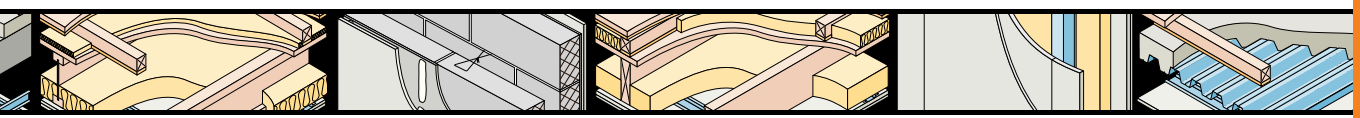
robustdetails®

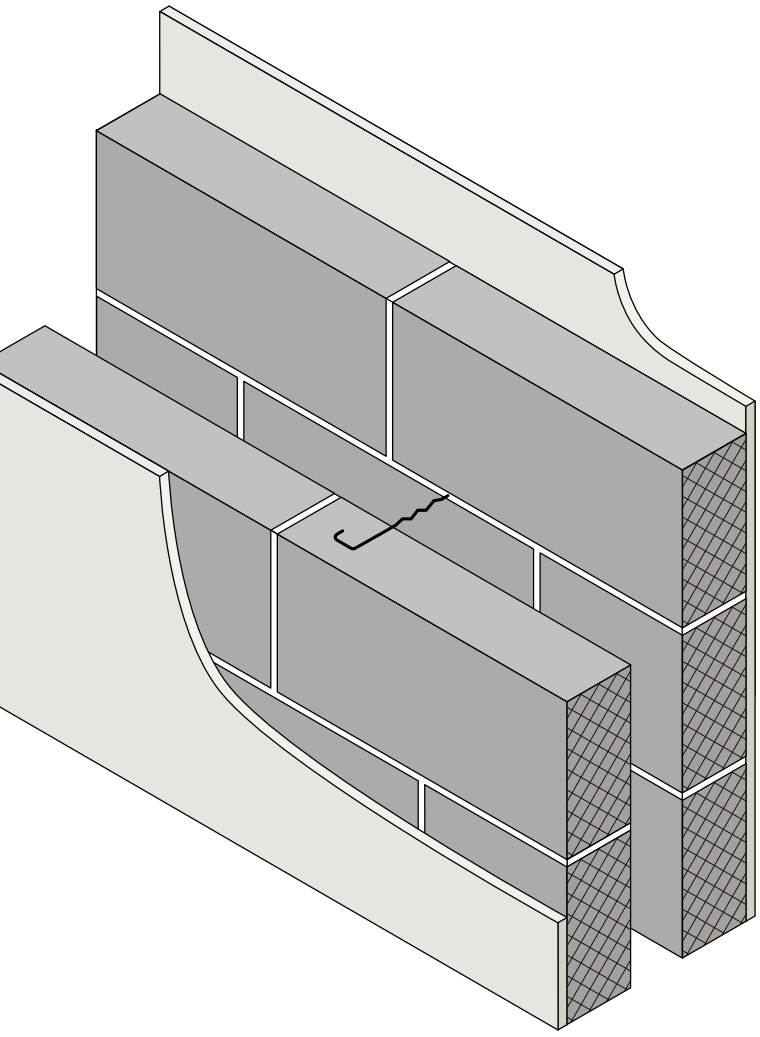




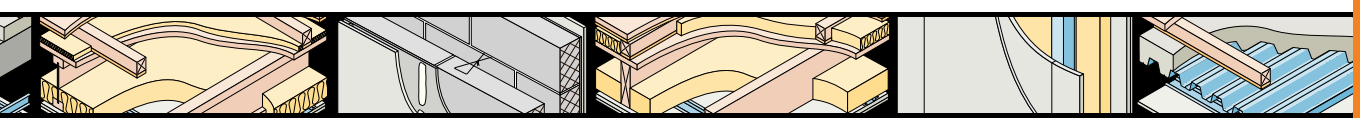
SEPARATING WALLS







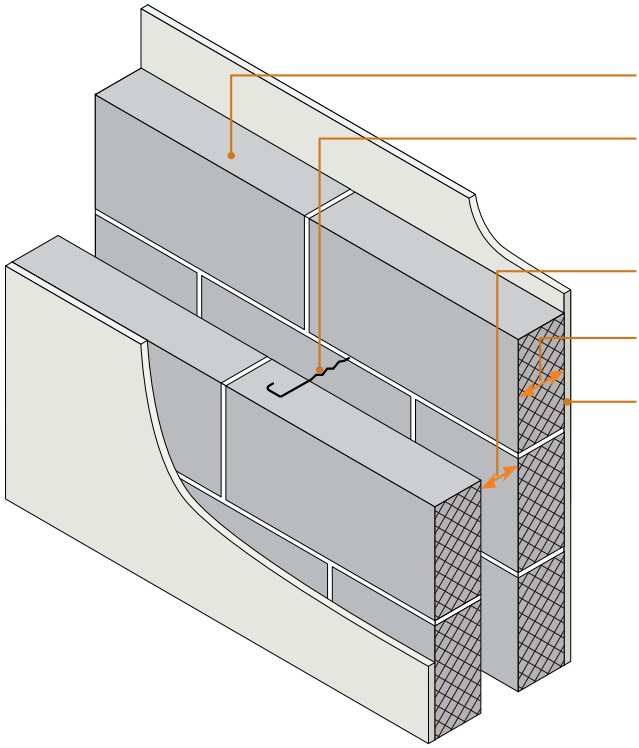
MASONRY



Separating Wall – Cavity Masonry

E-WM-1

Dense aggregate blocks ■
Wet plaster ■



Block density	1850 to 2300 kg/m^3
Wall ties	Approved Document E "Tie type A" (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	13mm plaster or cement: sand render with plaster skim (min 10 kg/m^2), both sides
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

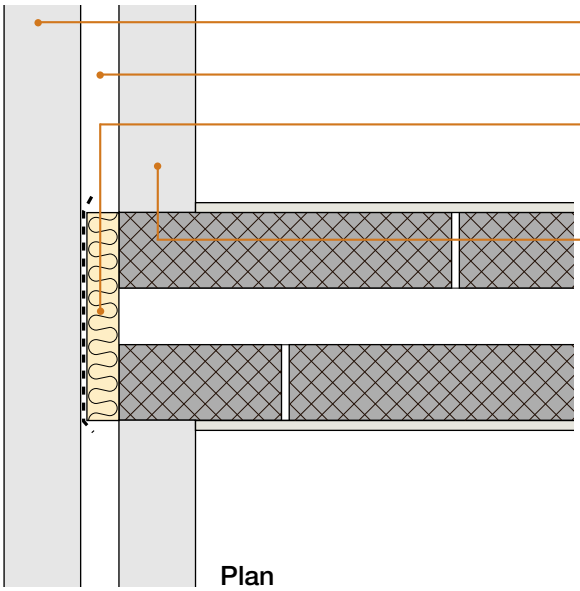
Separating wall cavity insulation (optional)

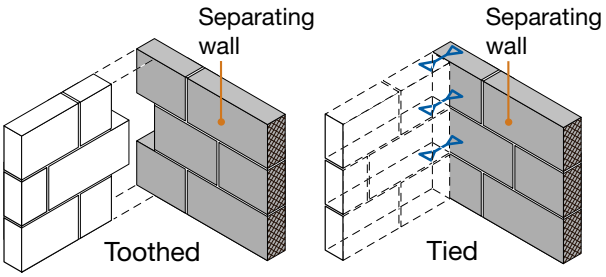
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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
- Select an alternative Robust Detail where flues are required in the separating wall e.g. for dense aggregate blocks, see E-WM-3
- 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

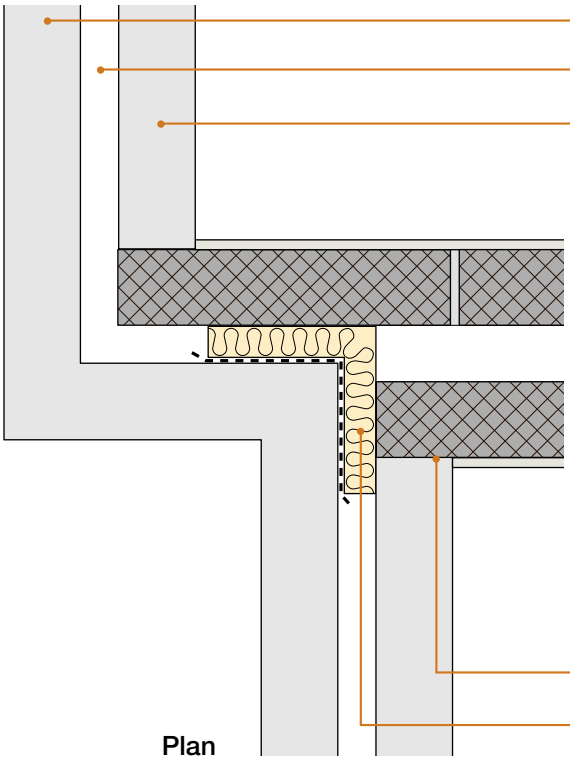
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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, 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

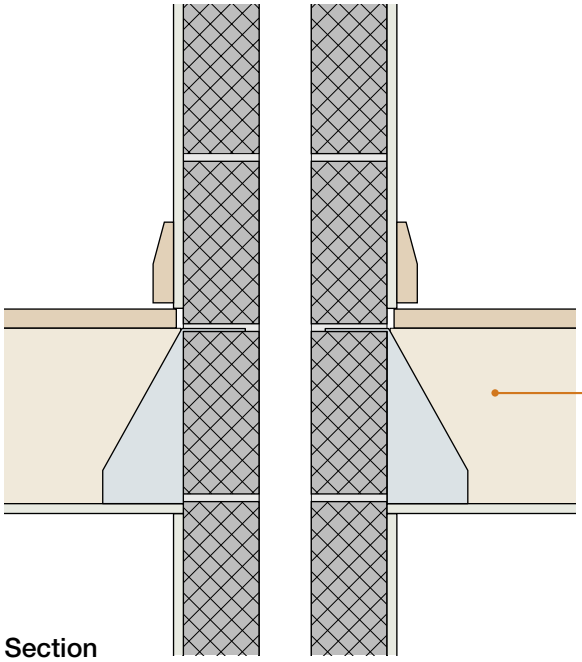
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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

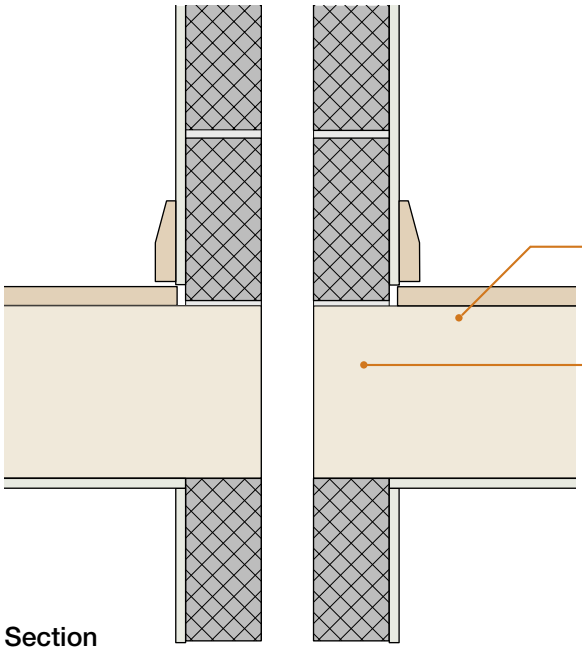
3. Internal floor junction: timber floor supported on joist hangers



Section

Floor to comply with Building Regulations Requirement E2

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



Section

Sketch shows timber joists built in

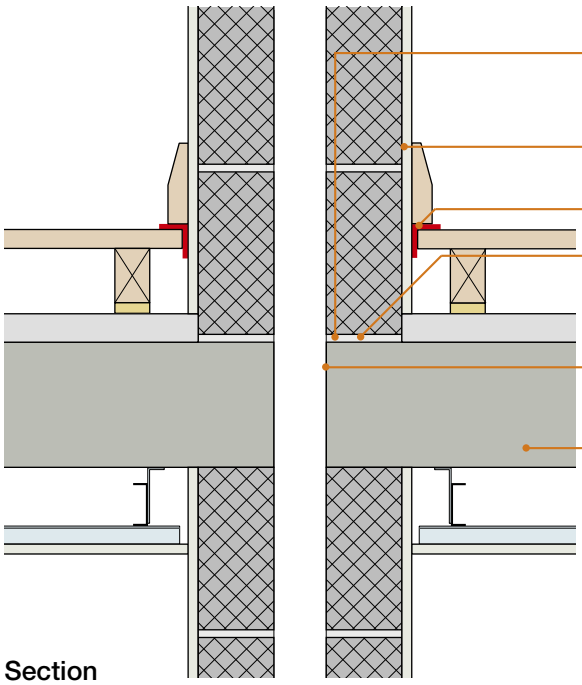
Floor to comply with Building Regulations Requirement E2

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

5. Separating floor junction

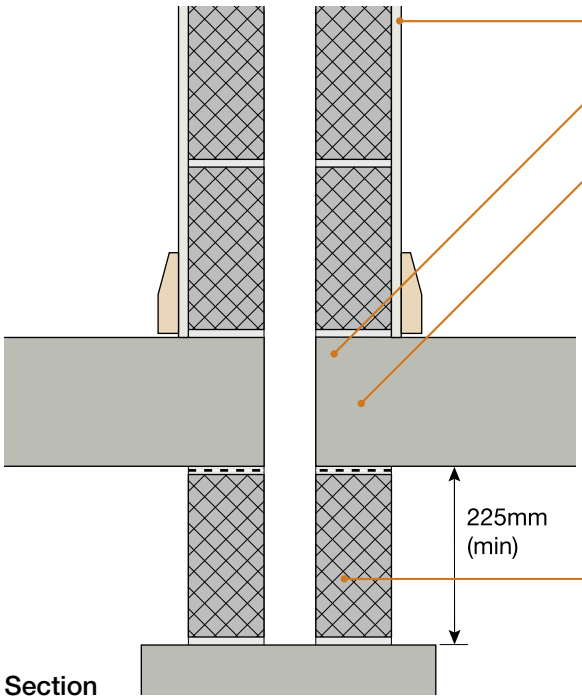


Section

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

- Separating wall must not be continuous between storeys
- Plaster complete wall surface
- 5mm (min) resilient flanking strip
- Concrete planks with all voids filled 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

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

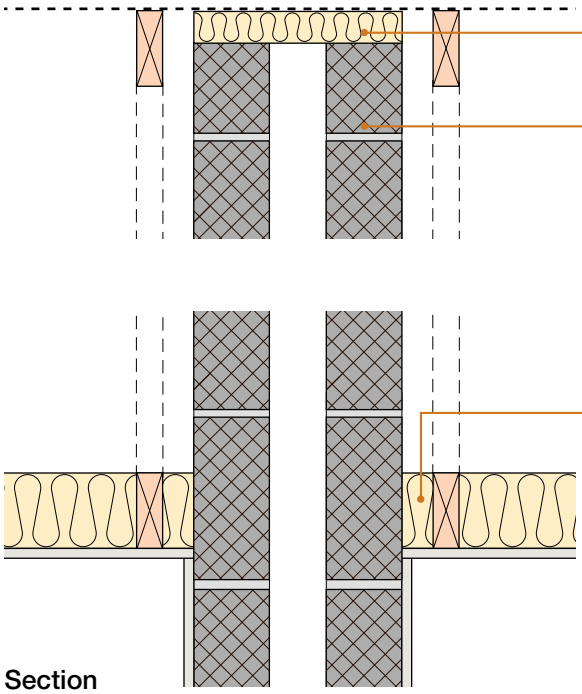


Section

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

- Plaster complete wall surface down to finished floor level
- 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.

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



Section

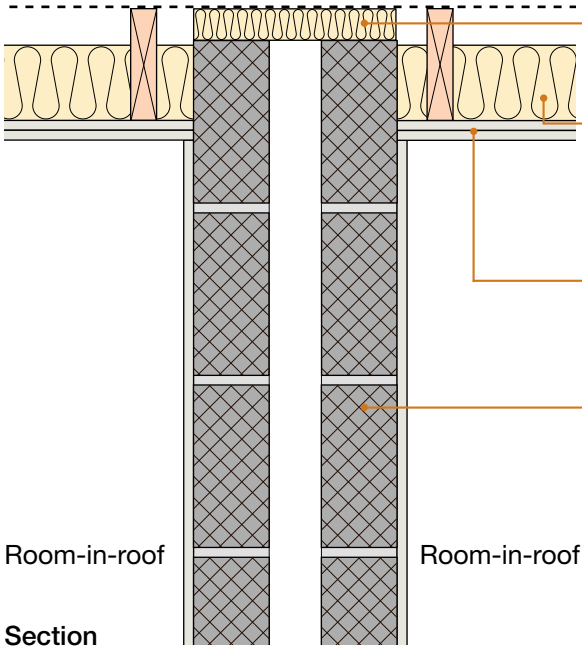
Junction between separating wall and roof filled with flexible closer

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

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

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

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:

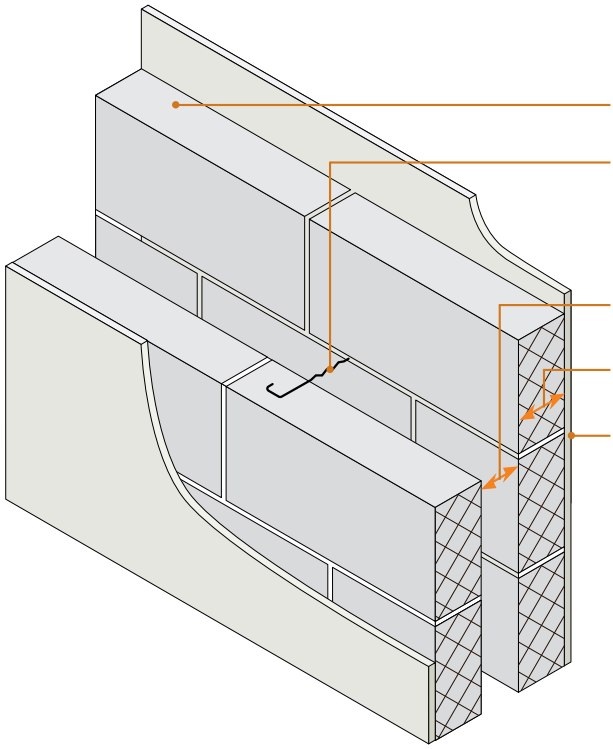
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks dense aggregate (1850 to 2300 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties 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.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
10.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-2

Lightweight aggregate blocks ■
Wet plaster ■



Block density	1350 to 1600 kg/m^3
Wall ties	Approved Document E "Tie type A" (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	13mm plaster or cement: sand render with plaster skim (min 10 kg/m^2), both sides
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

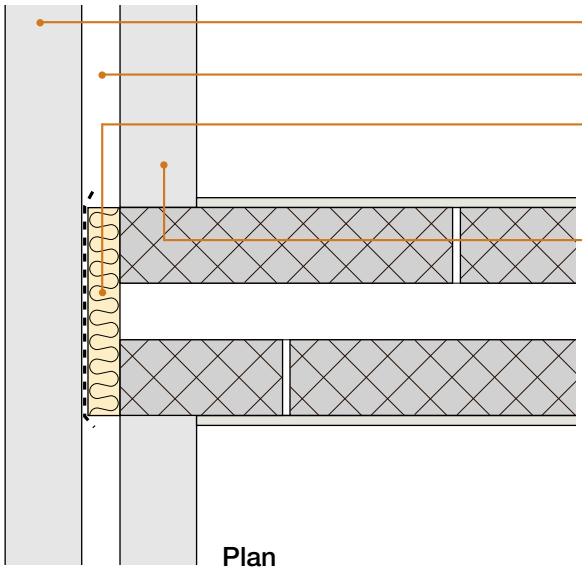
Separating wall cavity insulation (optional)

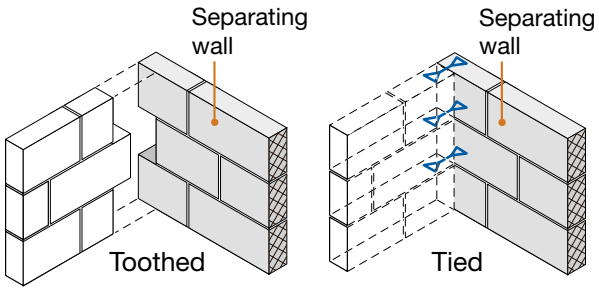
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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
- Select an alternative Robust Detail where flues are required in the separating wall e.g. for lightweight aggregate blocks, see E-WM-4
- 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

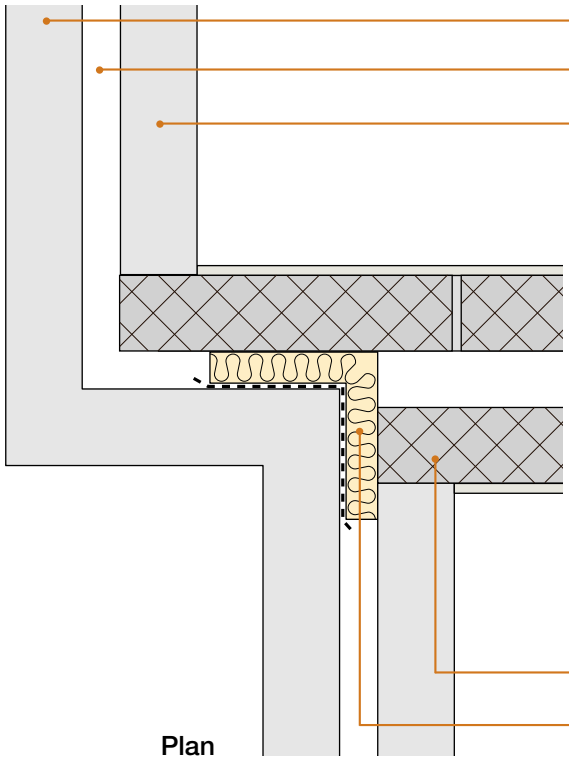
- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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).
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

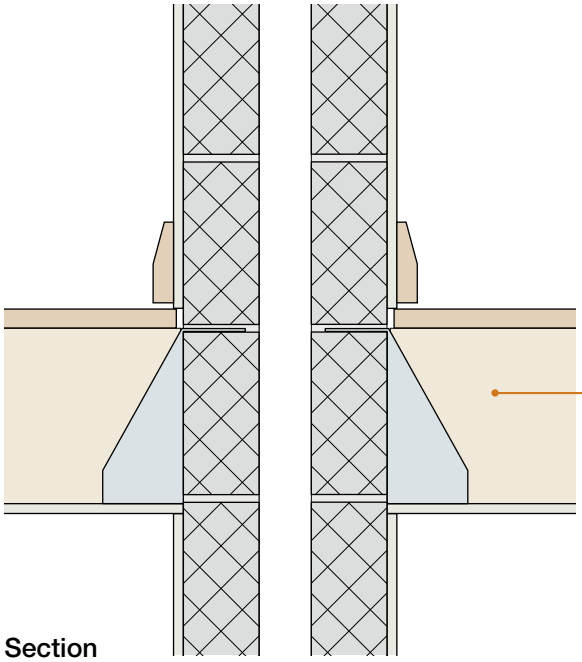
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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

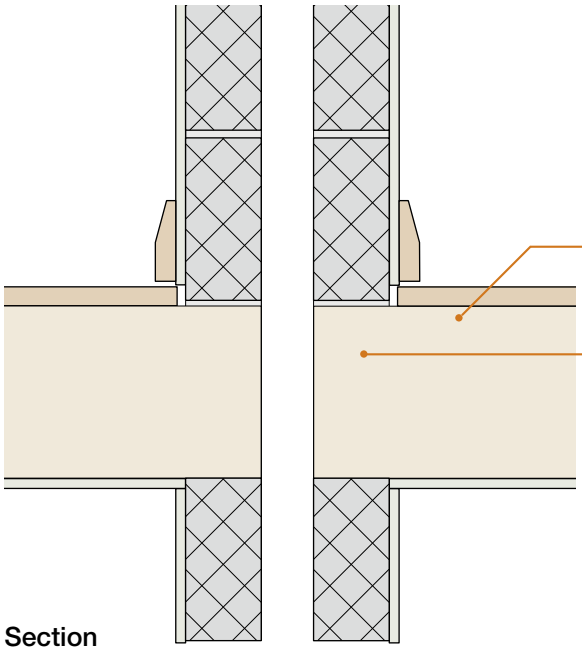
3. Internal floor junction: timber floor supported on joist hangers



Section

Floor to comply with Building Regulations Requirement E2

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



Section

Floor to comply with Building Regulations Requirement E2

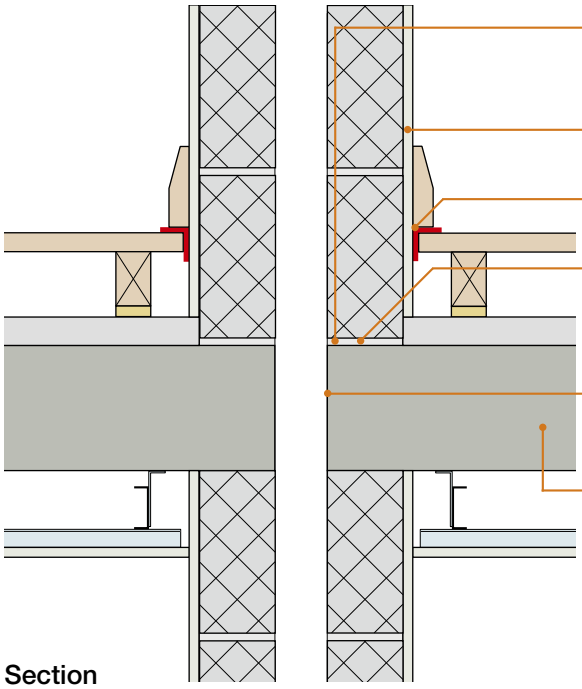
Internal floors should not be continuous between dwellings

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

Sketch shows timber joists built in

5. Separating floor junction



Section

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

Separating wall must not be continuous between storeys

Plaster complete wall surface

5mm (min) resilient flanking strip

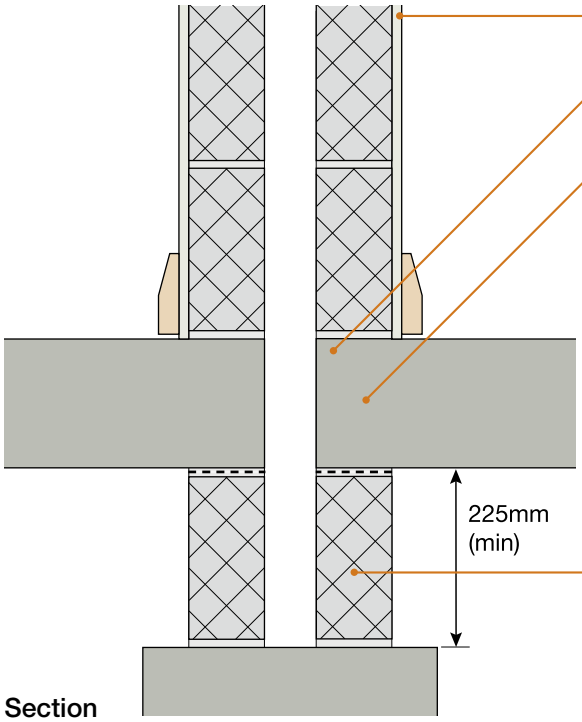
Concrete planks with all voids filled between planks and blockwork filled with mortar or flexible sealant

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 Ddetail for floating floor and ceiling options
- if using floor requiring pre-completion testing, seek specialist advice

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



Section

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

Plaster complete wall surface down to finished floor level

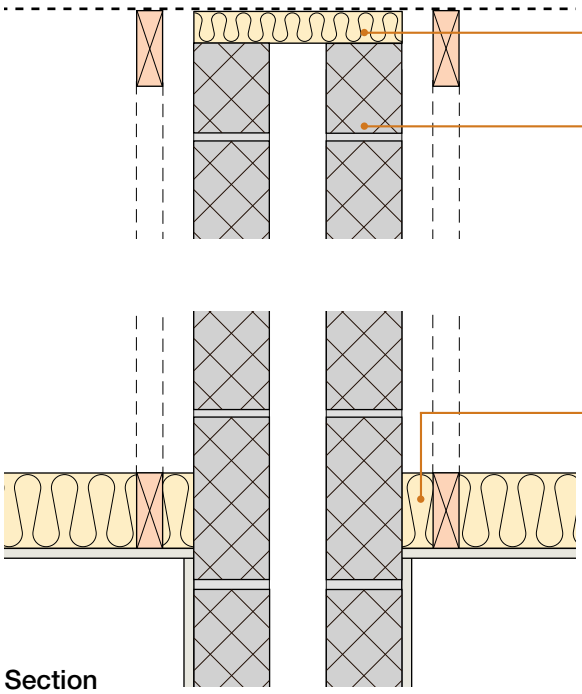
Ground floor not continuous between dwellings

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.

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



Section

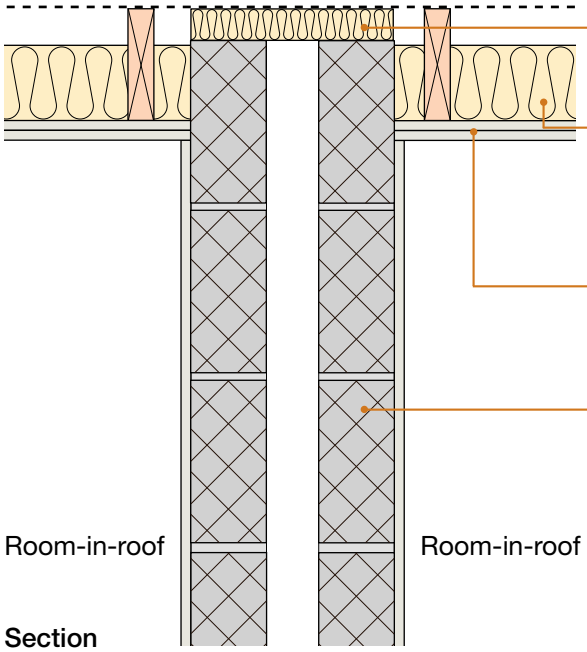
Junction between separating wall and roof filled with flexible closer

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.

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

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

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:

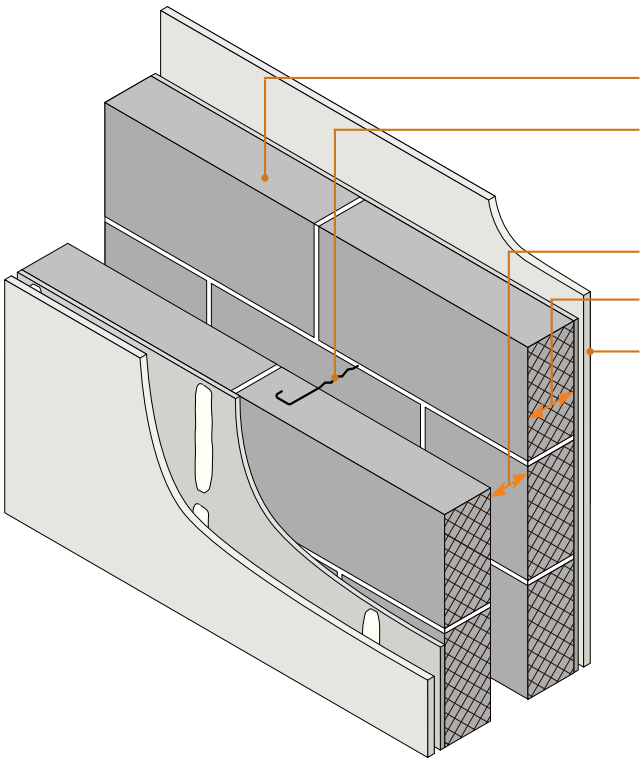
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties 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.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
10.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-3

Dense aggregate blocks ■
Render and gypsum-based board on dabs ■



Block density	1850 to 2300 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 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.

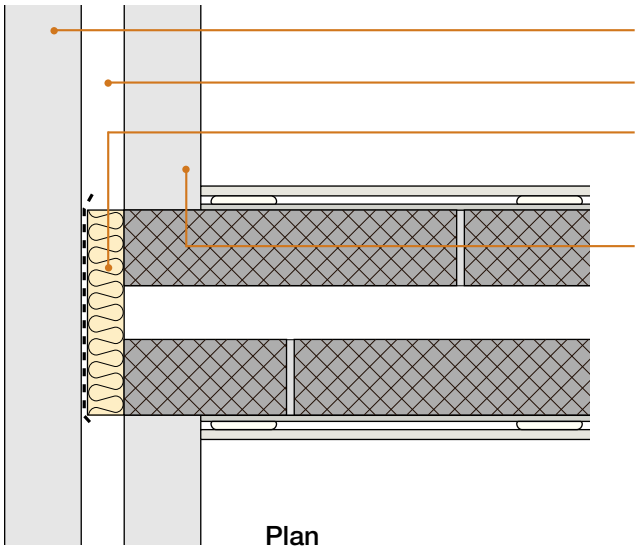
Separating wall cavity insulation (optional)

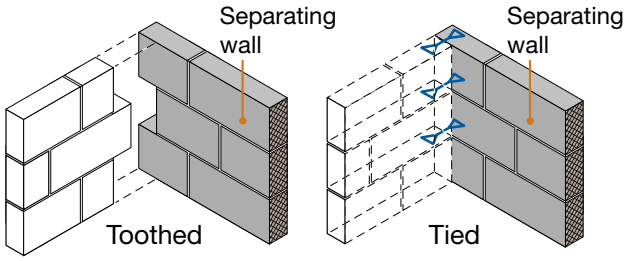
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

DO

- 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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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 (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

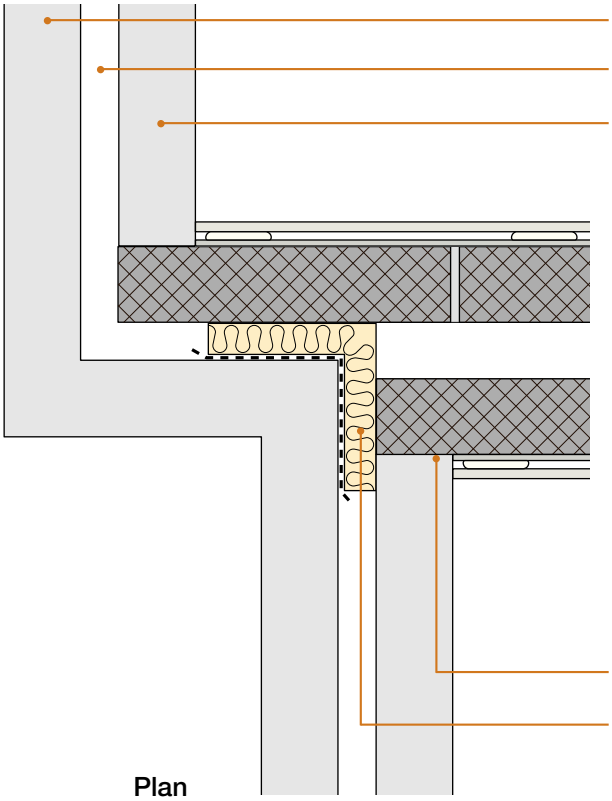
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

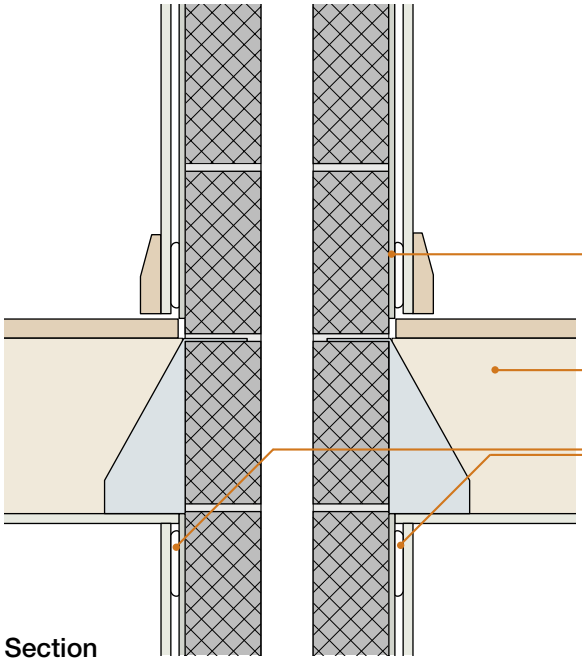
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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



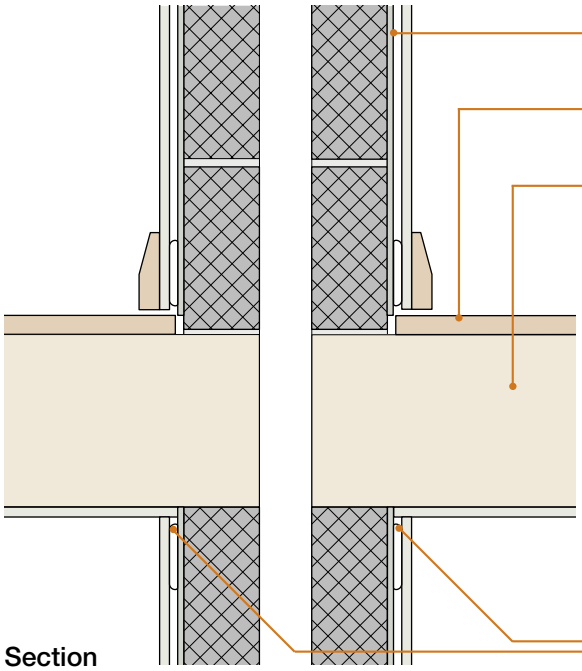
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

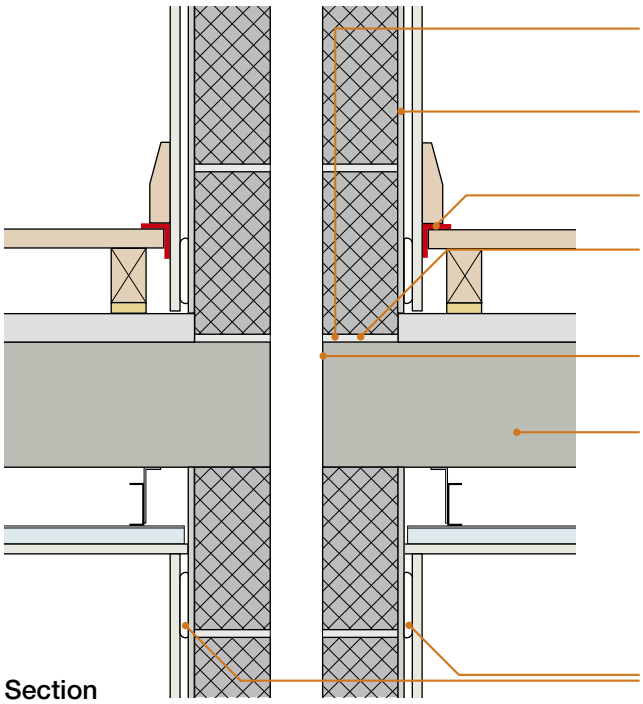
Floor construction:

- 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

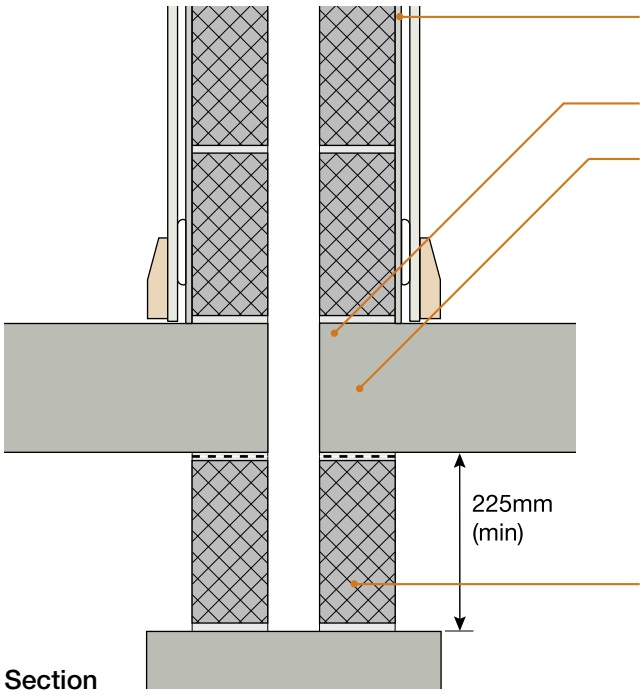


Section

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

- Separating wall must not be continuous between storeys
- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- 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

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

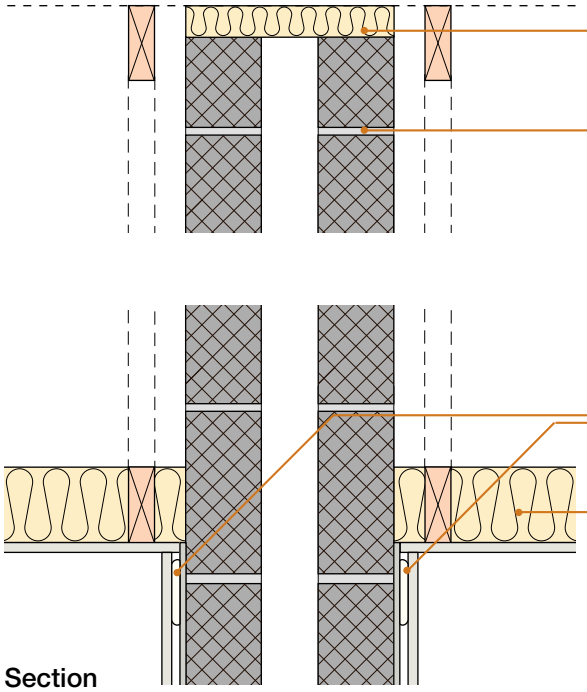


Section

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

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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.

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



Section

Junction between separating wall and roof filled with flexible closer

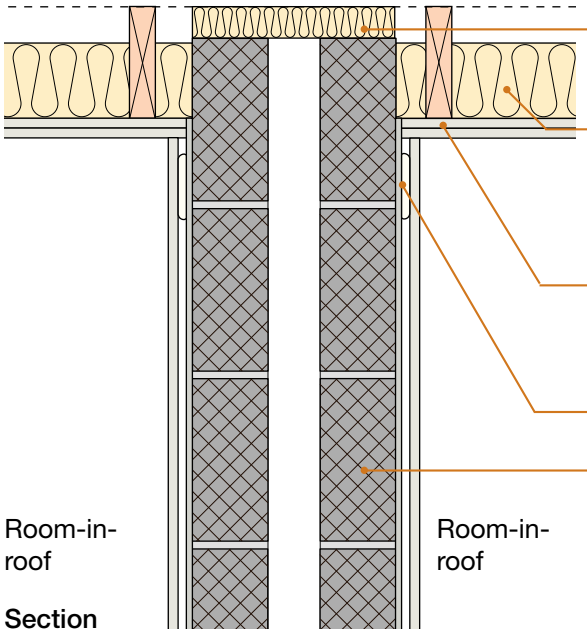
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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)

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)

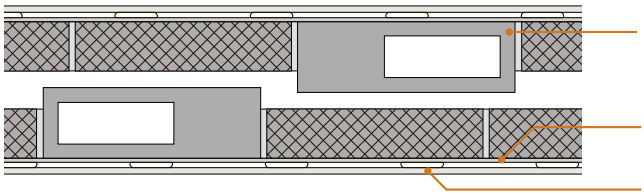
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters

Continuous 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

9. Flue blocks built into separating wall

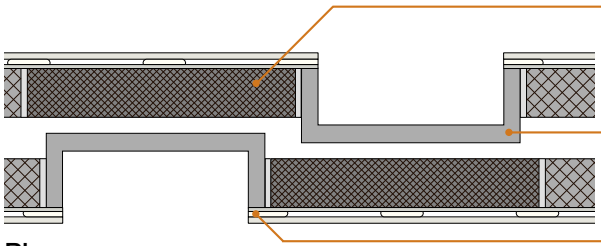


Plan

Flue block (stagger flues in accordance with the manufacturer's instructions)

Nominal 8mm render

Gypsum-based board (nominal 8 kg/m^2) on dabs



Plan

High density block (minimum 2270 kg/m^3) behind starter blocks from ground level up to at least where gather blocks start

Starter block (stagger in accordance with the manufacturer's instructions)

Continuous plaster fillet around fire opening

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

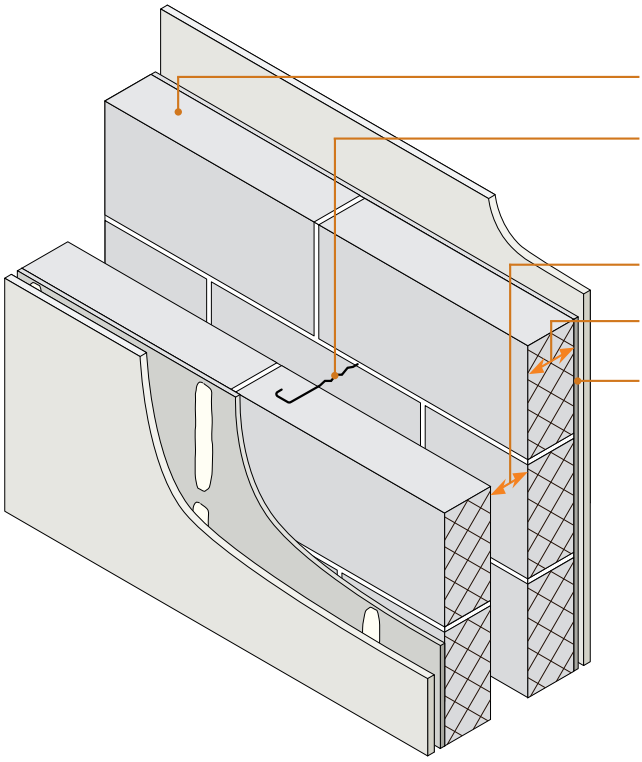
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks dense aggregate (1850 to 2300 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties 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 E-WM-4

Lightweight aggregate blocks ■
Render and gypsum-based board 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 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)
or
Lafarge Ecoat Parge Coat (nominal 8mm, minimum 6mm)

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

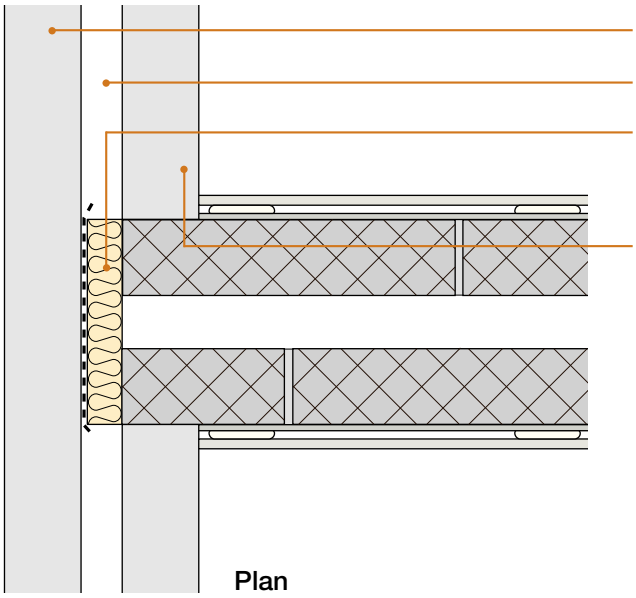
Separating wall cavity insulation (optional)

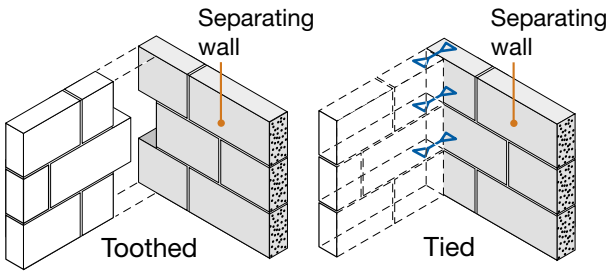
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m³.

DO

- 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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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

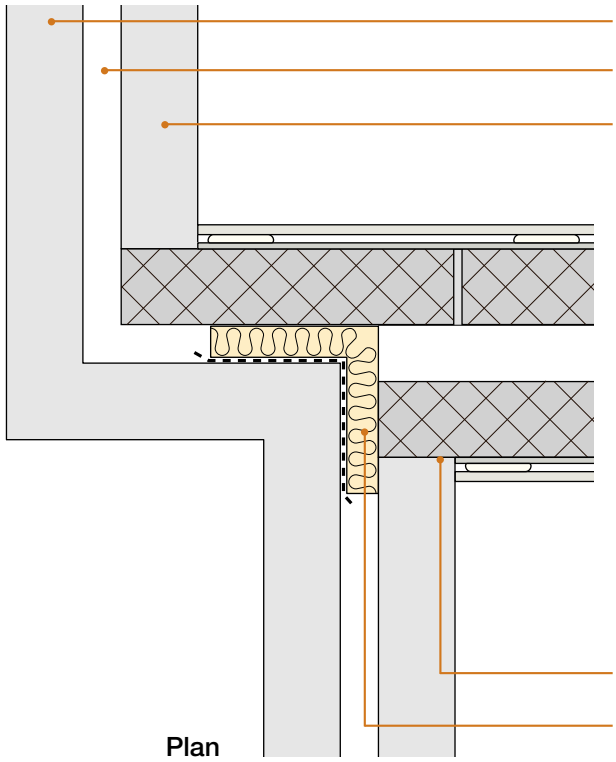
- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

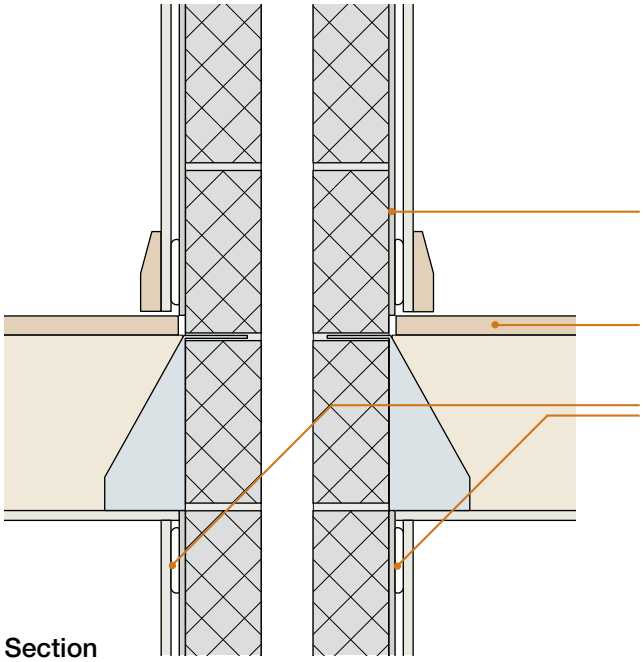
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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



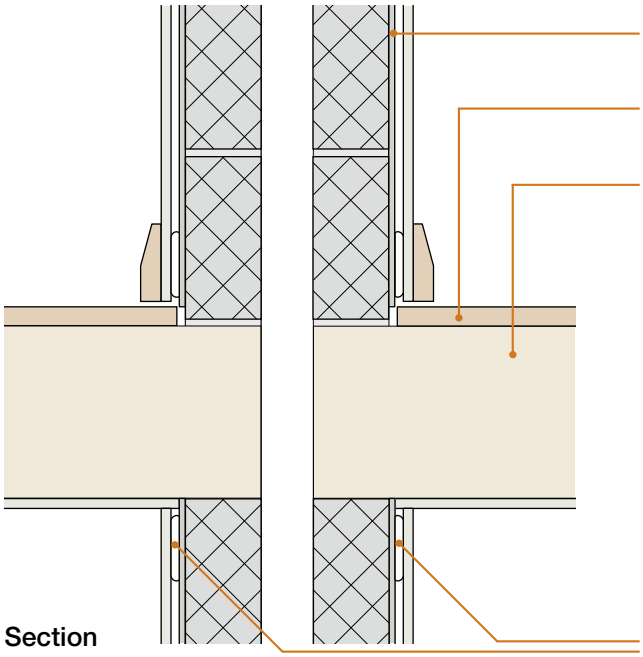
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

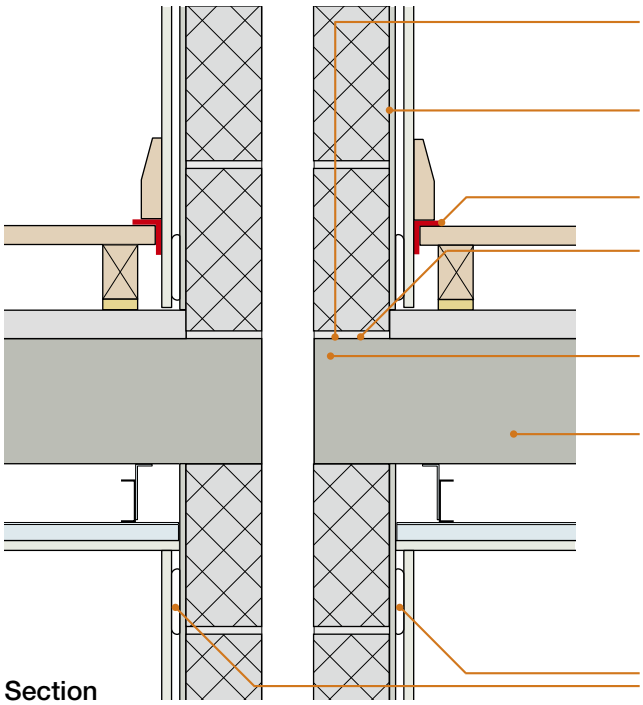
Floor construction:

- 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

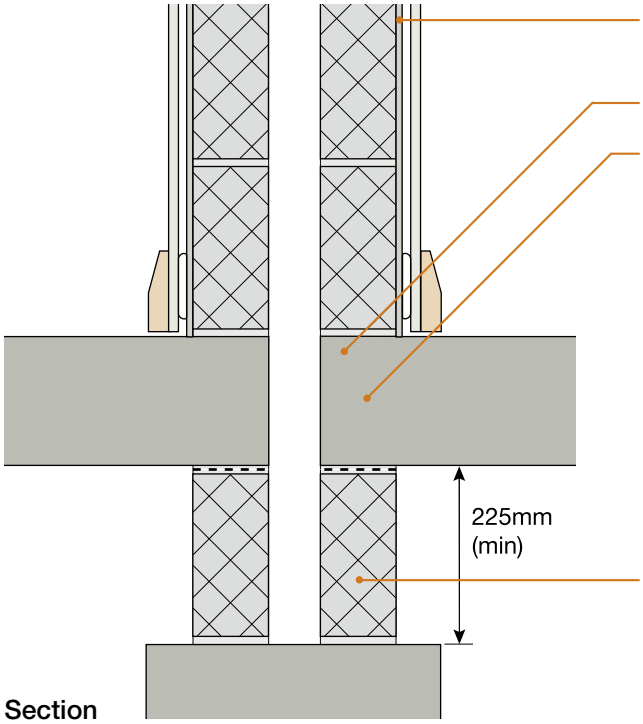


Section

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

- Separating wall must not be continuous between storeys
- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- 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

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

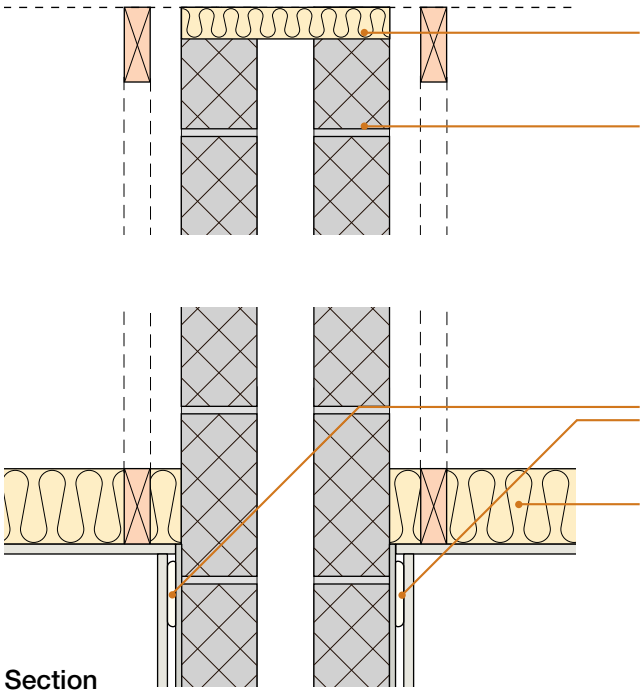


Section

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

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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.

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



Section

Junction between separating wall and roof filled with flexible closer

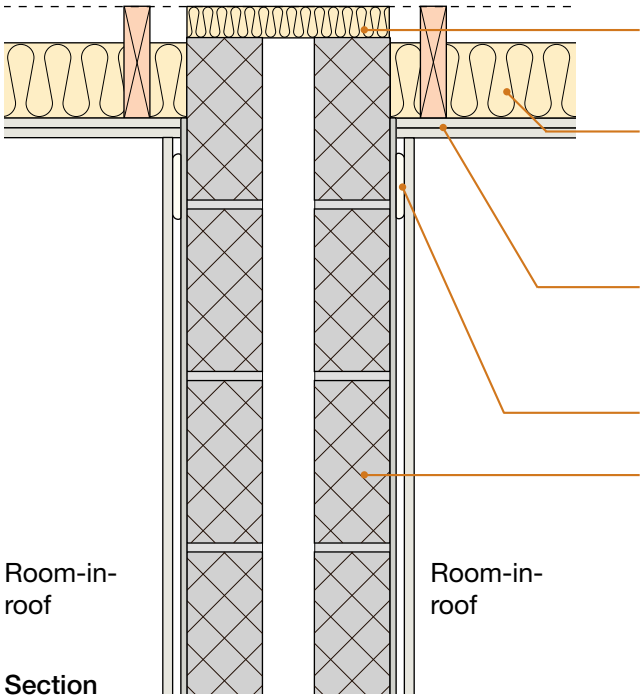
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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)

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)

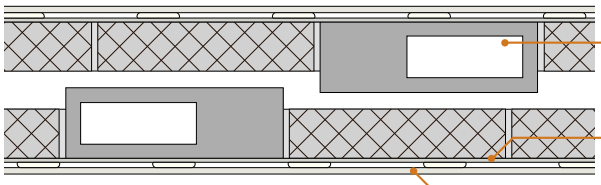
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used, rigid insulation may be placed between and/or directly beneath rafters

Continuous 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

9. Flue blocks built into separating wall

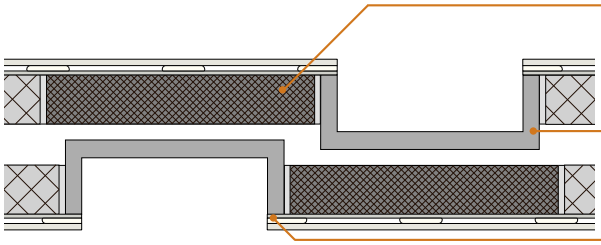


Plan

Flue block (stagger flues in accordance with the manufacturer's instructions)

Nominal 8mm render

Gypsum-based board (nominal 8 kg/m^2) on dabs



Plan

High density block (minimum 2270 kg/m^3) behind starter blocks from ground level up to at least where gather blocks start

Starter block (stagger in accordance with the manufacturer's instructions)

Continuous plaster fillet around fire opening

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

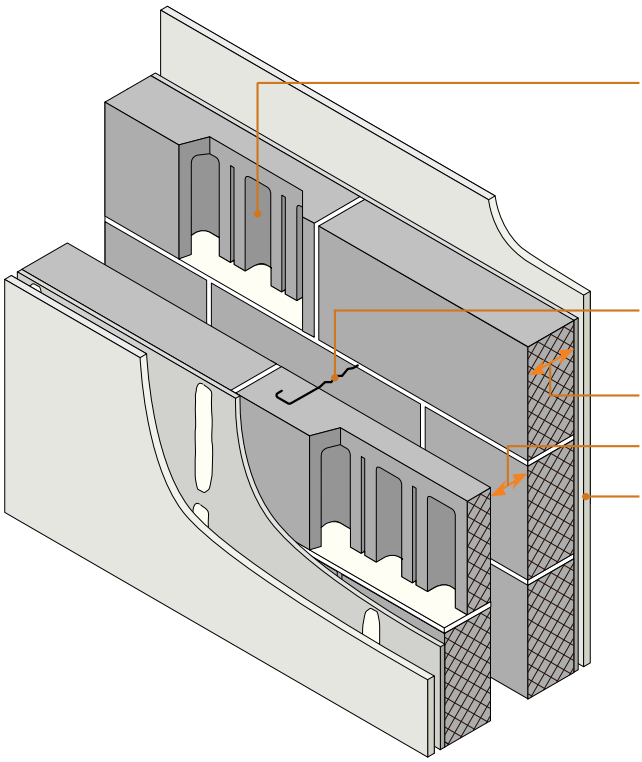
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall 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 E-WM-5

Besblock “Star Performer” dense aggregate cellular blocks ■
Render and gypsum-based board on dabs ■



Block	Only Besblock “Star Performer” 5-bridge cellular block (4-core, concrete density 1995 kg/m^3, block density 1528 kg/m^3, 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/m^2) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish Typical render mix 1:1:6 to 1:$^1/_2$: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.

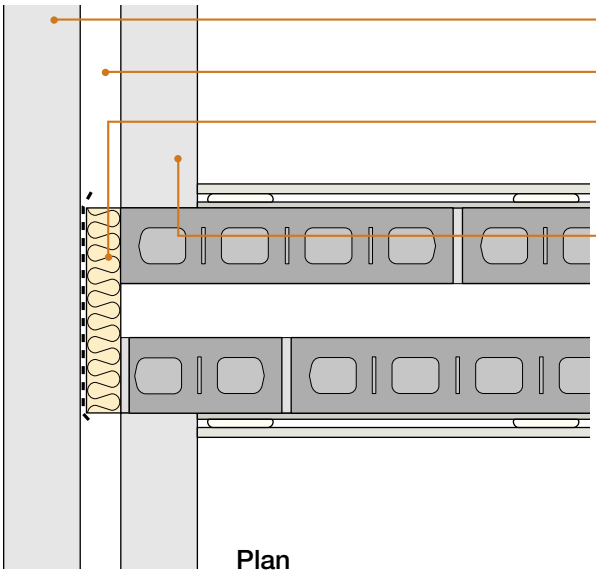
Separating wall cavity insulation (optional)

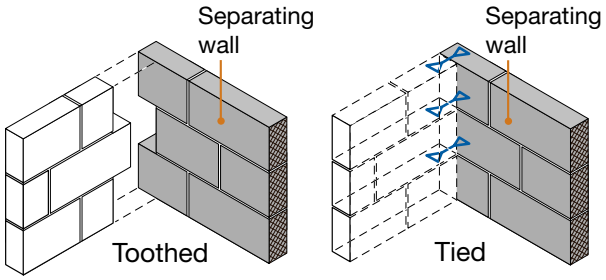
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

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

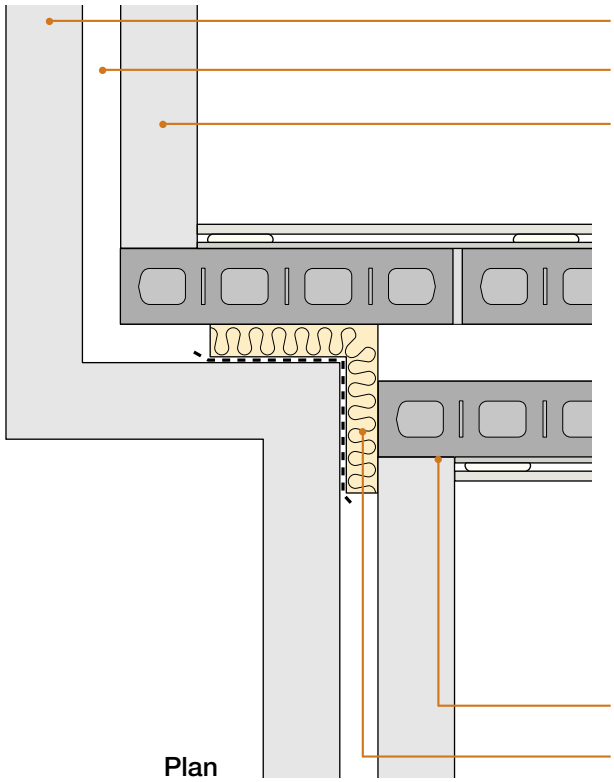
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Besblock "Star Performer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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 Besblock "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 Besblock "Star Performer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

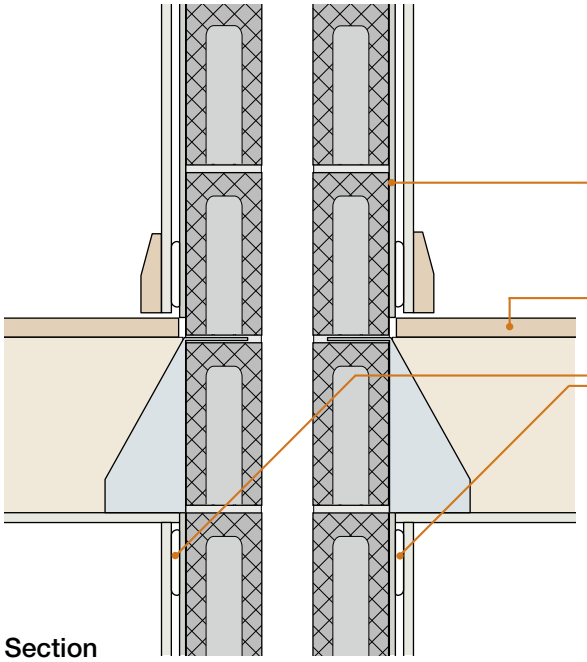
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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 Besblock "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)

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



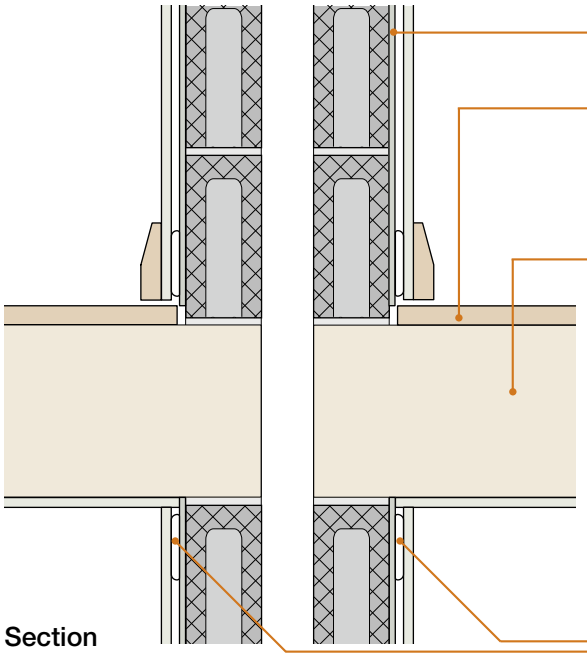
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

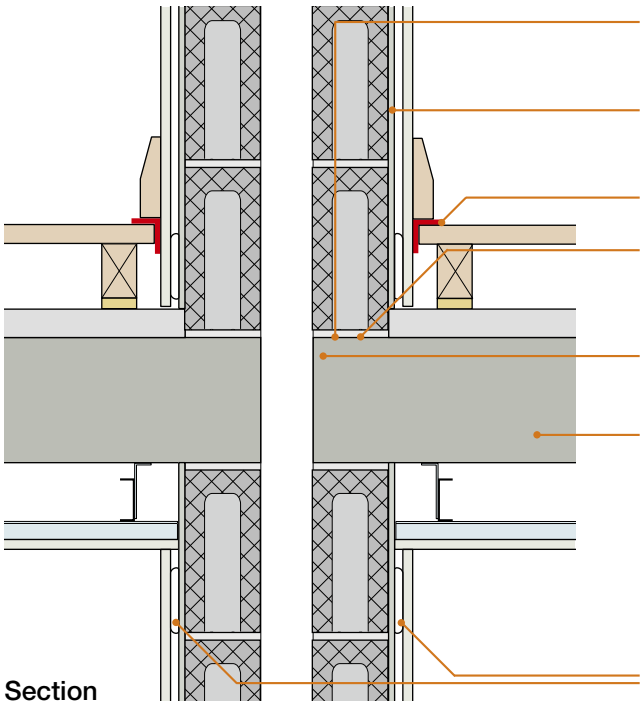
Floor construction:

- 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

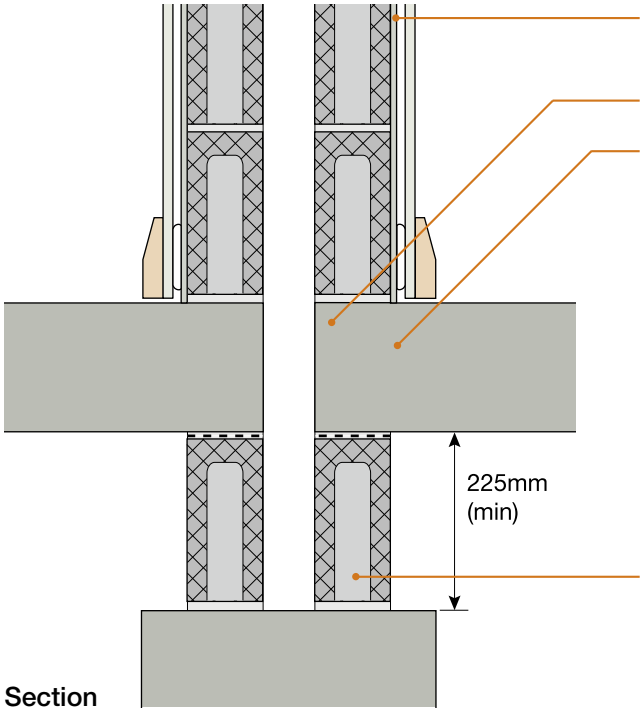


Section

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

- Separating wall must not be continuous between storeys
- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- 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

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

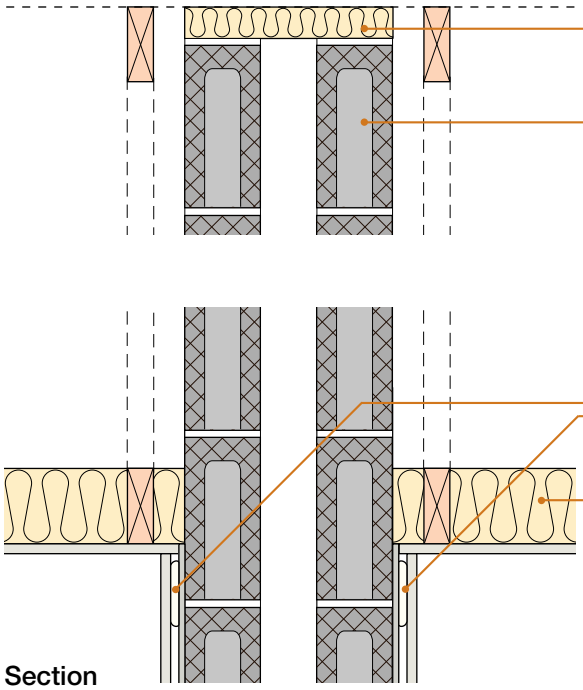


Section

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

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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.

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



Section

Junction between separating wall and roof filled with flexible closer

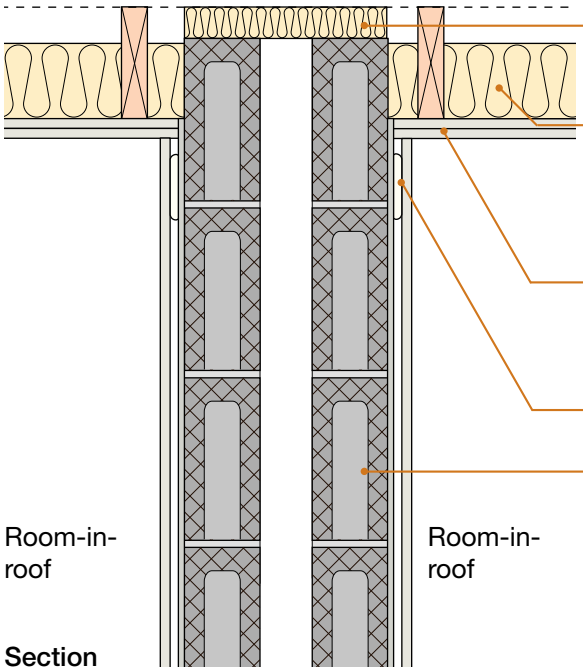
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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)

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)

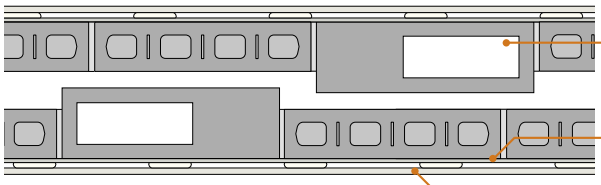
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters

Continuous 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

9. Flue blocks built into separating wall

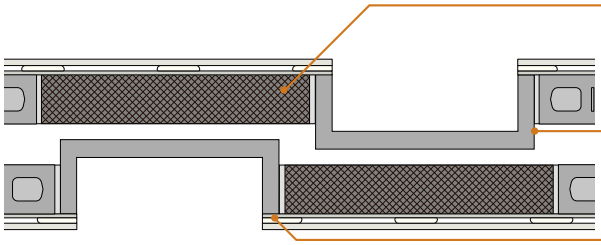


Plan

Flue block (stagger flues in accordance with the manufacturer's instructions)

Nominal 8mm render

Gypsum-based board (nominal 8 kg/m^2) on dabs



Plan

High density block (minimum 2270 kg/m^3) behind starter blocks from ground level up to at least where gather blocks start

Starter block (stagger in accordance with the manufacturer's instructions)

Continuous plaster fillet around fire opening

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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 Besblock 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 Besblock, manufacturer of ‘Star Performer’ dense aggregate cellular blocks:

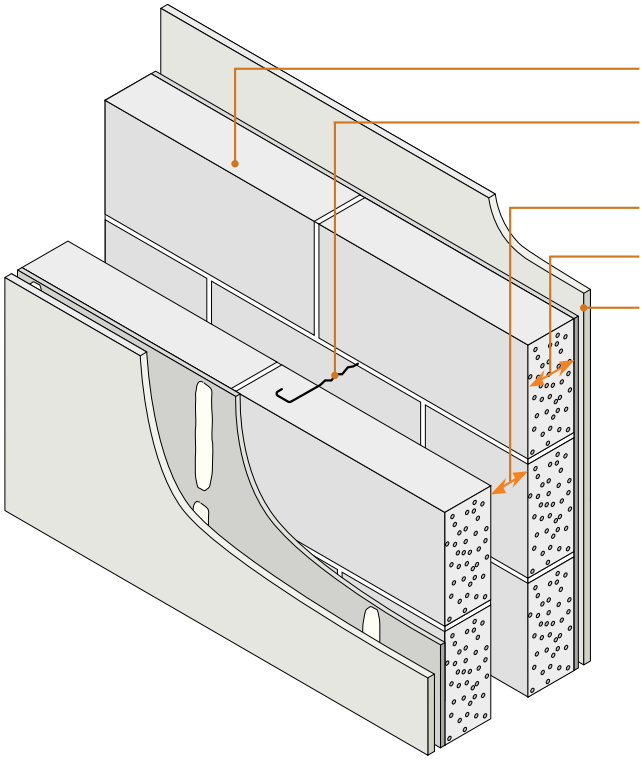
Telephone: 01952 685000 **Fax:** 01952 585224 **E-mail:** technical@besblock.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-6

Aircrete blocks ■
Render and gypsum-based board on dabs ■



Block density	600 to 800 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 on cement:sand render (nominal 8mm) with scratch finish Render mix must not be stronger than 1:1:6 and not stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

Note: When using this Robust Detail in flats/apartments, please refer to Tables 3a and 4 of the Introduction

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 foundations (and insulation)
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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)
- Ensure flues are not integrated within the separating wall
- Refer to Appendix A

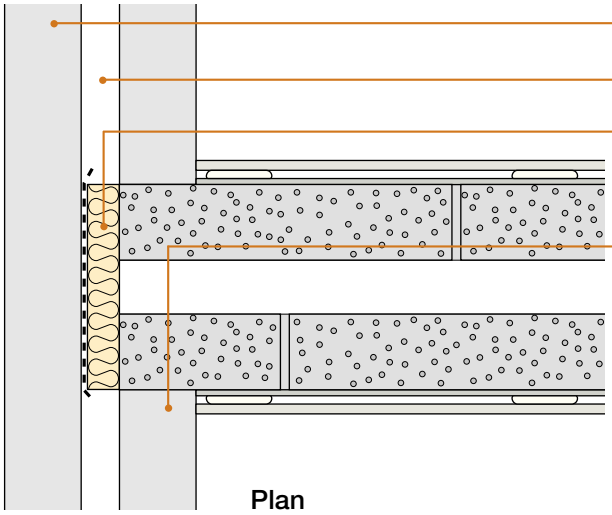
Alternative internal render specification

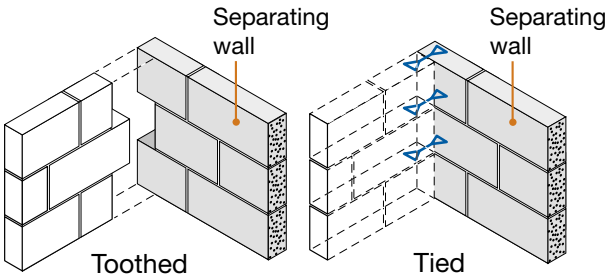
British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm) applied in accordance with the manufacturer's instructions, may be used instead of the cement:sand render mix.

Cavity insulation (optional)

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

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

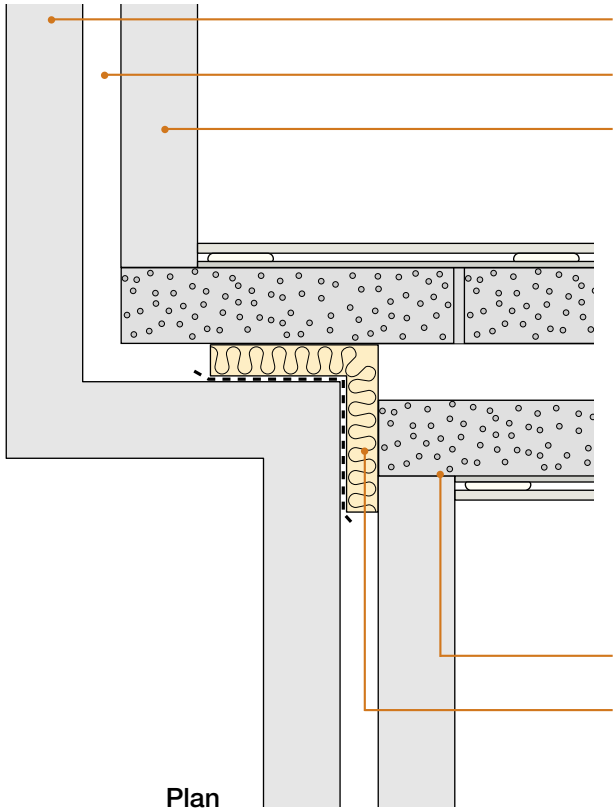
- 100mm (min) aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish 13mm plaster or nominal 8 kg/m² gypsum-based board

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



Masonry outer leaf

External wall cavity (min 50mm)

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

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

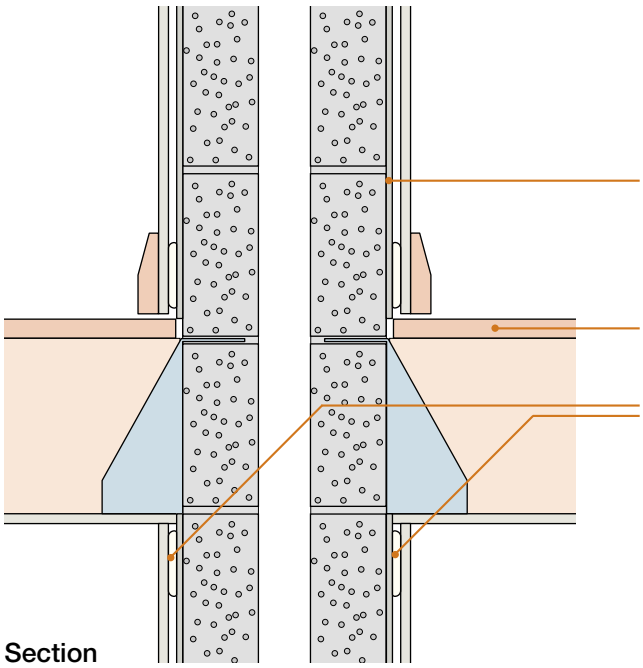
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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



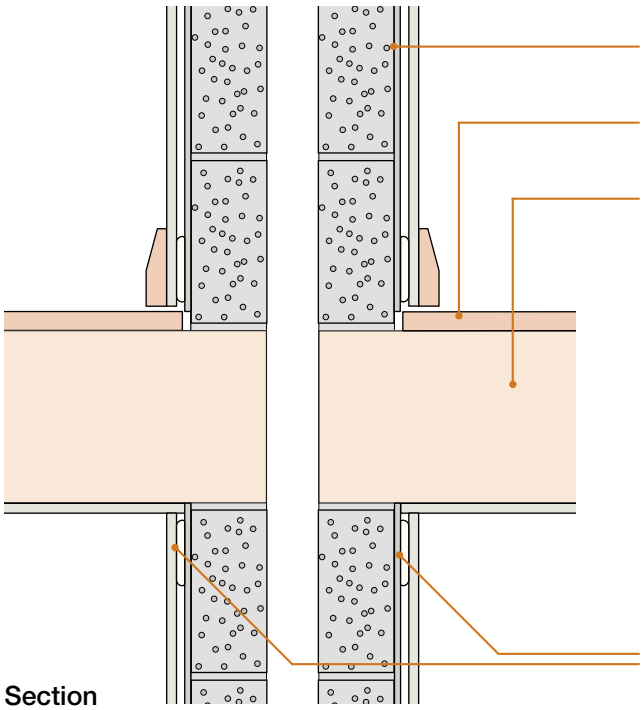
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

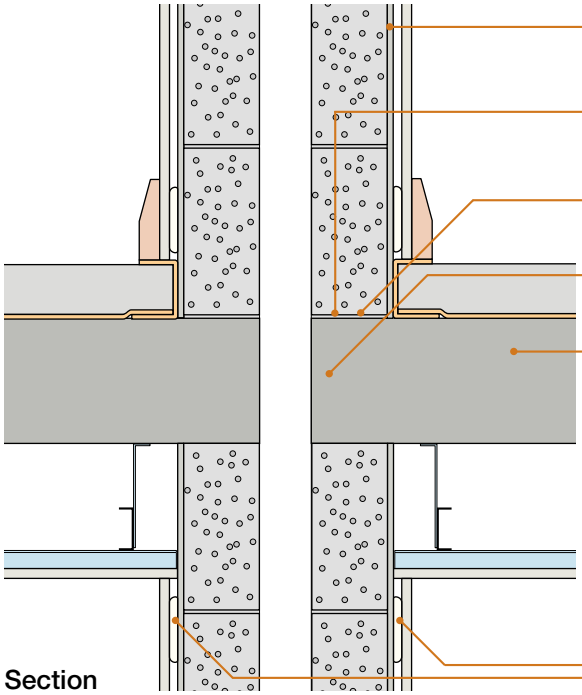
Floor construction:

- 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

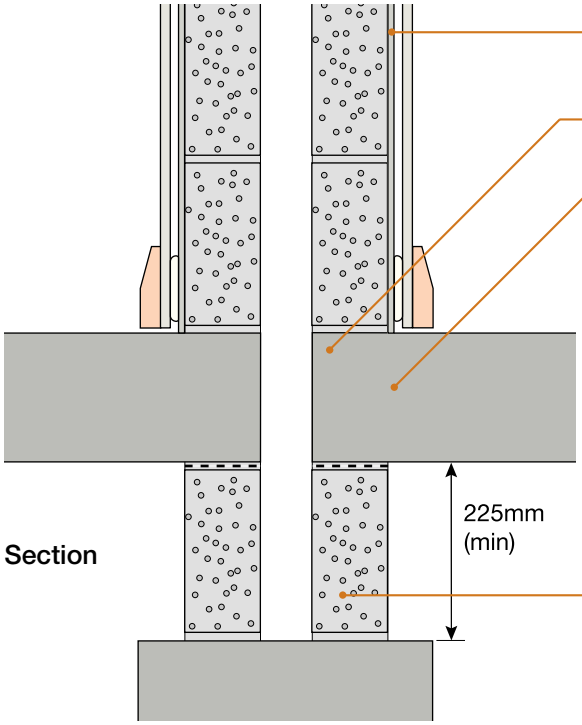


Section

Sketch shows E-FC-4 separating floor and CT0 type ceiling treatment

- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- Separating wall must not be continuous between storeys
- 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
  - at least one storey of the separating wall flanking the separating floor must be built in Aircrete of minimum density of 680 kg/m³
  - if using floor requiring pre-completion testing, seek specialist advice
- Continuous horizontal ribbon of adhesive

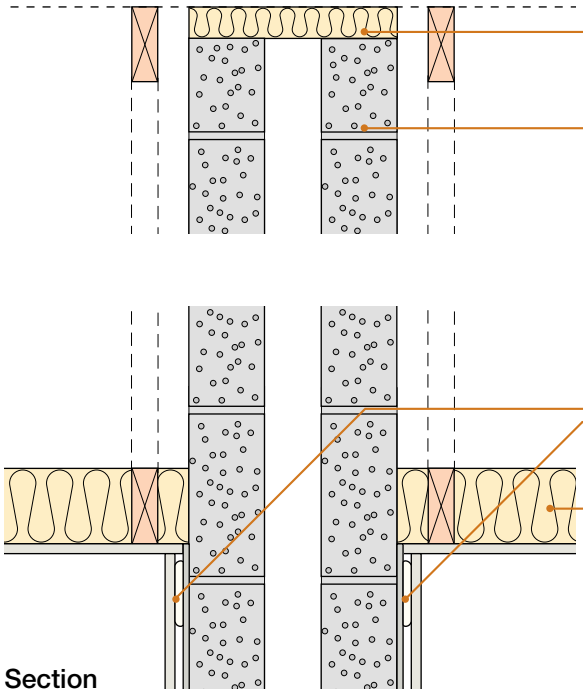
6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



Section

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- Ground floor not continuous between dwellings
- Ground floor construction:
  - timber joists built in with:
    - all voids around the joists filled with mortar
    - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
  - beam and block floor with all voids filled with mortar, or
  - concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
  - ground bearing slab
- Cavity separating wall continuous to foundation, cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable. Solid walls which support separating walls are only acceptable where each ground floor (not timber joists) is built into one side of the separating wall and breaks the vertical continuity of the wall and the minimum clear cavity indicated is maintained.

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



Section

Junction between separating wall and roof filled with flexible closer

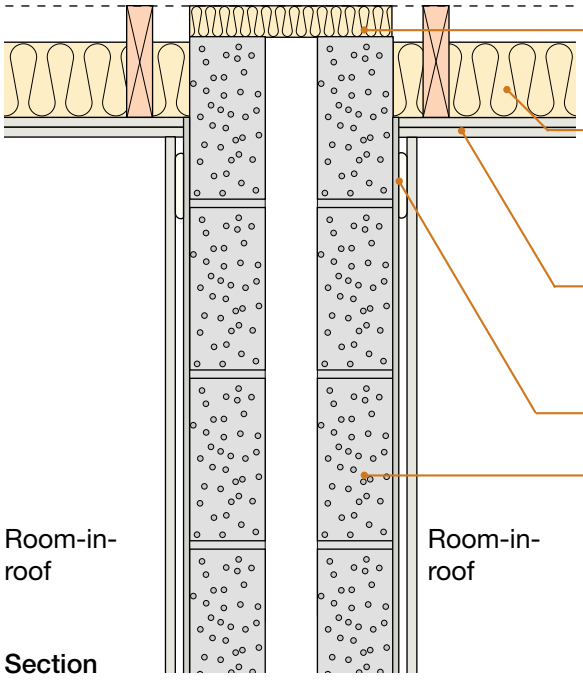
Aircrete cavity separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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



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 ribbon of adhesive

Aircrete cavity 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:

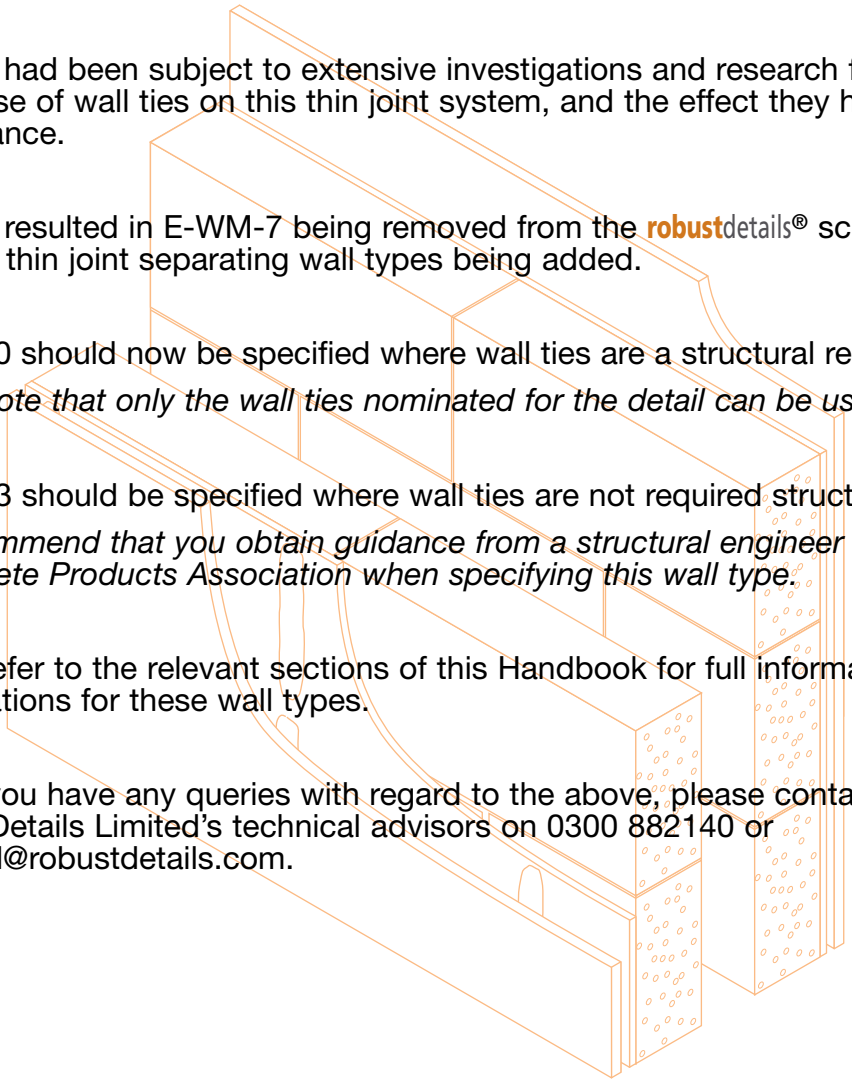
Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Is external (flanking) wall inner leaf aircrete (450 to 800 kg/m^3)?			
4.	Are separating wall blocks aircrete (600 to 800 kg/m^3)?			
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 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 correct flanking/isolation been provided to the perimeter of the floating floor/screed?			
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 . . . . . .

Important information regarding current status of E-WM-7



E-WM-7 had been subject to extensive investigations and research focusing on the use of wall ties on this thin joint system, and the effect they have on performance.

This has resulted in E-WM-7 being removed from the robustdetails® scheme, and two new thin joint separating wall types being added.

E-WM-10 should now be specified where wall ties are a structural requirement.

Please note that only the wall ties nominated for the detail can be used.

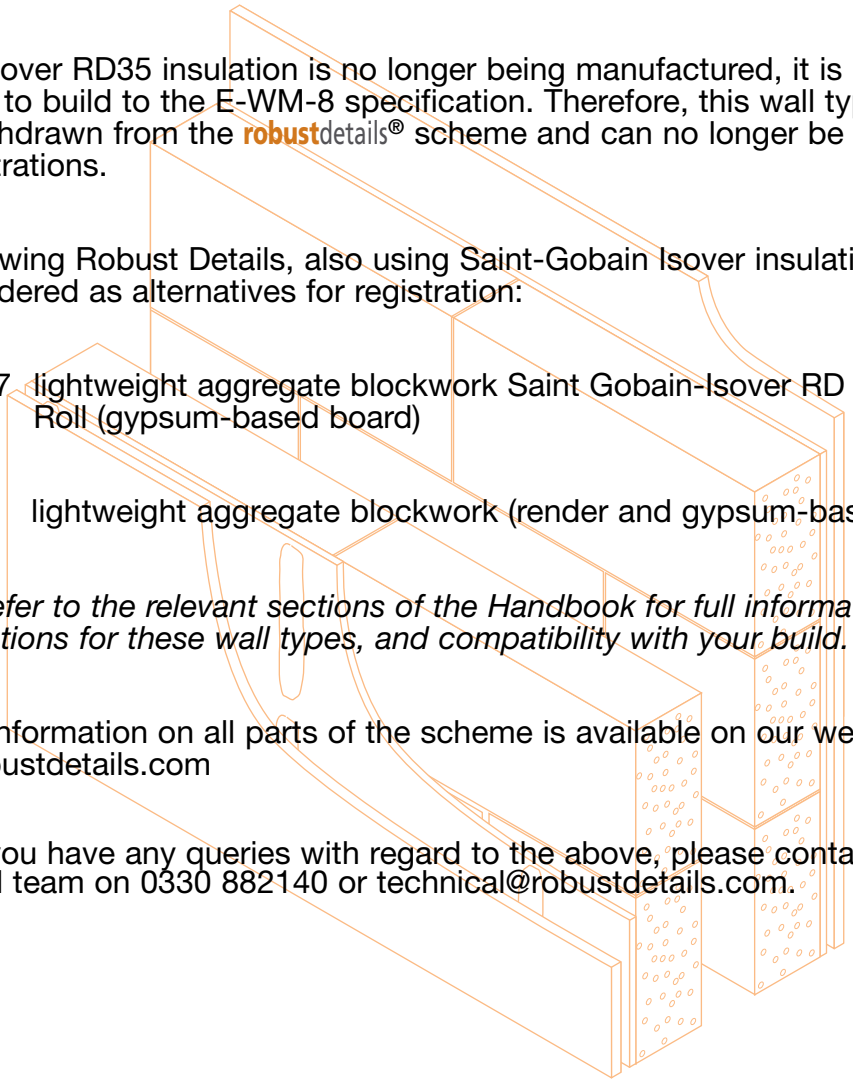
E-WM-13 should be specified where wall ties are not required structurally.

We recommend that you obtain guidance from a structural engineer and from the Aircrete Products Association when specifying this wall type.

Please refer to the relevant sections of this Handbook for full information and specifications for these wall types.

Should you have any queries with regard to the above, please contact Robust Details Limited's technical advisors on 0300 882140 or technical@robustdetails.com.

Important information regarding current status of E-WM-8



As the Isover RD35 insulation is no longer being manufactured, it is not possible to build to the E-WM-8 specification. Therefore, this wall type has been withdrawn from the robustdetails® scheme and can no longer be selected for registrations.

The following Robust Details, also using Saint-Gobain Isover insulation, may be considered as alternatives for registration:

E-WM-17 lightweight aggregate blockwork Saint Gobain-Isover RD Party Wall Roll (gypsum-based board)

E-WM-4 lightweight aggregate blockwork (render and gypsum-based board).

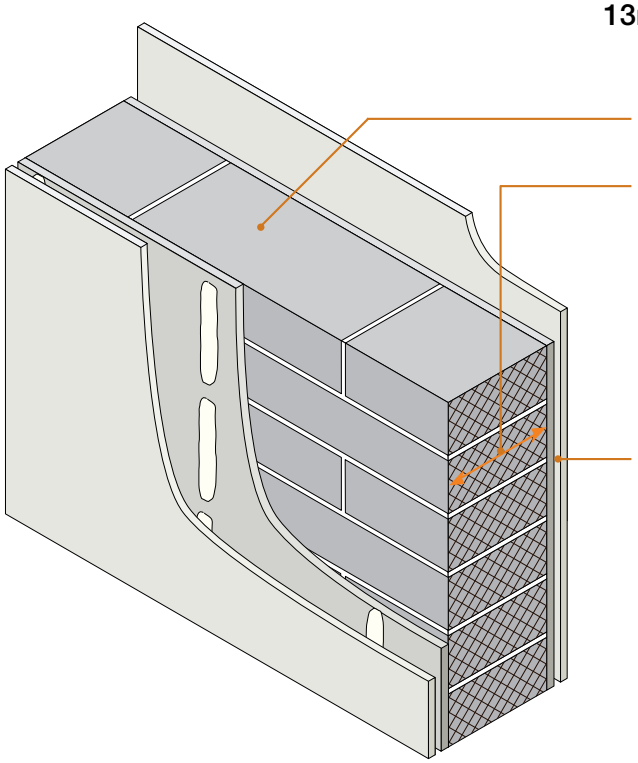
Please refer to the relevant sections of the Handbook for full information and specifications for these wall types, and compatibility with your build.

Further information on all parts of the scheme is available on our website www.robustdetails.com

Should you have any queries with regard to the above, please contact RDL's technical team on 0330 882140 or technical@robustdetails.com.

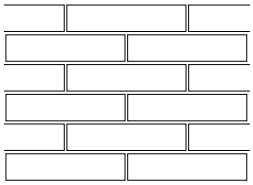
Separating Wall – Solid Dense Block Masonry E-WM-9

Attached houses on raft foundations only ■
Dense aggregate blocks ■
13mm render and gypsum base board on dabs ■



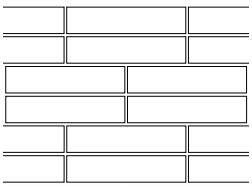
Block density	1850-2300 kg/m^3
Block thickness	215mm wide, full block laid on its side, single course, stretcher bond NB: mortar beds may be 10-15mm thick to permit coursing to junction with inner leaf
Wall finish	Gypsum-based board (nominal mass per unit area 12.5 kg/m^2) mounted on dabs, on cement: sand render (nominal 15mm, minimum 13mm) with scratch finish. Typical render mix must not be stronger than the background (see Appendix A)
External (flanking wall)	Masonry both leaves with 50mm (min.) cavity – clear, fully filled or partially filled with insulation.

DO ✓



Do use single course stretcher bond

DO NOT ✗



Do not use double coursing

IMPORTANT

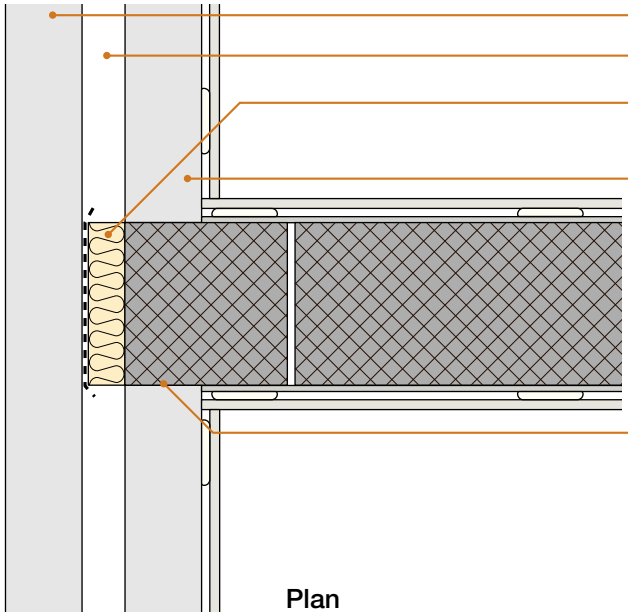
Only use blocks accepted by Robust Details Limited as providing a suitable method of identifying on both faces of the wall, by manufactured mark or feature, that the constructed wall has used dense aggregate blocks.

A current list of blocks and further information on block identification is available on the Robust Details website www.robustdetails.com

DO

- Ensure blocks are laid on side for 215mm full wall width
- Ensure that blockwork is single course stretcher bond
- Ensure all joints are fully filled
- Ensure inner leaf is either abutted and tied to face of separating wall or bonded in every two courses
- Ensure no chasing occurs on face of separating wall
- Ensure render coat is a minimum of 13mm and applied to face of separating wall with 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

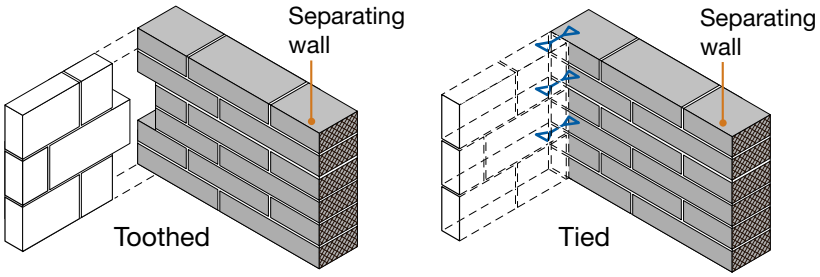
External wall cavity (min 50mm)

Close cavity with flexible cavity stop unless it is fully filled with built-in mineral wool insulation

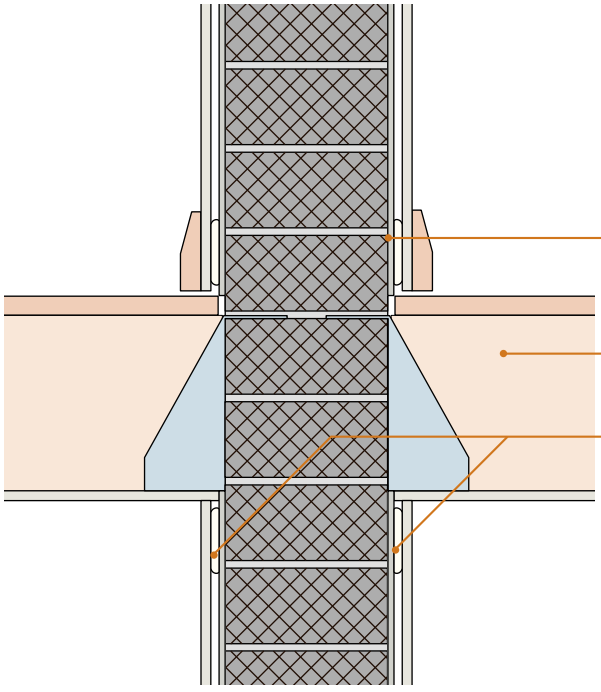
Inner leaf

- 100mm (min) concrete block (1350 kg/m^3 to 1600 kg/m^3 or 1850 kg/m^3 to 2300 kg/m^3) or aircrete block (450 kg/m^3 to 800 kg/m^3)
- Internal finish – 13mm plaster or nominal 8 kg/m^2 gypsum-based board

Ensure that separating wall blockwork is single course stretcher bond and that inner leaf of external wall is either abutted and tied to face of separating wall or bonded (toothed) in every two courses.
NB: Better performance with tied



2. Internal floor junction: timber floor supported on joists

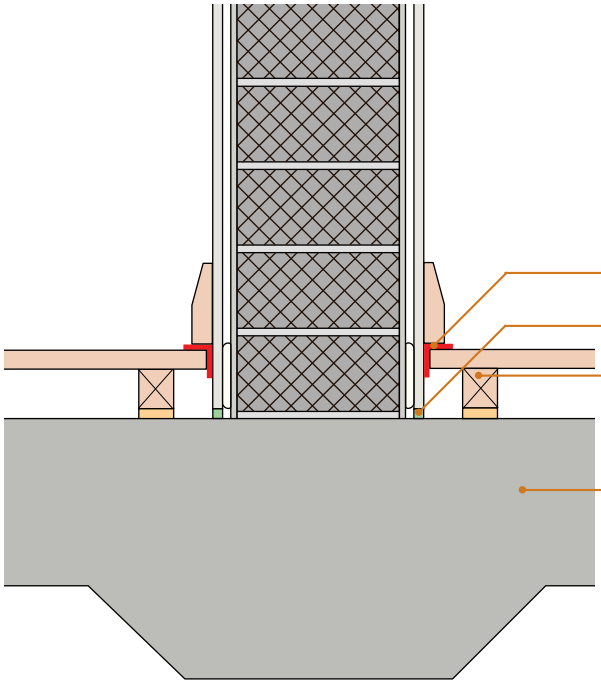


Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

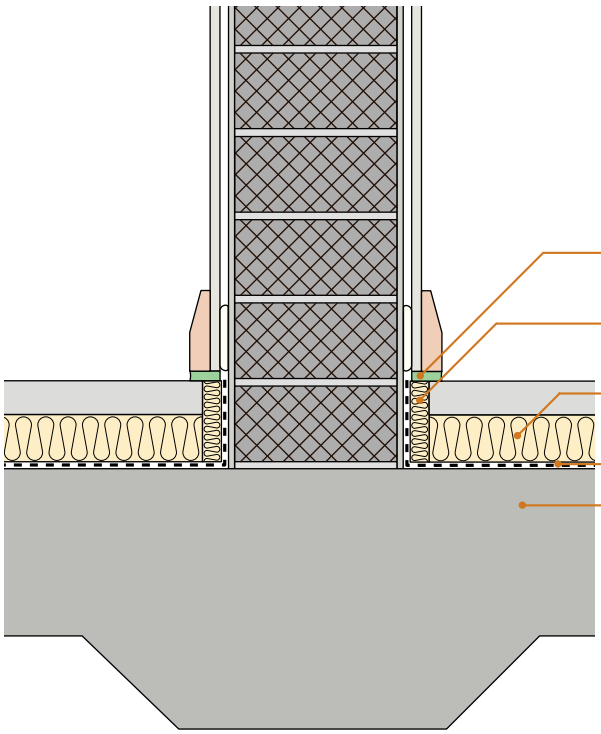
Continuous horizontal ribbon of adhesive

3. Raft foundation with floating floor treatment



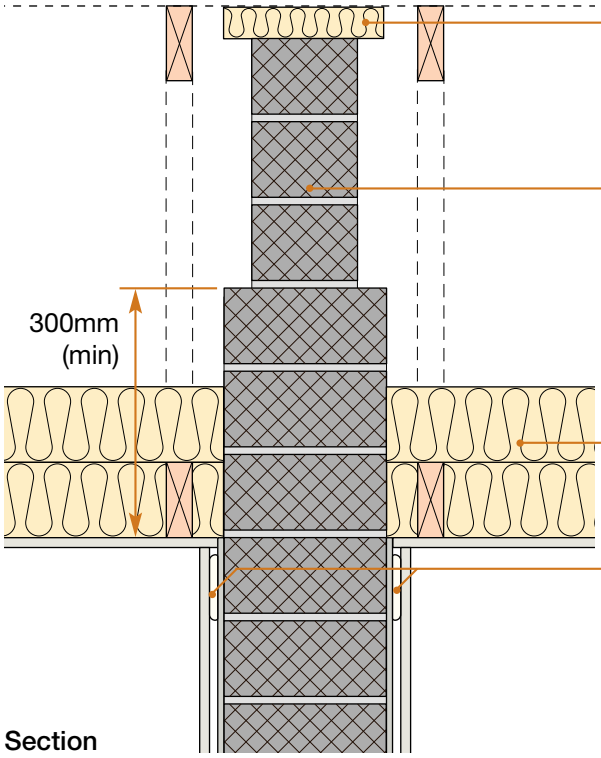
- 5mm (min) resilient flanking strip
- Flexible or acoustic sealant
- A floating floor treatment (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)
- Concrete raft – mass per unit area of 365 kg/m^2 (min)

4. Raft foundation with screed



- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from separating wall
- Below screed insulation, isolating screed from raft
- Polyethylene
- Concrete raft – mass per unit area of 365 kg/m^2 (min)

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



Junction between separating wall and roof filled with flexible closer

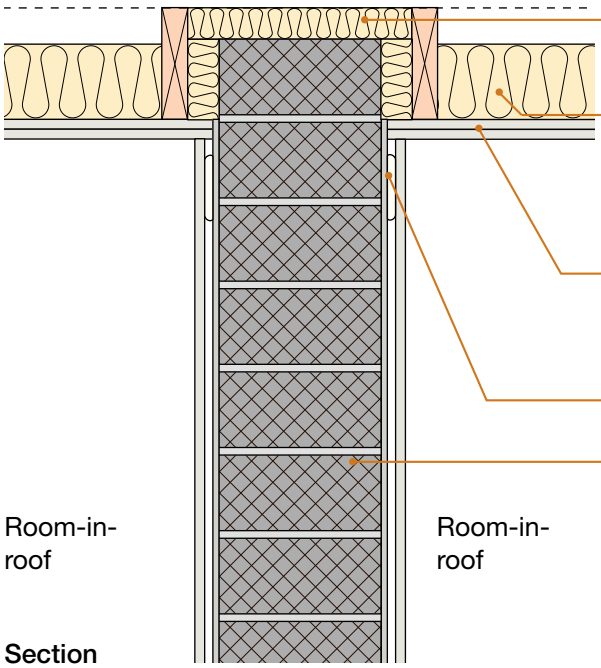
Minimum 140mm wide solid dense block to underside of roof. Alternatively use a spandrel panel – see Appendix A

Minimum 200mm mineral wool insulation 10 kg/m³ (min)

Continuous horizontal ribbon of adhesive

Section

6. 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 ribbon of adhesive

Solid 215mm blockwork to underside of roof covering

Section

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

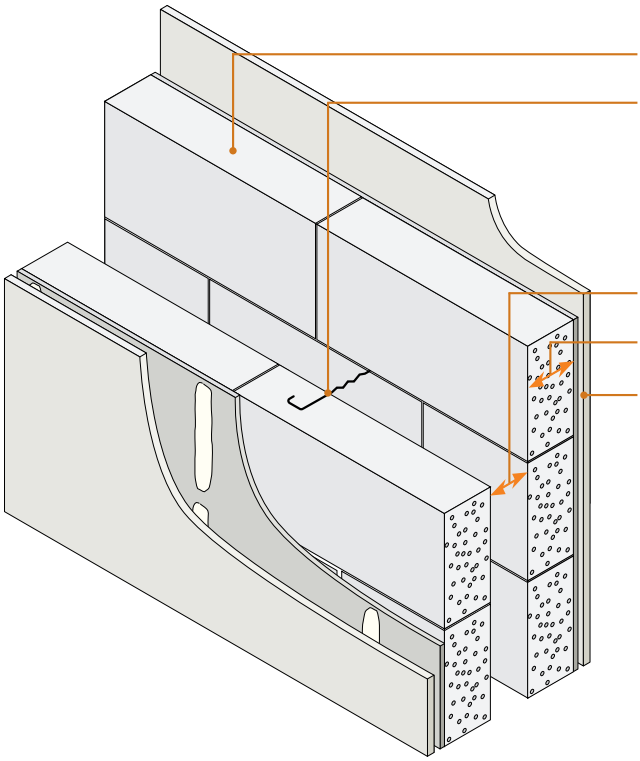
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are separating wall blocks dense aggregate (1850 to 2300 kg/m^3) as featured on the list of acceptable blocks (www.robustdetails.com)?			
2.	Are blocks laid for the full 215mm width of the wall (i.e. 215mm blocks laid on side)?			
3.	Is blockwork laid single course stretcher bond?			
4.	Is separating wall breaking the continuity of the inner leaf? (i.e. is the face of the separating wall abutted and tied or bonded into the inner leaf)			
5.	Are cavity stops installed?			
6.	Are all joints fully filled?			
7.	Is cement:sand render applied to the whole wall face? (except where it may be omitted between floor joists/beams)			
8.	Is cement:sand render at least 13mm thick and scratch finished?			
9.	Is mass per unit area of the gypsum based board at least 12.5 kg/m^2?			
10.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
11.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry (thin joint) E-WM-10

Aircrete thin joint system ■
Render and gypsum-based board on dabs ■



Block density	600 to 800 kg/m³
Wall ties	Wall ties must be Ancon Building Products Staifix HRT4 or Clan PWT4 installed at not more than 2.5 ties per square metre
Cavity width	75mm (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 Render mix must not be stronger than 1:1:6 and not stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

IMPORTANT

Only the following wall ties may be used in this separating wall:

- Ancon Building Products Staifix HRT4
- Clan PWT4

Refer to Appendix A for the requirements of wall ties in flanking walls.

Alternative internal render specification

British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm) applied in accordance with the manufacturer's instructions, may be used instead of the cement:sand render mix.

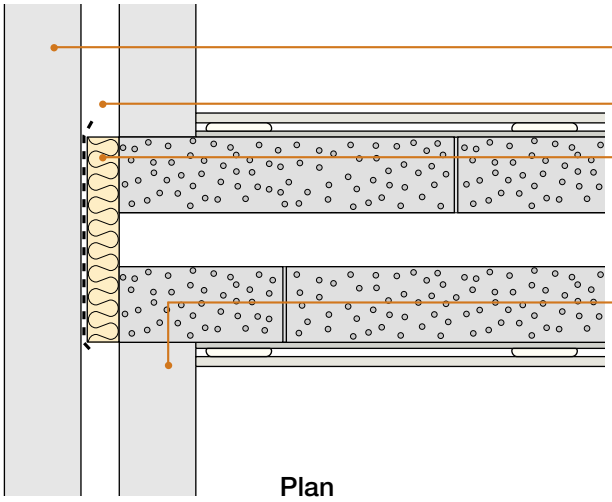
Cavity insulation (optional)

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
- Ensure correct wall ties are used
- Fully fill all thin joints
- Make sure there is no connection between the two leaves except for wall ties and foundations (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)
- Ensure flues are not integrated within the separating wall
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Refer to Appendix A

1. External (flanking) wall junction



Plan

Masonry outer leaf

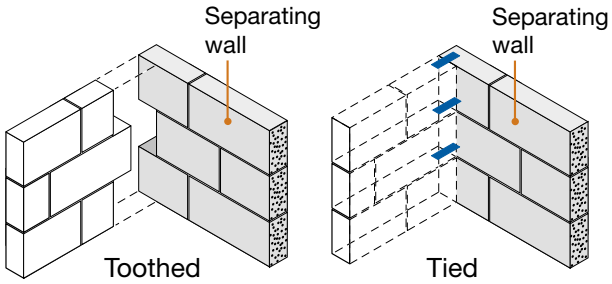
External wall cavity (min 50mm)

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

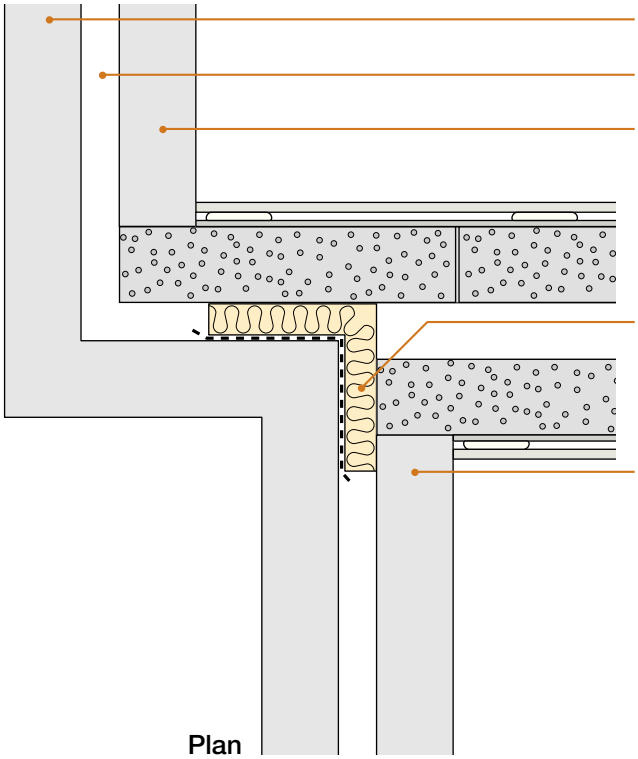
Inner leaf:

- 100mm (min) aircrete thin joint block (450 kg/m³ to 800 kg/m³)
- 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)

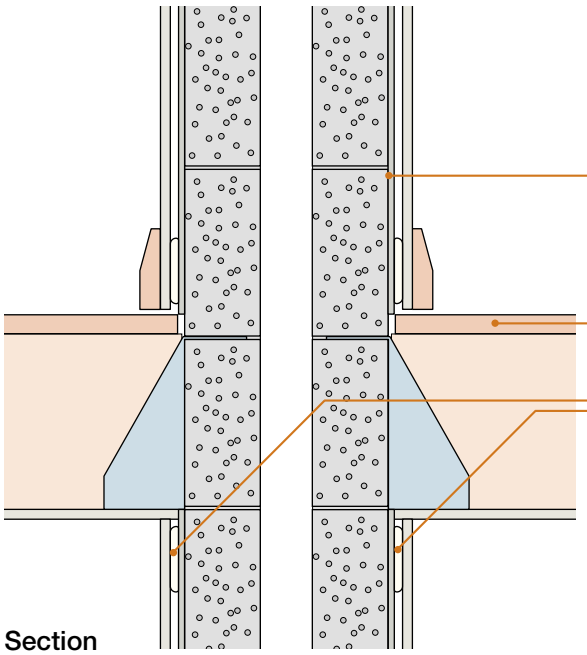
Inner leaf:

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

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

Tooth or tie walls together

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



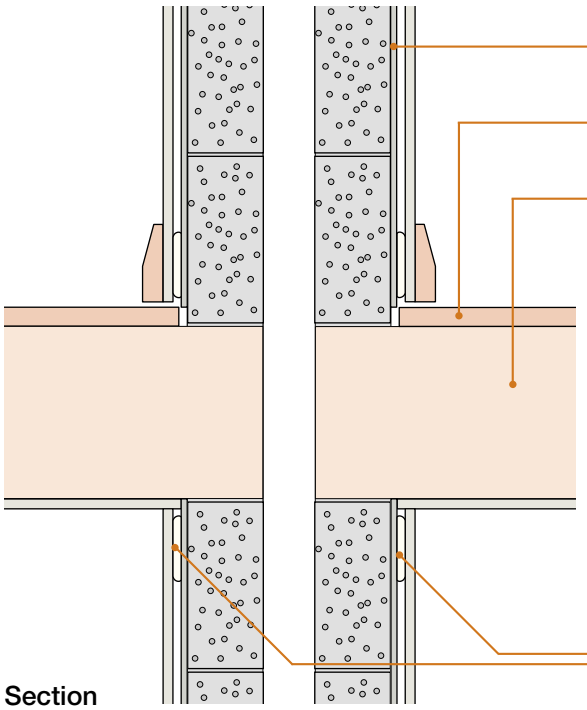
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

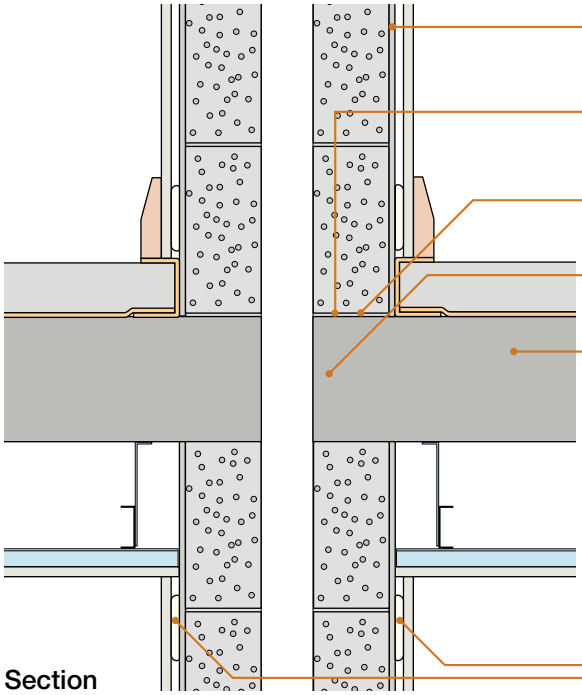
Floor construction:

- 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

Sketch shows E-FC-4 separating floor and CT0 type ceiling treatment

Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)

Separating wall must not be continuous between storeys

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

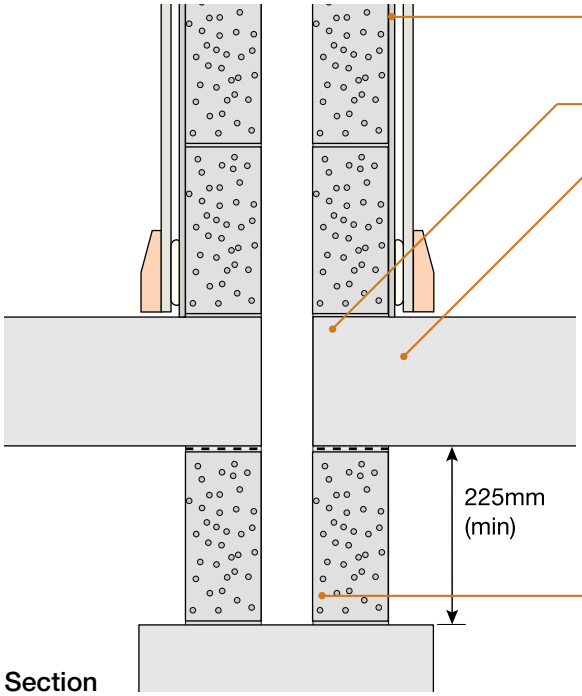
Separating floor must not be continuous between dwellings

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
- at least one storey of the separating wall flanking the separating floor must be built in Aircrete of minimum density of 680kg/m³
- if using floor requiring pre-completion testing, seek specialist advice

Continuous horizontal ribbon of adhesive

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

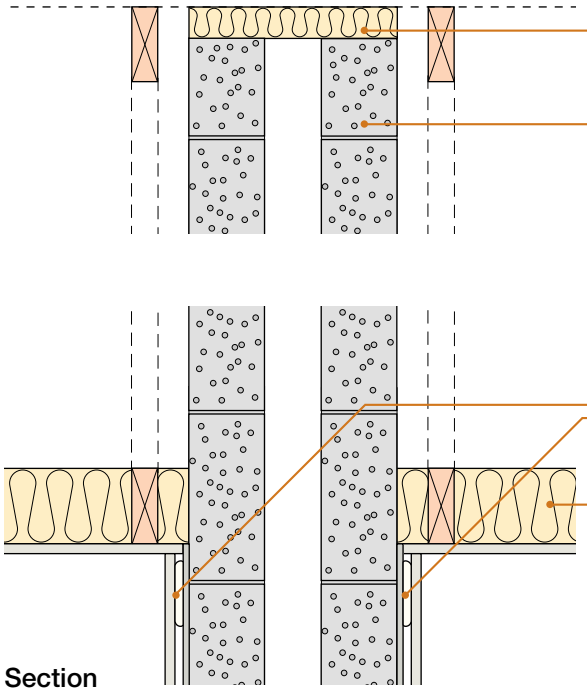
Ground floor not continuous between dwellings

Ground floor construction:

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

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

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



Section

Junction between separating wall and roof filled with flexible closer

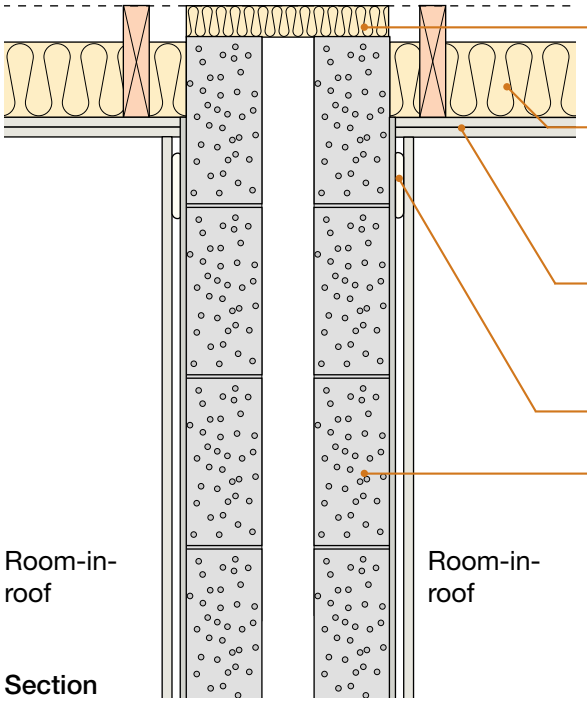
Aircrete cavity separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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



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 ribbon of adhesive

Aircrete cavity 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:

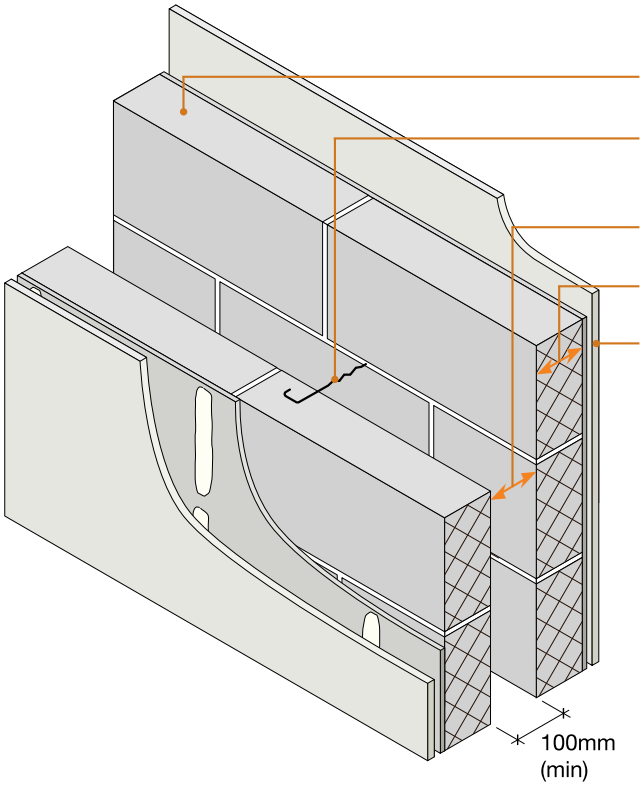
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Is external (flanking) wall inner leaf aircrete thin joint block (450 to 800 kg/m^3)?			
4.	Are separating wall blocks thin joint compatible aircrete (600 to 800 kg/m^3)?			
5.	Is cavity free from droppings and debris?			
6.	Have only Ancon Staifix HRT4 wall ties or Clan PWT4 wall ties been used in the separating wall?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled and sealed?			
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.	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 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 Besblock 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.

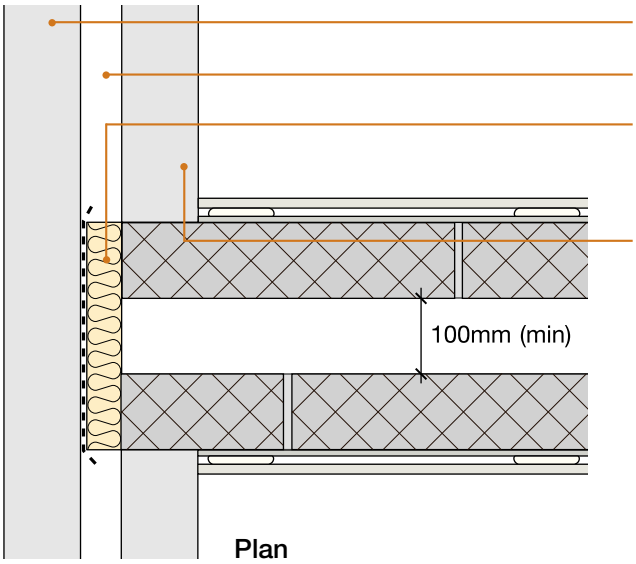
Separating wall cavity insulation (optional)

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

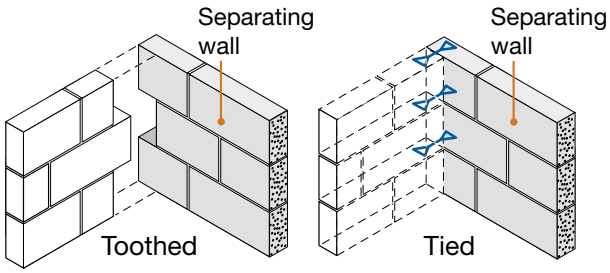
DO

- 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



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

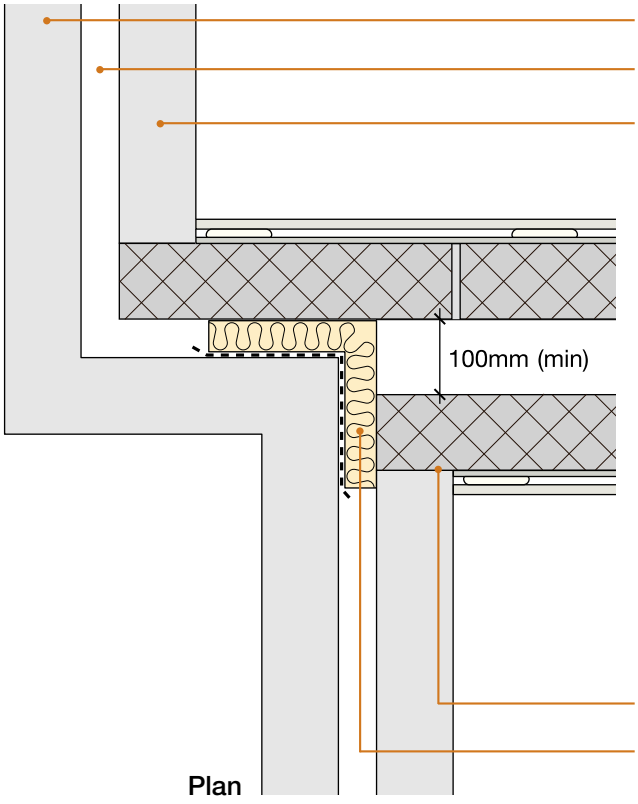
- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Besblock "Star Perfomer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

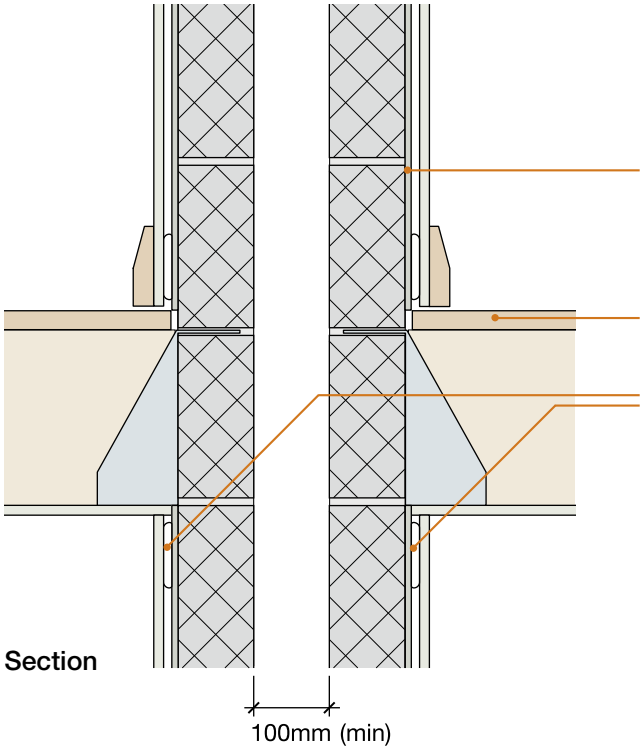
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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 Besblock "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)

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

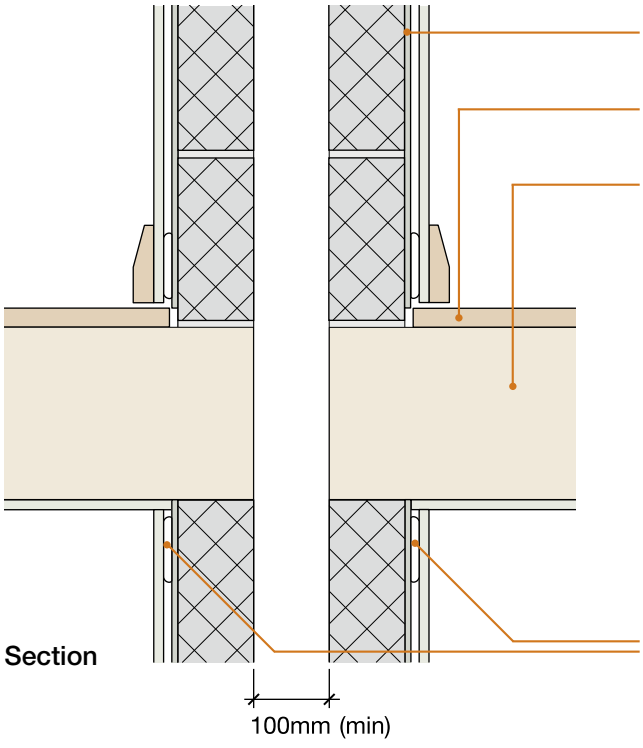


Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

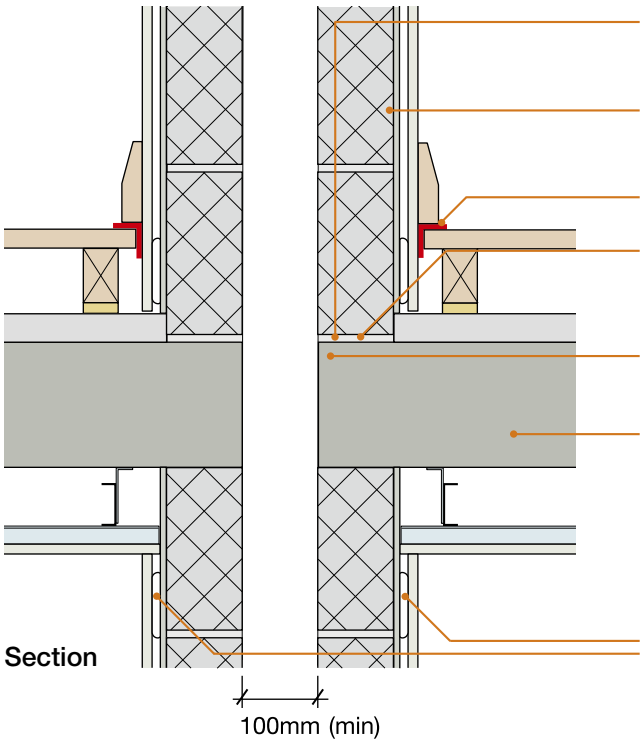
Floor construction:

- 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

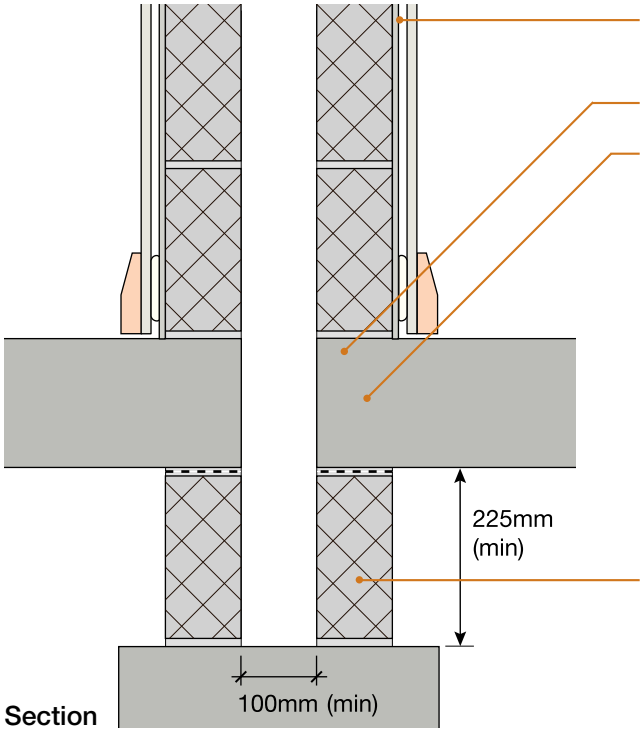
5. Separating floor junction



- Separating wall must not be continuous between storeys
- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- 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

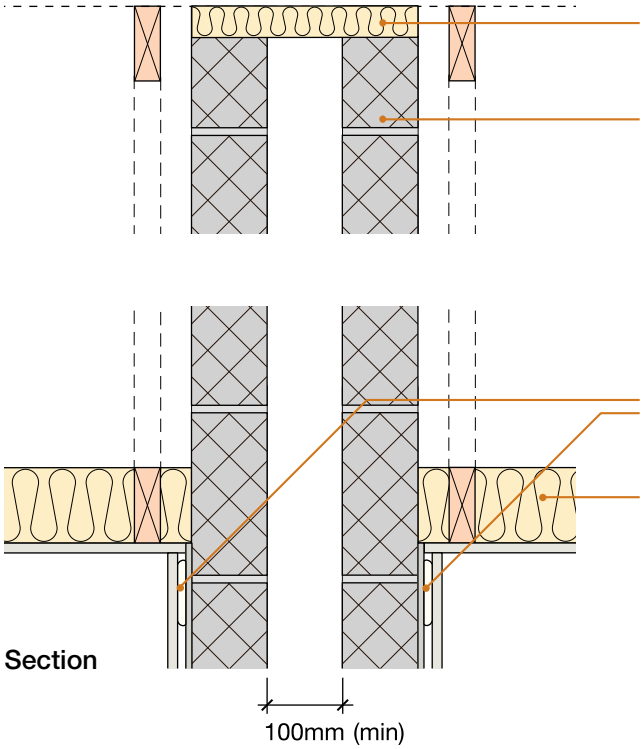
6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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

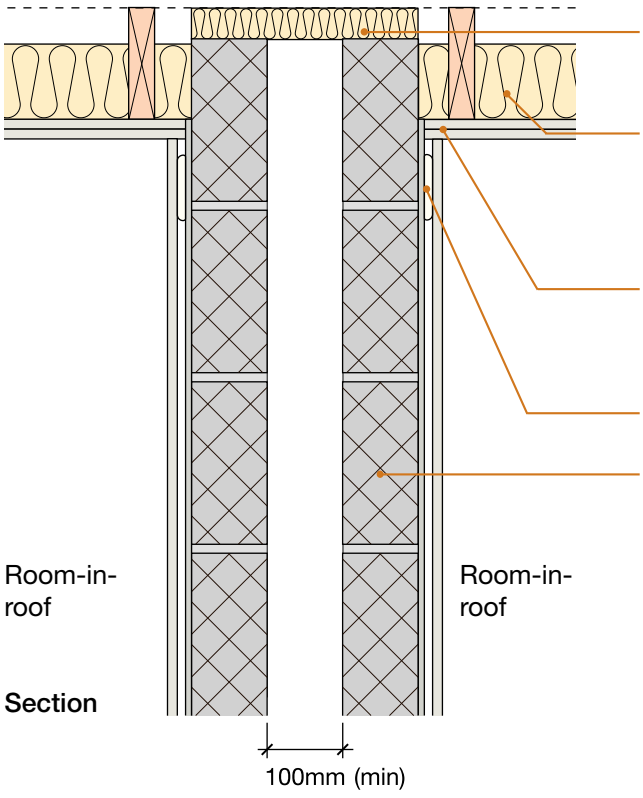
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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/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)

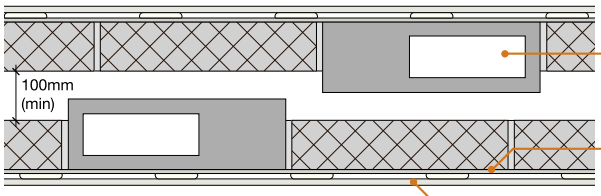
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters

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

9. Flue blocks built into separating wall

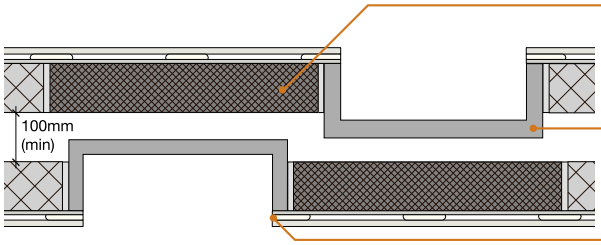


Plan

Flue block (stagger flues in accordance with the manufacturer's instructions)

Nominal 8mm render

Gypsum-based board (nominal 8 kg/m^2) on dabs



Plan

High density block (minimum 2270 kg/m^3) behind starter blocks from ground level up to at least where gather blocks start

Starter block (stagger in accordance with the manufacturer's instructions)

Continuous plaster fillet around fire opening

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

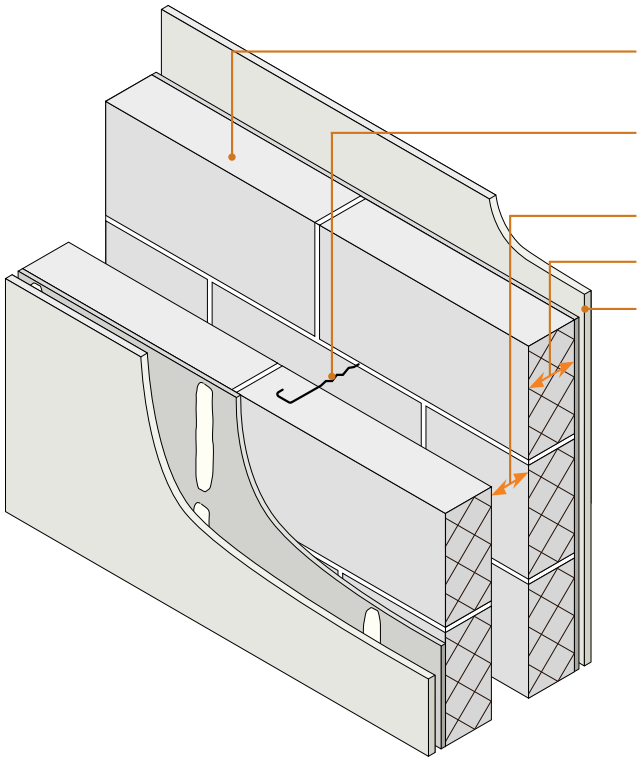
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3) or Besblock “Star Performer”? Are blocks laid with the cells open to the 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 E-WM-12

Plasmor “Aglite Ultima” lightweight aggregate blocks ■
Render and gypsum-based board on dabs ■



Block	Only Plasmor "Aglite Ultima" block density 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 on cement:sand render (nominal 8mm) with scratch finish Render mix must not be stronger than 1:1:6 and not stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

Note: When using this Robust Detail in flats/apartments, please refer to Tables 3a and 4 of the Introduction

Alternative internal render specification

Either:

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

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

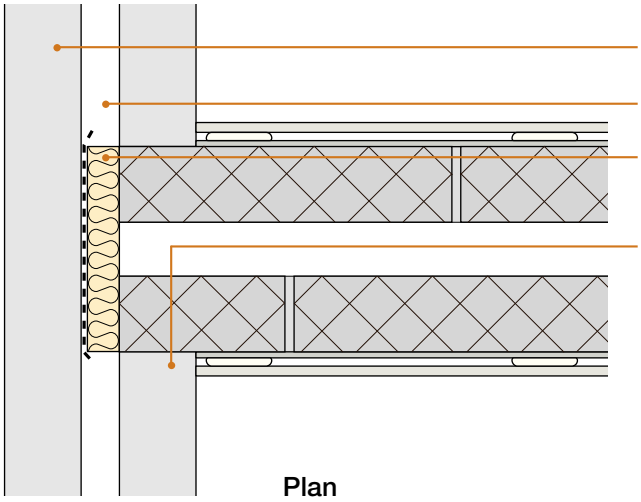
Separating wall cavity insulation (optional)

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

DO

- Keep cavity and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties and foundation
- Ensure that only Plasmor "Aglite Ultima" blocks are used in the construction of separating and flanking walls
- 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)
- Ensure flues are not integrated within the separating wall
- Refer to Appendix A

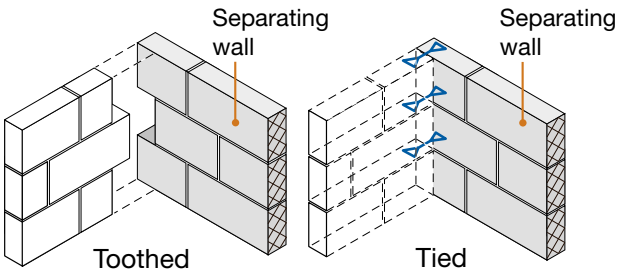
1. External (flanking) wall junction



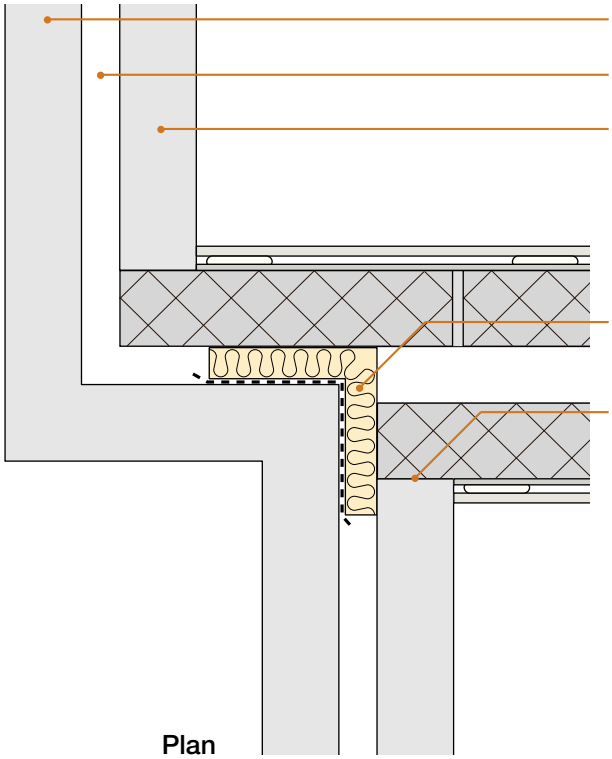
Plan

- Masonry outer leaf
- External wall cavity (min 50mm)
- Close cavity with a flexible cavity stop unless it is fully filled with built in mineral wool insulation
- Inner leaf:
  - 100mm (min) Plasmor "Aglite Ultima" 1050 kg/m³ block
  - internal finish 13mm plaster or nominal 8 kg/m² gypsum-based board

Tooth or tie walls together



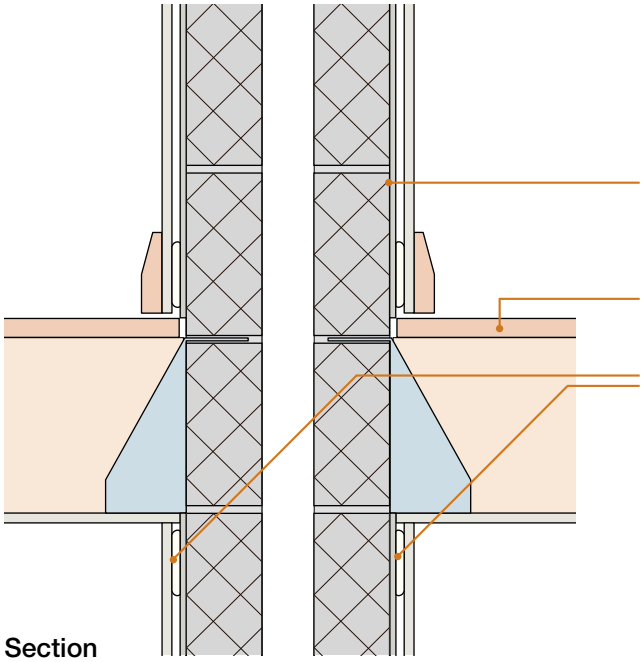
2. Staggered external (flanking) wall junction



Plan

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf:
  - 100mm (min) Plasmor "Aglite Ultima" 1050 kg/m³ block
  - internal finish 13mm plaster or nominal 8 kg/m² gypsum-based board
- Close cavity with a flexible cavity stop unless it is fully filled with built in mineral wool insulation
- Tooth or tie walls together

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



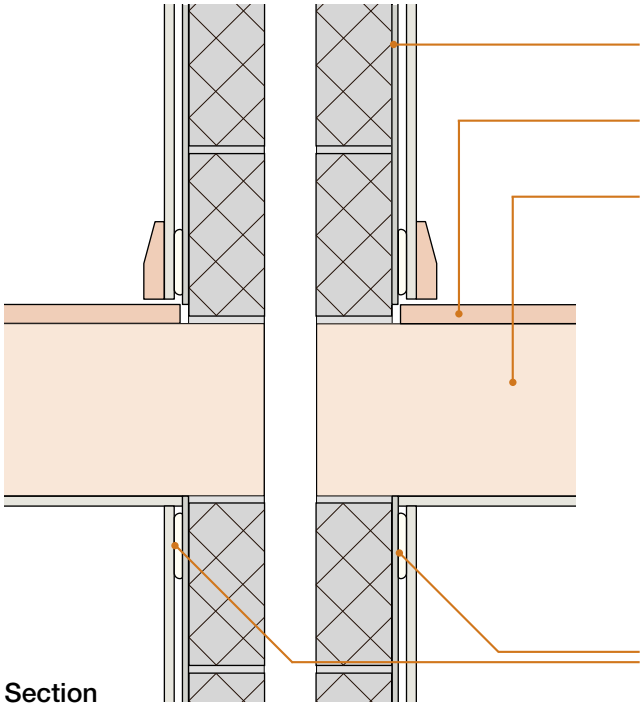
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

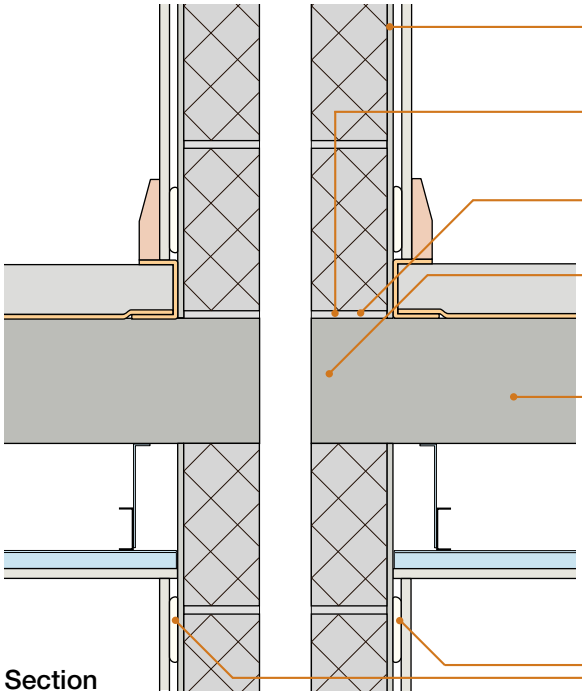
Floor construction:

- 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

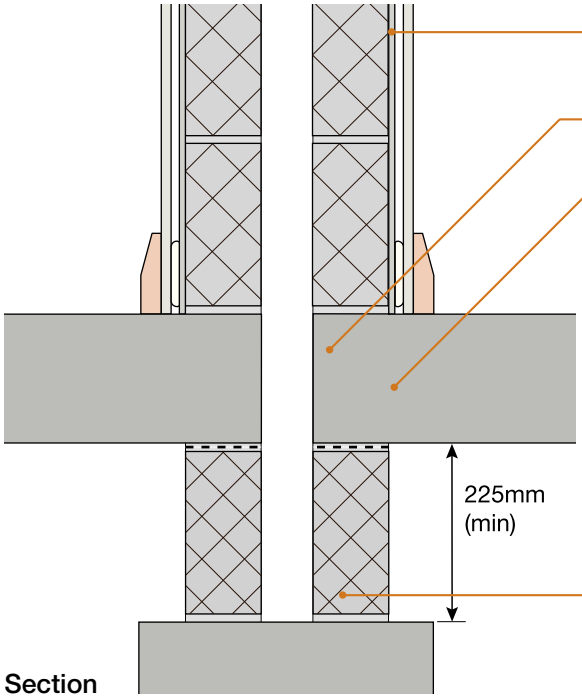


Section

Sketch shows E-FC-4 separating floor and CT0 type ceiling treatment

- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- Separating wall must not be continuous between storeys
- 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

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

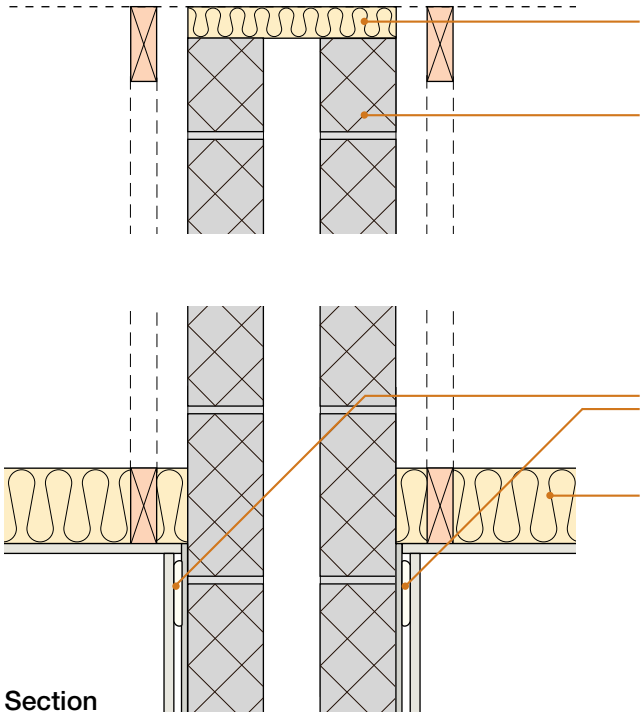


Section

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

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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.

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



Section

Junction between separating wall and roof filled with flexible closer

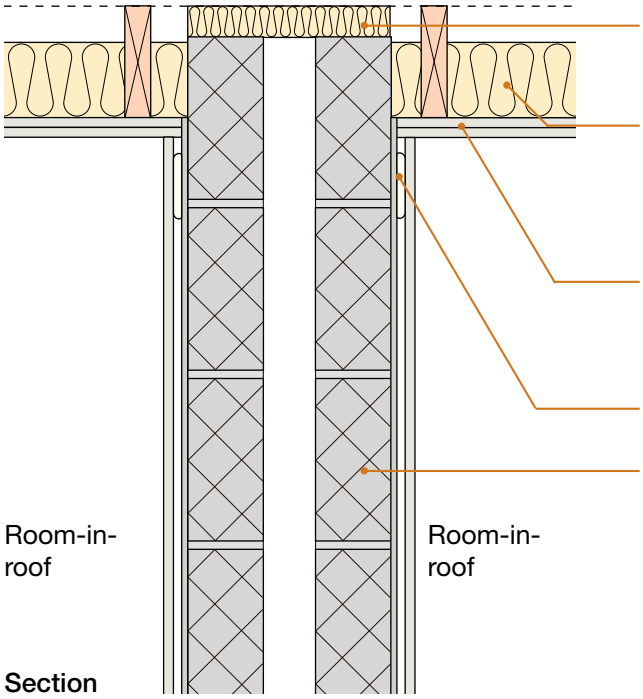
Cavity separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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



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 ribbon of adhesive

Cavity 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 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks Plasmor "Aglite Ultima" blocks?			
4.	Are external (flanking) wall blocks Plasmor "Aglite Ultima" blocks?			
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 correct flanking/isolation been provided to the perimeter of the floating floor/screed?			
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 assisstance from Plasmor, manufacturer of "Aglite Ultima" lightweight aggregate blocks:

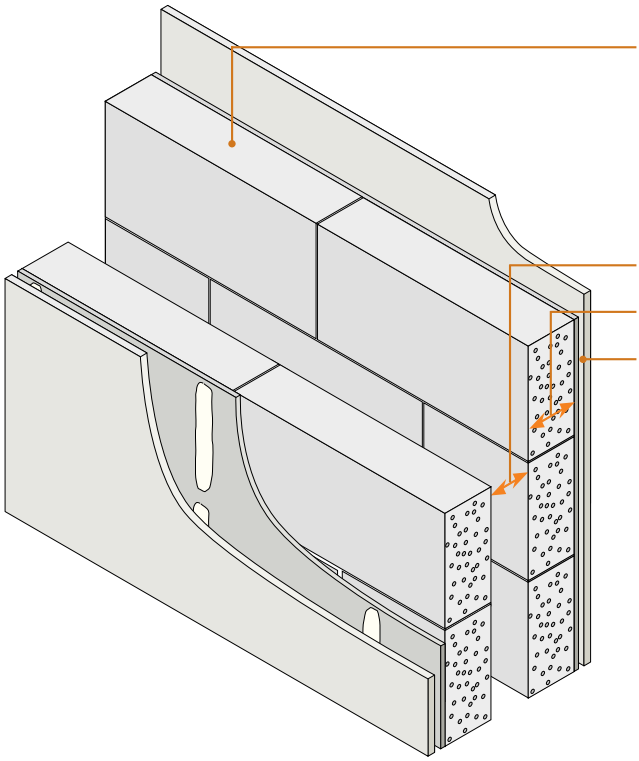
Telephone: 01977 673221 **Fax:** 01977 607071 **E-mail:** knott@plasmor.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry thin joint, untied E-WM-13

Aircrete thin joint - untied system ■
Render and gypsum-based board on dabs ■



Block density	600 to 800 kg/m^3
Wall ties	**No wall ties** are to be inserted in the separating wall.
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m^2) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish Render mix must not be stronger than 1:1:6 and not stronger than background (see Appendix A)
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

IMPORTANT

Should it be necessary to introduce wall ties into the cavity of the aircrete thin joint masonry separating wall please refer to E-WM-10.

Alternative internal render specification

British Gypsum Gyproc Soundcoat Plus (nominal 8mm, minimum 6mm) applied in accordance with the manufacturer's instructions, may be used instead of the cement:sand render mix.

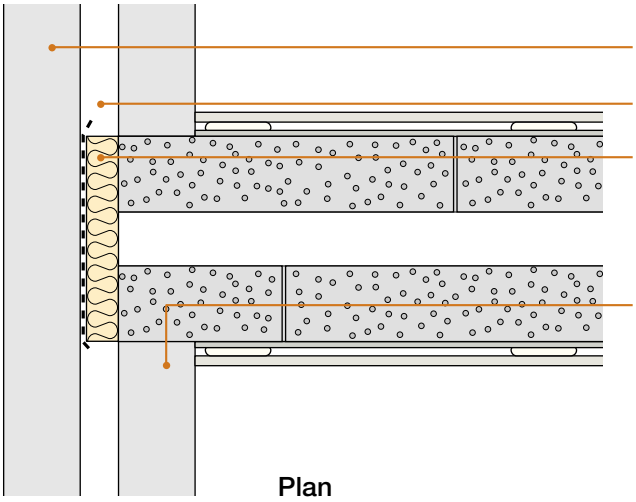
Cavity insulation (optional)

The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

DO

- Keep cavity (and insulation) free from mortar droppings and debris
- Fully fill all thin joints
- Make sure there is no connection between the two leaves except for foundations (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)
- Ensure flues are not integrated within the separating wall
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Refer to Appendix A

1. External (flanking) wall junction



Masonry outer leaf

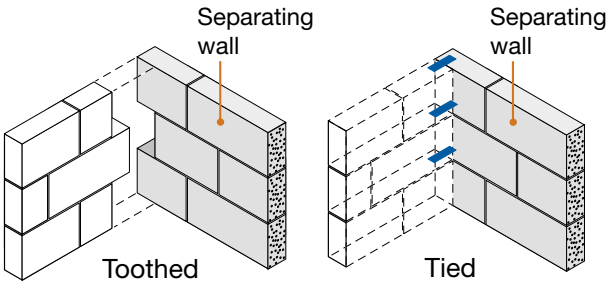
External wall cavity (min 50mm)

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

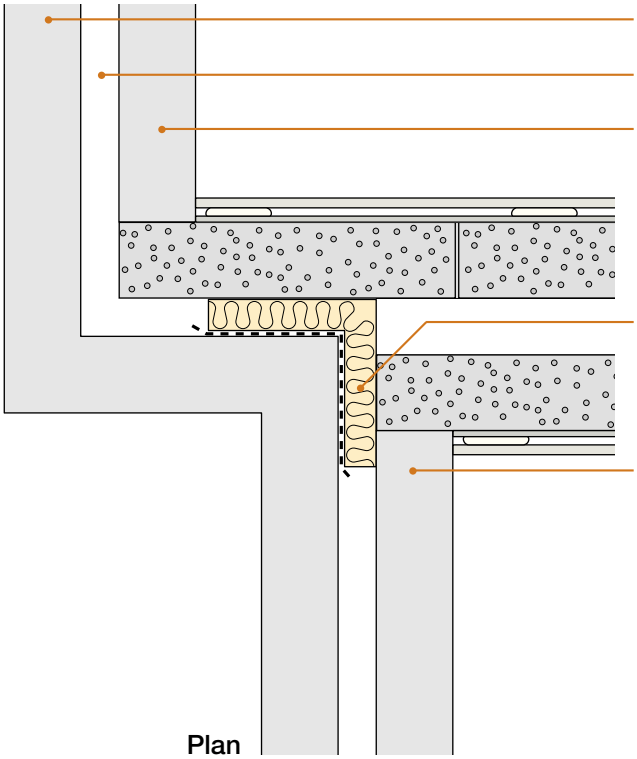
Inner leaf:

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

Tooth or tie walls together



2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

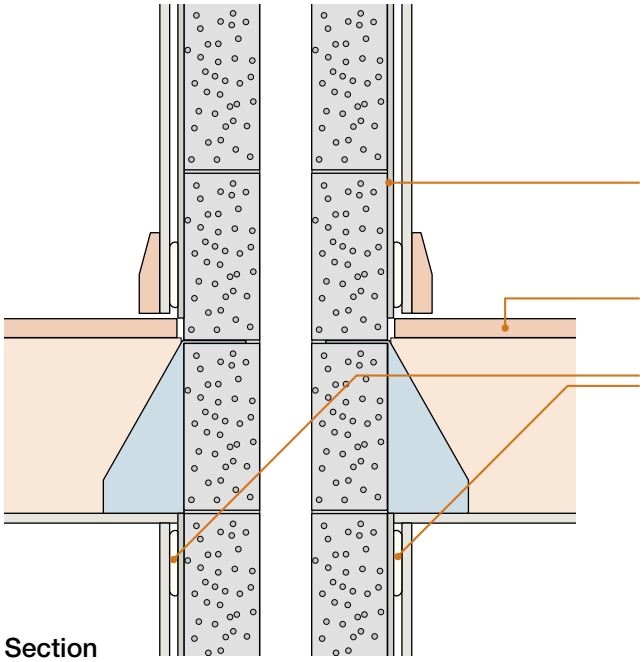
Inner leaf:

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

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

Tooth or tie walls together

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



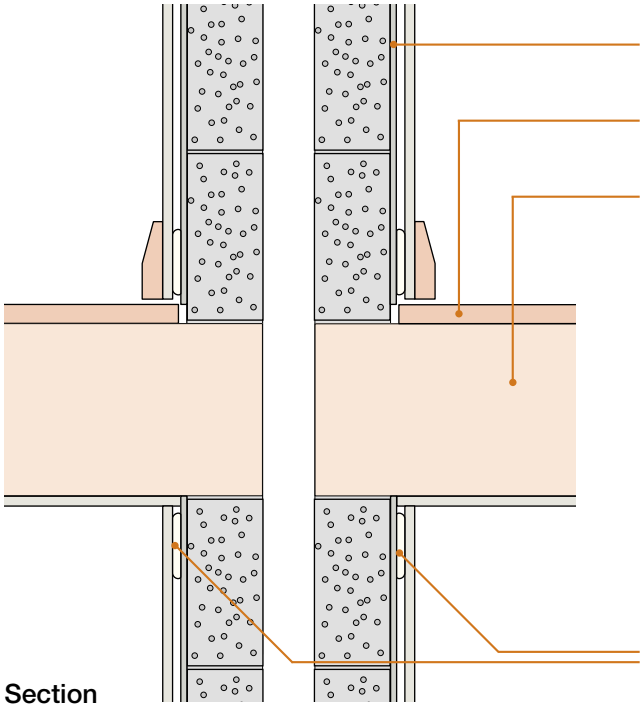
Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Section

Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

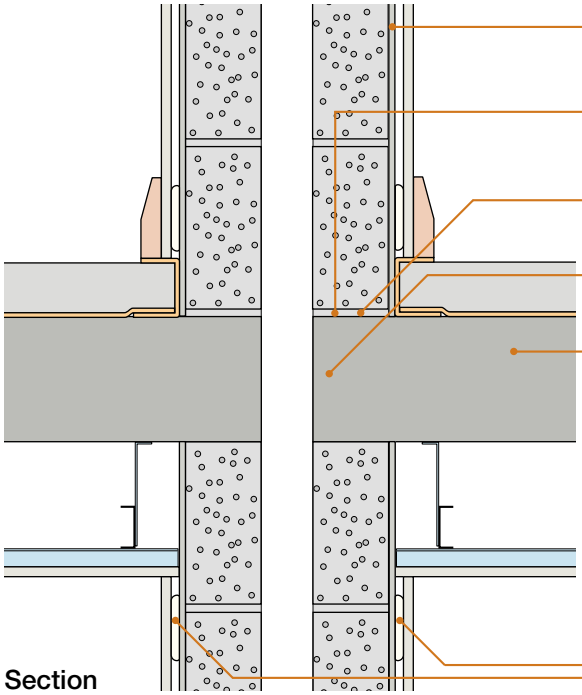
Floor construction:

- 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

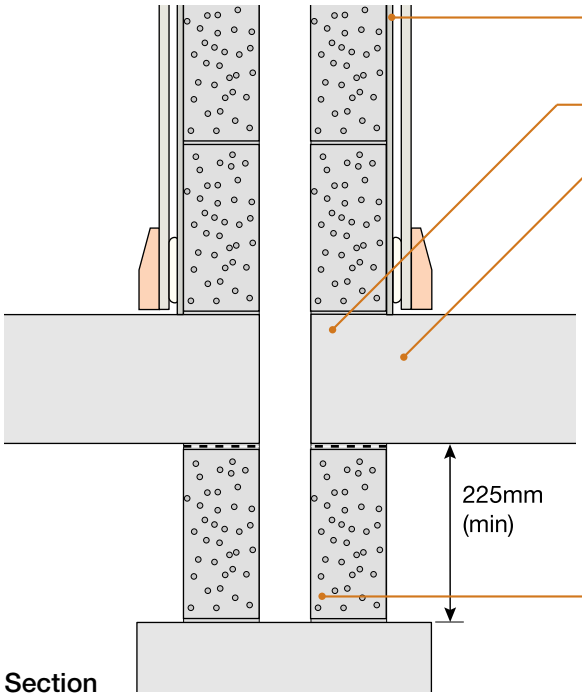


Section

Sketch shows E-FC-4 separating floor and CT0 type ceiling treatment

- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- Separating wall must not be continuous between storeys
- 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
  - at least one storey of the separating wall flanking the separating floor must be built in Aircrete of minimum density of 680kg/m³
  - if using floor requiring pre-completion testing, seek specialist advice
- Continuous horizontal ribbon of adhesive

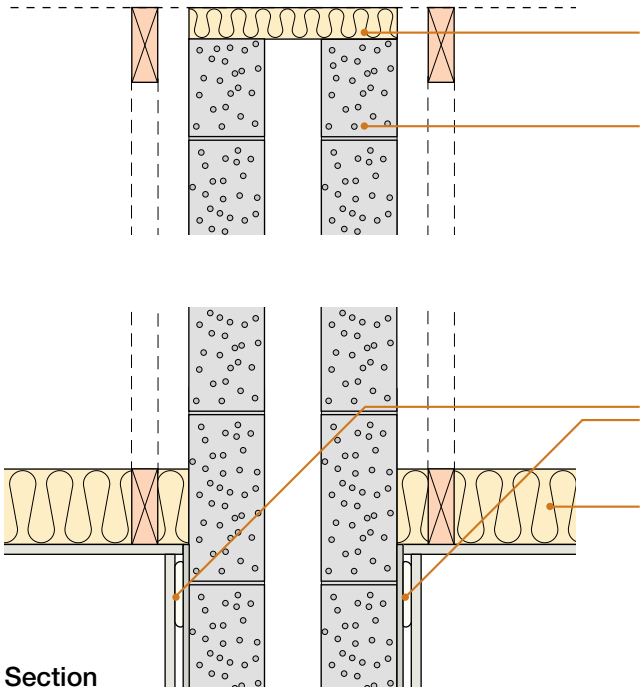
6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



Section

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- Ground floor not continuous between dwellings
- Ground floor construction:
  - timber joists built in with:
    - all voids around the joists filled with mortar
    - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
  - beam and block floor with all voids filled with mortar, or
  - concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
  - ground bearing slab
- Cavity separating wall continuous to foundation, cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable. Solid walls which support separating walls are only acceptable where each ground floor (not timber joists) is built into one side of the separating wall and breaks the vertical continuity of the wall and the minimum clear cavity indicated is maintained.

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



Section

Junction between separating wall and roof filled with flexible closer

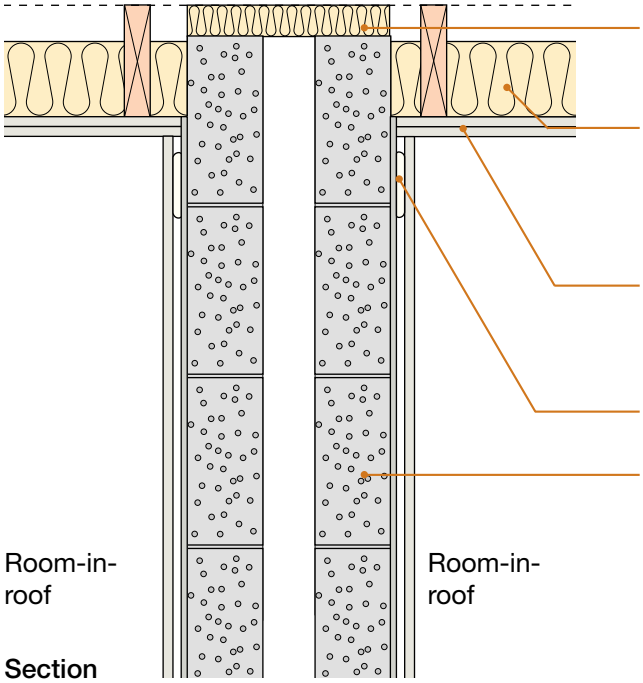
Aircrete cavity separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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



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 ribbon of adhesive

Aircrete cavity 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:

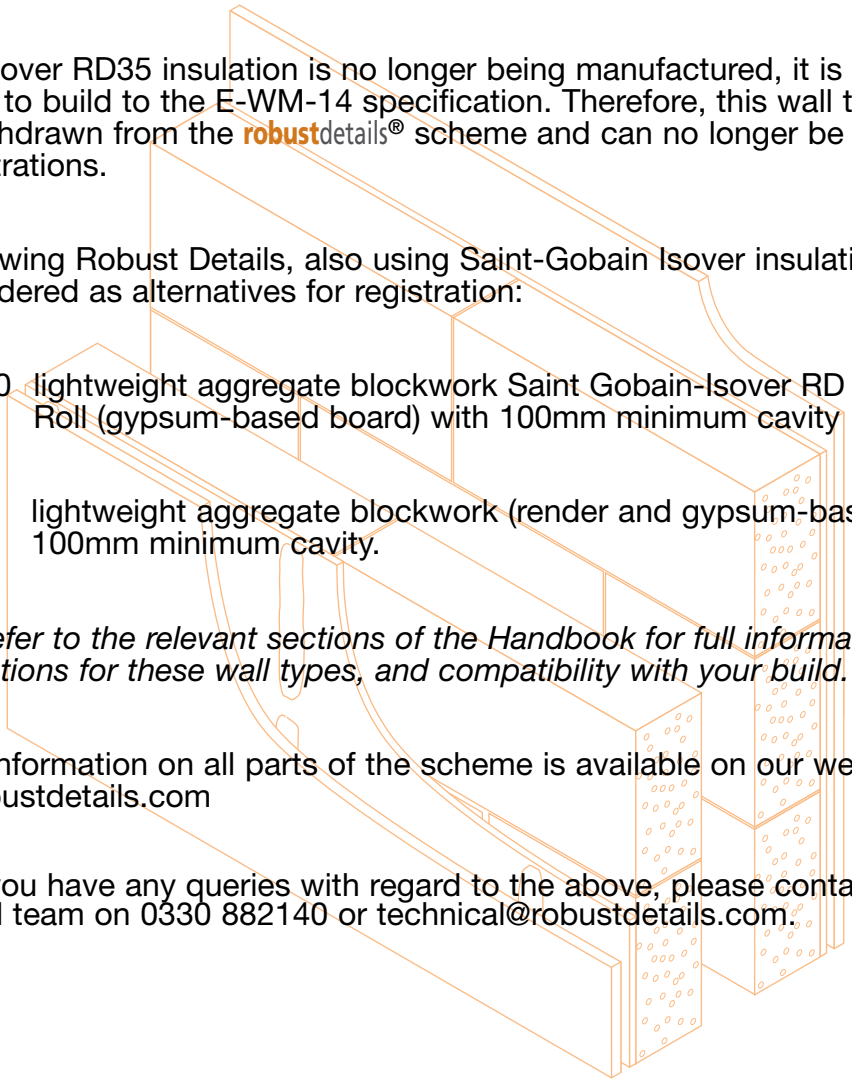
Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks thin joint compatible aircrete (600 to 800 kg/m^3)?			
4.	Is external (flanking) wall inner leaf aircrete thin joint block (450 to 800 kg/m^3)?			
5.	Is cavity free from droppings and debris?			
6.	Is the separating wall cavity completely free from wall ties throughout its full height?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled and sealed?			
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.	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 . . . . . .

Important information regarding current status of E-WM-14



As the Isover RD35 insulation is no longer being manufactured, it is not possible to build to the E-WM-14 specification. Therefore, this wall type has been withdrawn from the robustdetails® scheme and can no longer be selected for registrations.

The following Robust Details, also using Saint-Gobain Isover insulation, may be considered as alternatives for registration:

E-WM-20 lightweight aggregate blockwork Saint Gobain-Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity

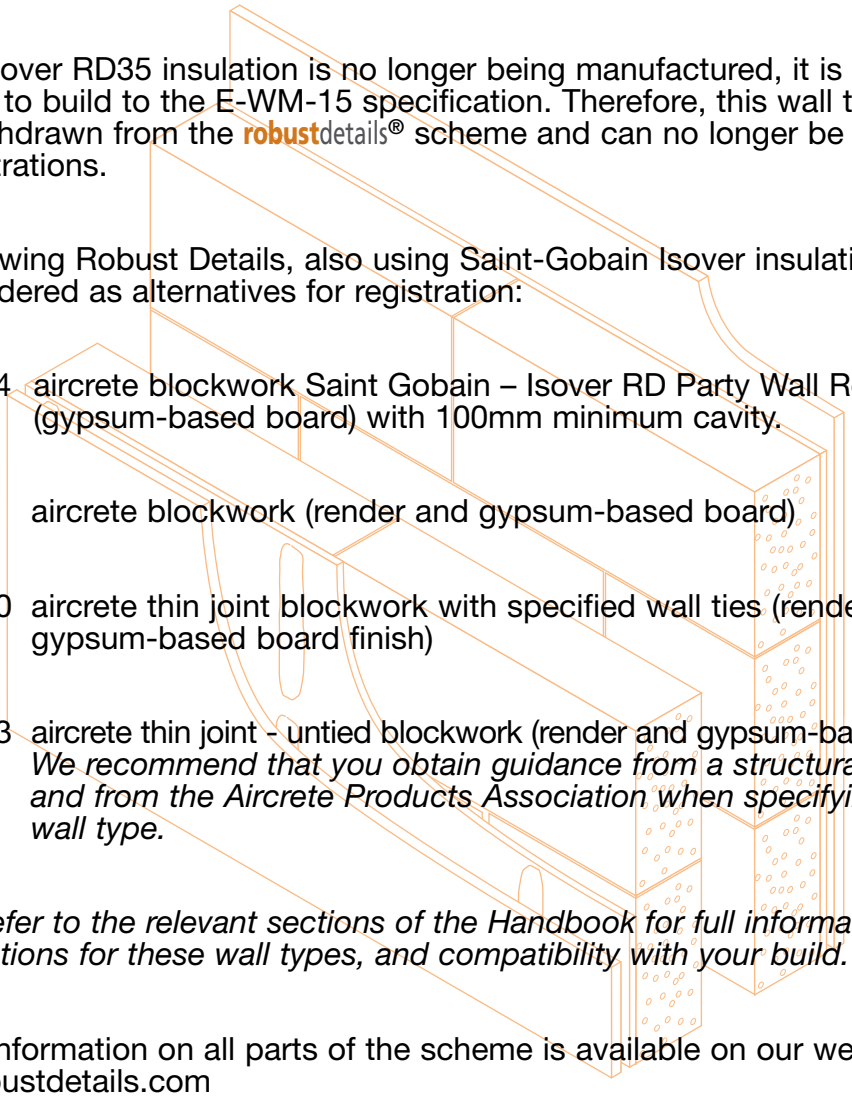
E-WM-4 lightweight aggregate blockwork (render and gypsum-based board) 100mm minimum cavity.

Please refer to the relevant sections of the Handbook for full information and specifications for these wall types, and compatibility with your build.

Further information on all parts of the scheme is available on our website www.robustdetails.com

Should you have any queries with regard to the above, please contact RDL's technical team on 0330 882140 or technical@robustdetails.com.

Important information regarding current status of E-WM-15



As the Isover RD35 insulation is no longer being manufactured, it is not possible to build to the E-WM-15 specification. Therefore, this wall type has been withdrawn from the robustdetails® scheme and can no longer be selected for registrations.

The following Robust Details, also using Saint-Gobain Isover insulation, may be considered as alternatives for registration:

E-WM-24 aircrete blockwork Saint Gobain – Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity.

E-WM-6 aircrete blockwork (render and gypsum-based board)

E-WM-10 aircrete thin joint blockwork with specified wall ties (render and gypsum-based board finish)

E-WM-13 aircrete thin joint - untied blockwork (render and gypsum-based board) *We recommend that you obtain guidance from a structural engineer and from the Aircrete Products Association when specifying this wall type.*

Please refer to the relevant sections of the Handbook for full information and specifications for these wall types, and compatibility with your build.

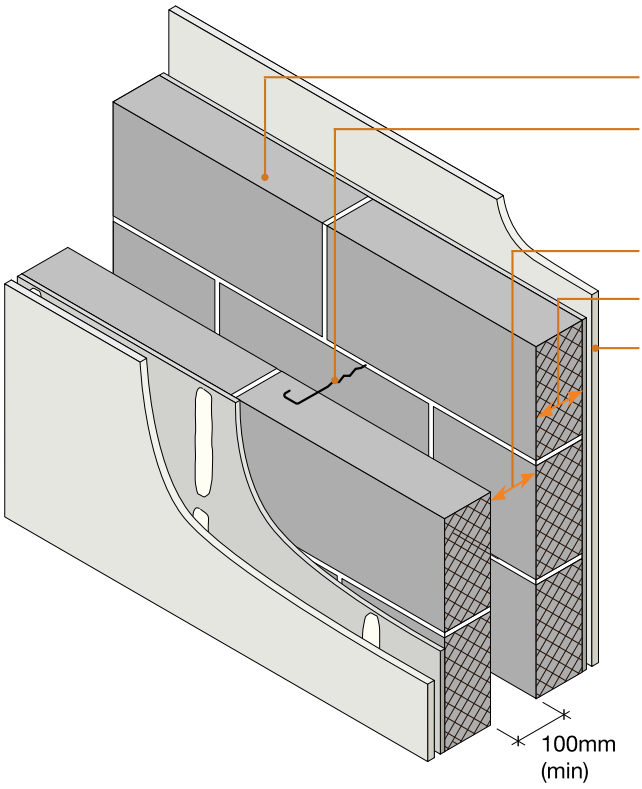
Further information on all parts of the scheme is available on our website www.robustdetails.com

Should you have any queries with regard to the above, please contact RDL's technical team on 0330 882140 or technical@robustdetails.com.

Separating Wall – Cavity Masonry

E-WM-16

Dense aggregate blocks ■
Render and gypsum-based board on dabs ■



Block density	1850 to 2300 kg/m^3
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 9.8 kg/m^2) mounted on dabs on cement:sand render (nominal 8mm) with scratch finish Typical render mix 1:1:6 to 1:$^1/_2$: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.

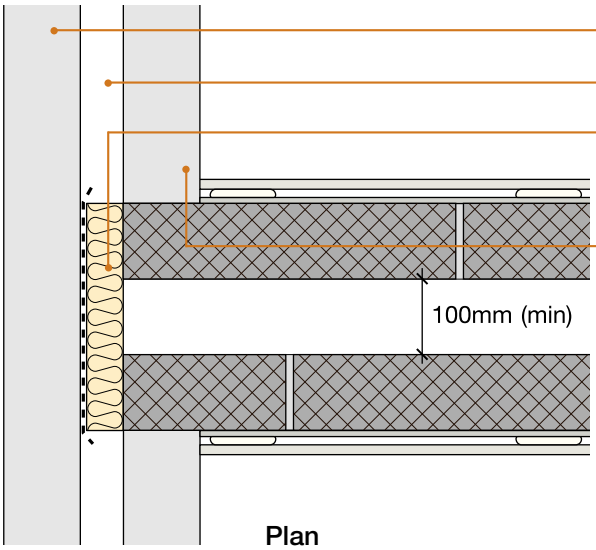
Separating wall cavity insulation (optional)

The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

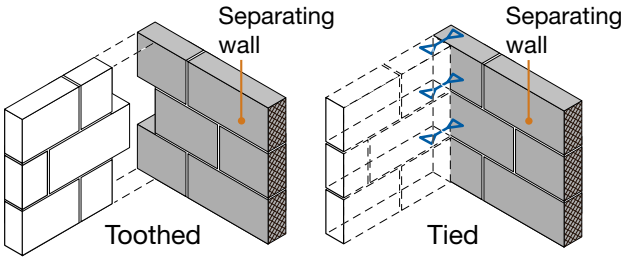
DO

- 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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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 (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 where there is no separating floor e.g. for houses

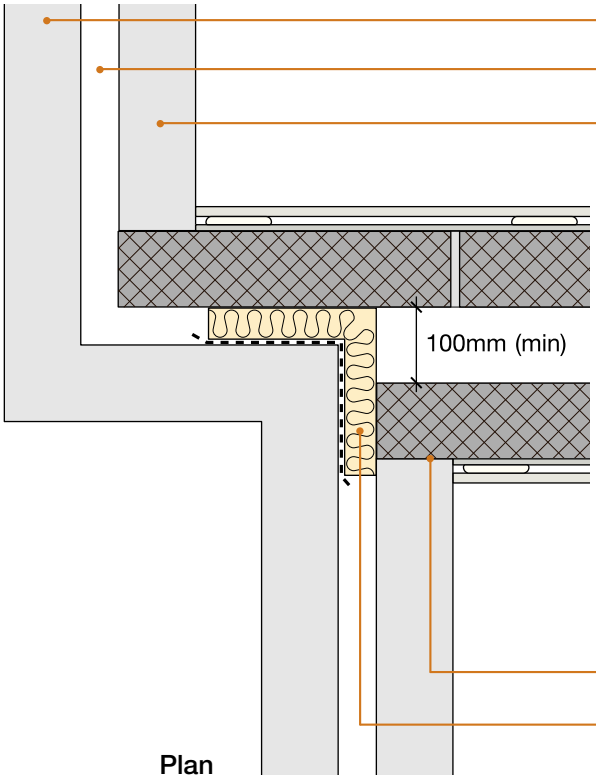
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

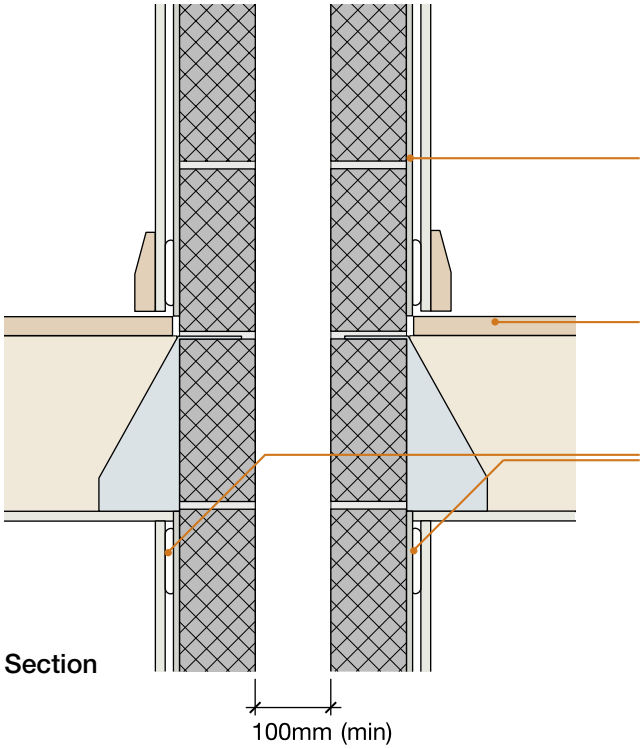
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

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

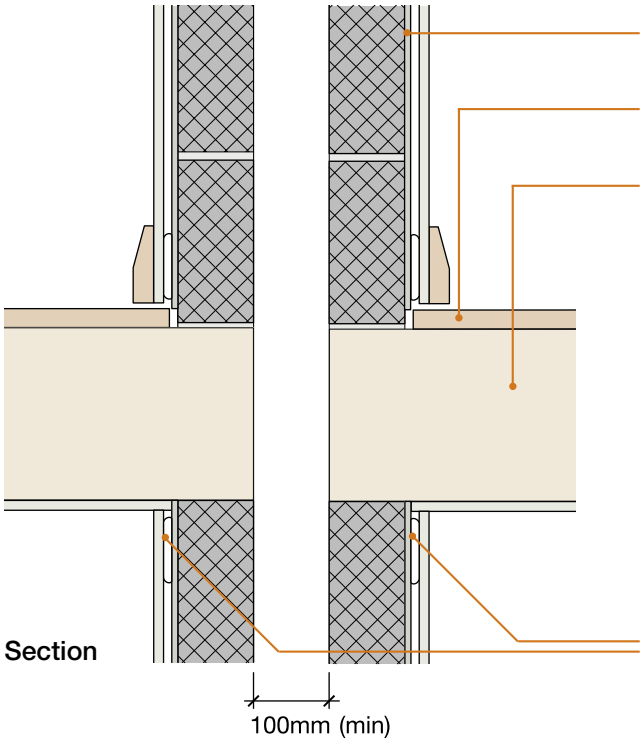


Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

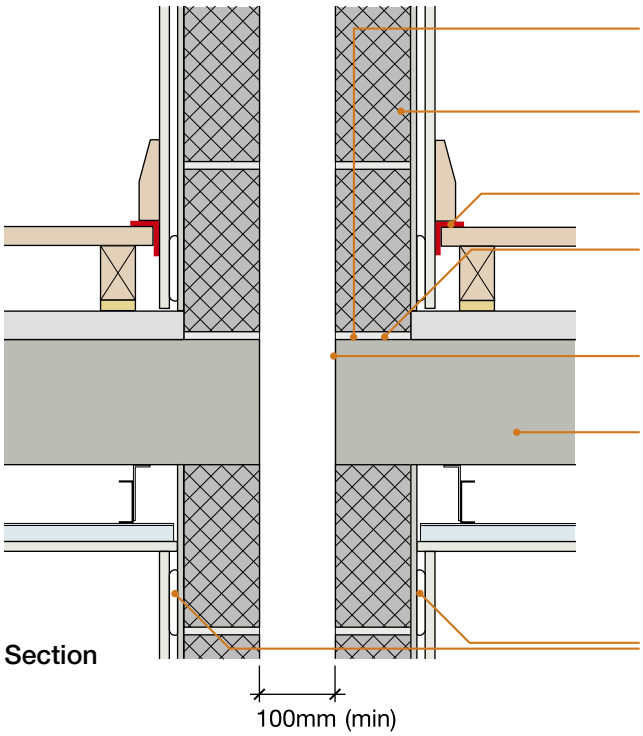
Floor construction:

- 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

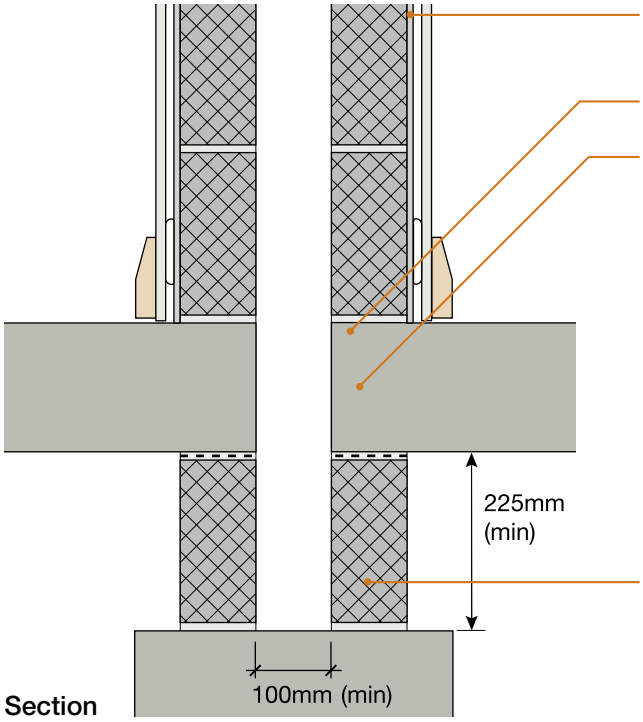


Section

- Separating wall must not be continuous between storeys
- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- 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 concrete suspended slab or ground bearing slab

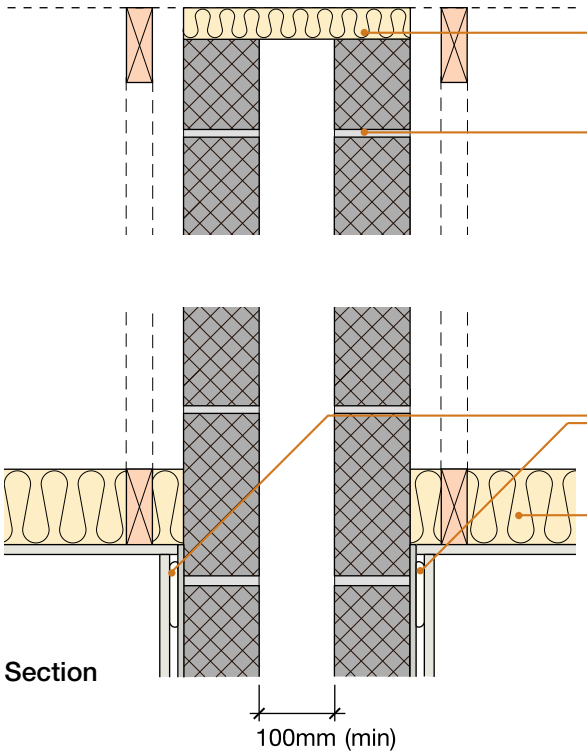


Section

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- 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

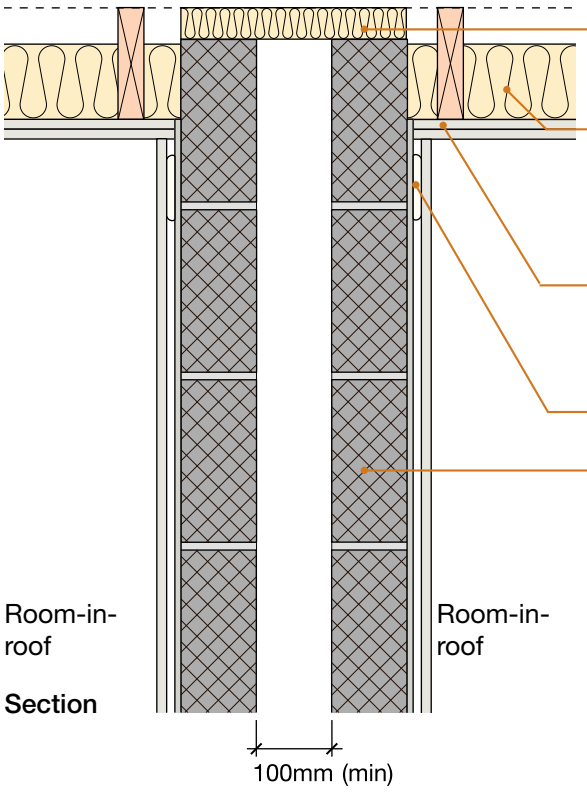
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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/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)

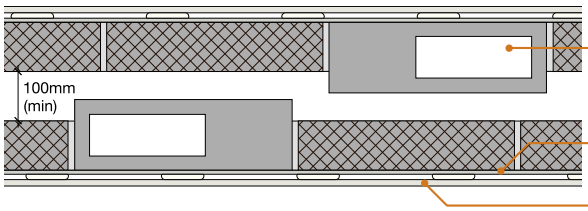
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters

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

9. Flue blocks built into separating wall

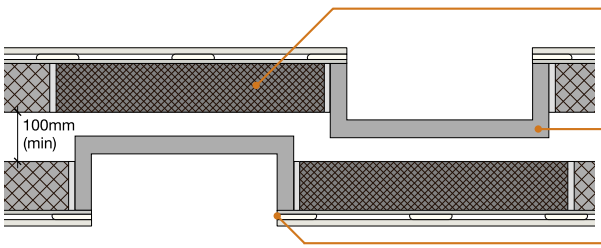


Plan

Flue block (stagger flues in accordance with the manufacturer's instructions)

Nominal 8mm render

Gypsum-based board (nominal 9.8 kg/m^2) on dabs



Plan

High density block (minimum 2270 kg/m^3) behind starter blocks from ground level up to at least where gather blocks start

Starter block (stagger in accordance with the manufacturer's instructions)

Continuous plaster fillet around fire opening

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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 dense aggregate (1850 to 2300 kg/m^3)?			
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?			

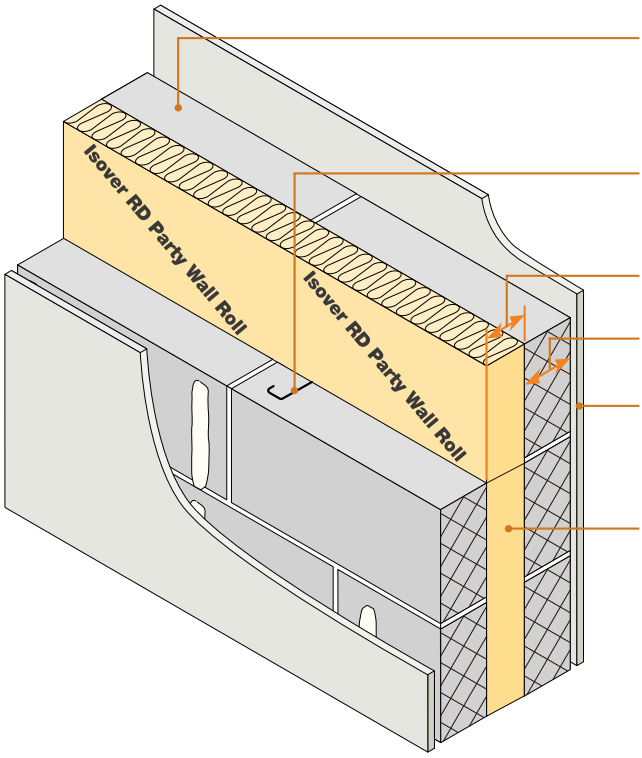
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

E-WM-17

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

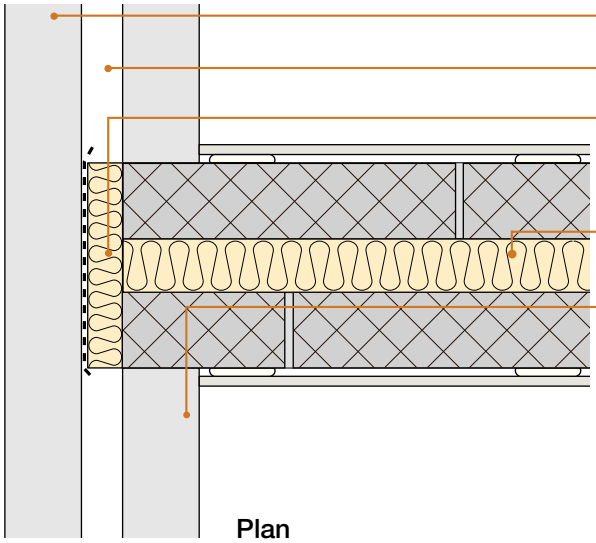
Hollow or Cellular Blocks - only for E-WM-17 100mm (min) cavity walls

The Besblock 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.

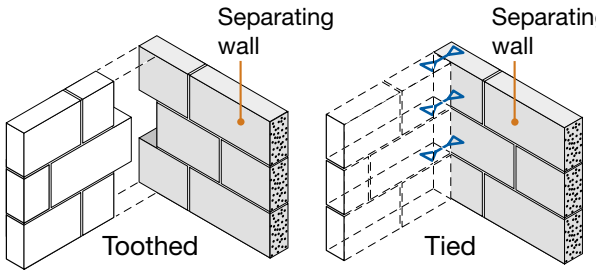
Ensure Star Performer blocks are laid with the cells open to the lower mortar bed only.

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)

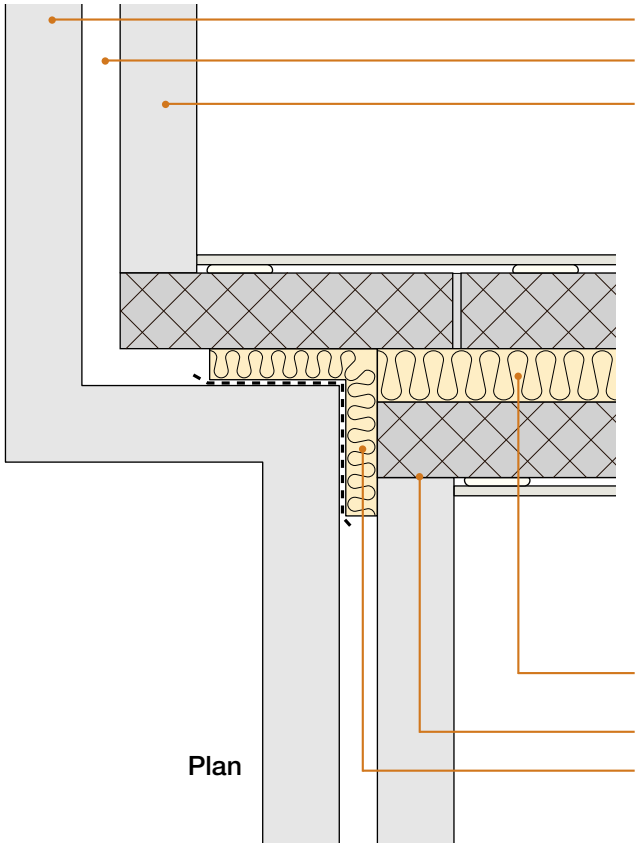
Inner leaf where there is no separating floor e.g. for houses

- 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 Besblock "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 Besblock "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 Besblock "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

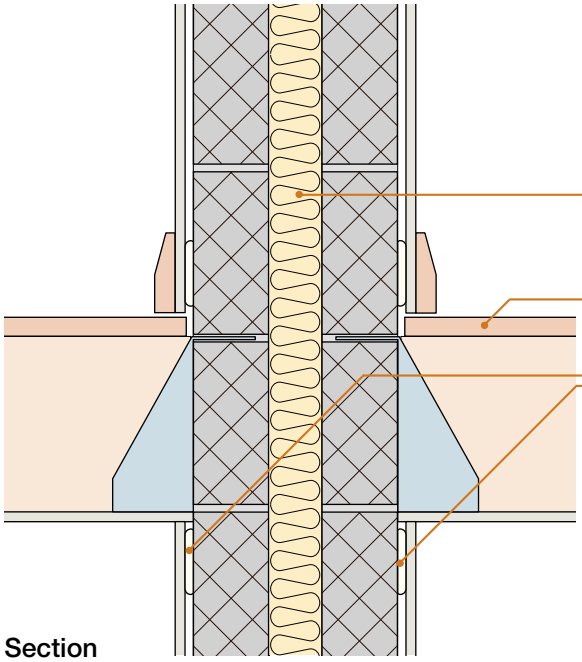
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction or use Plasmor Aglite Ultima or Besblock "Star Performer"
- if using floor requiring 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)

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



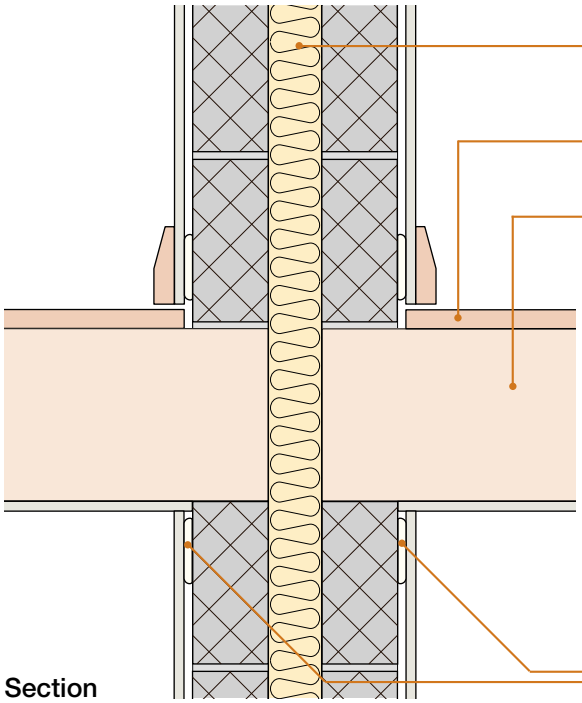
Isover RD Party Wall Roll (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Continuous horizontal ribbon of adhesive

Section

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



Isover RD 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:

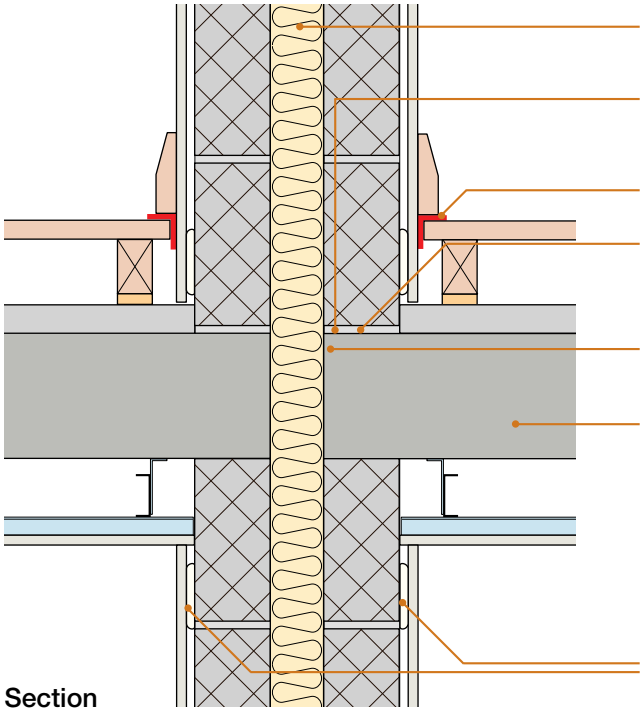
- timber joists built in with:
  - all voids around the joists filled with mortar
  - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
- beam and block floor with all voids filled with mortar, or
- concrete planks with all voids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

Continuous horizontal ribbon of adhesive

Section

Sketch shows timber joists built in

5. Separating floor junction

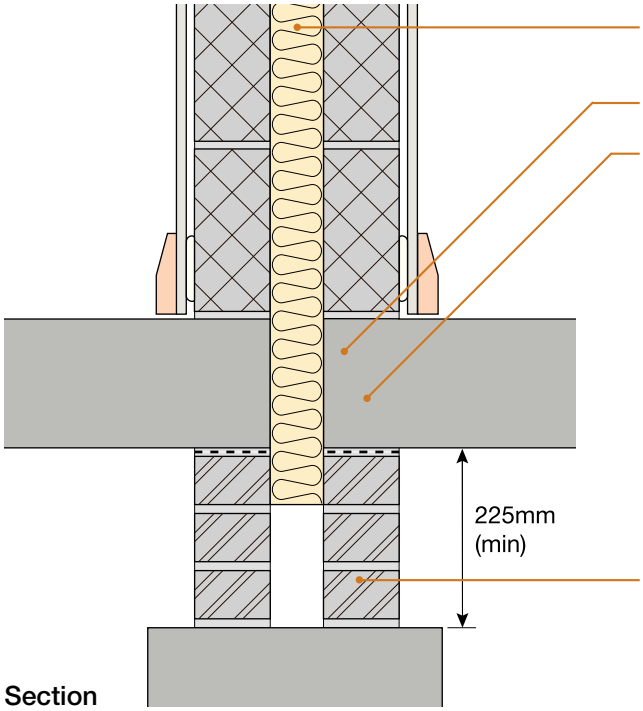


Section

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

- Isover RD 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

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

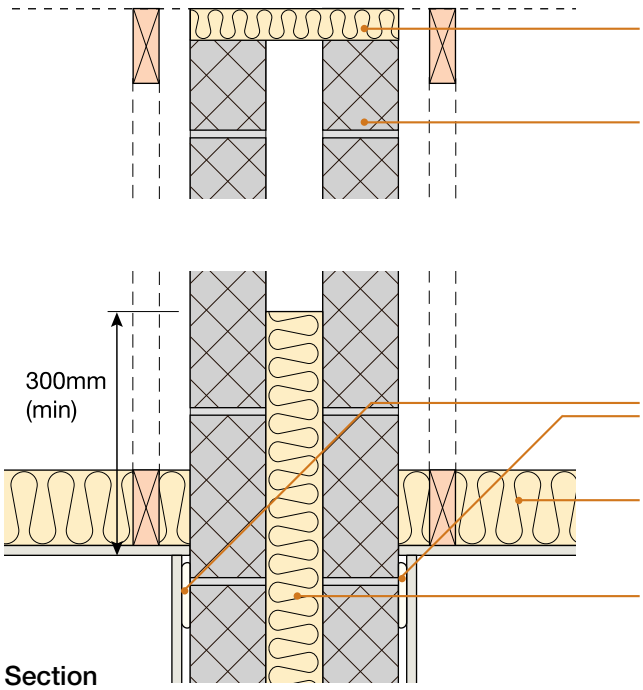


Section

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

- Isover RD 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.

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

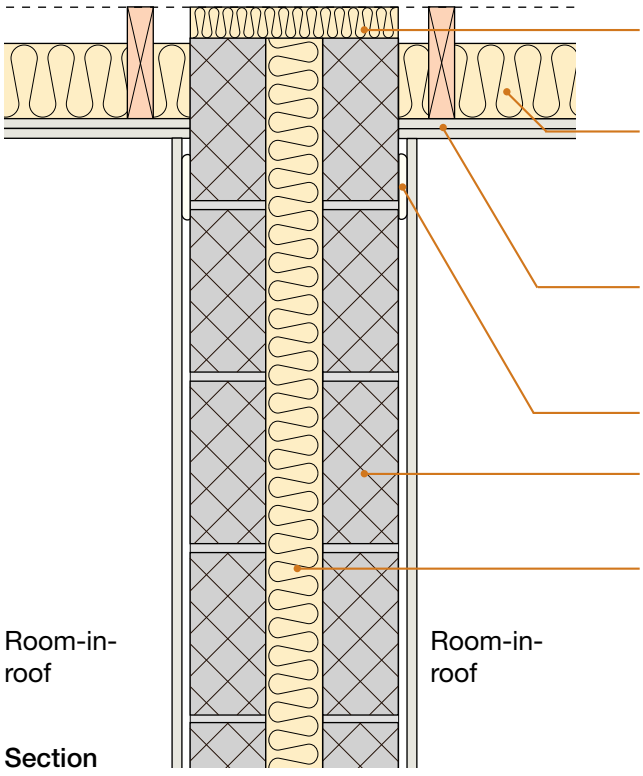
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

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 Besblock "Star Performer", is wall cavity 100mm (min), and 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:

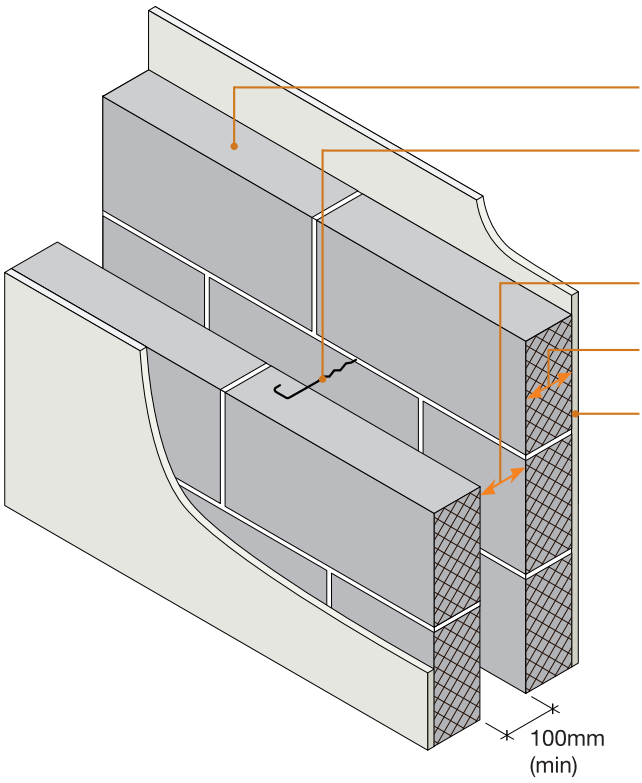
Telephone: 01159 451143 **Fax:** 0844 5618816 **E-mail:** isover.enquiries@saint-gobain.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-18

Dense aggregate blocks ■
Wet plaster ■



Block density	1850 to 2300 kg/m^3
Wall ties	Approved Document E "Tie type A" (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	13mm plaster or cement: sand render with plaster skim (min 10 kg/m^2), both sides
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

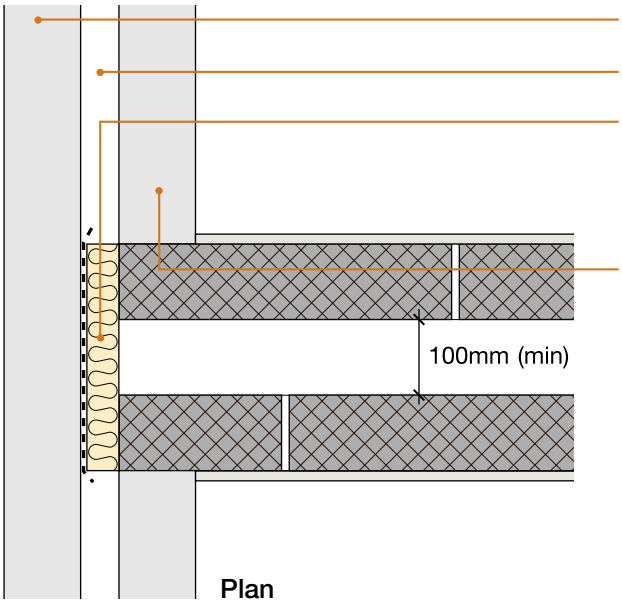
Separating wall cavity insulation (optional)

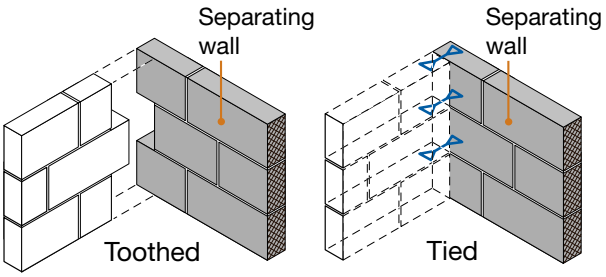
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3 or "**energystore superbead**" insulation.

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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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
- Select an alternative Robust Detail if flues are required in the separating wall
- 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

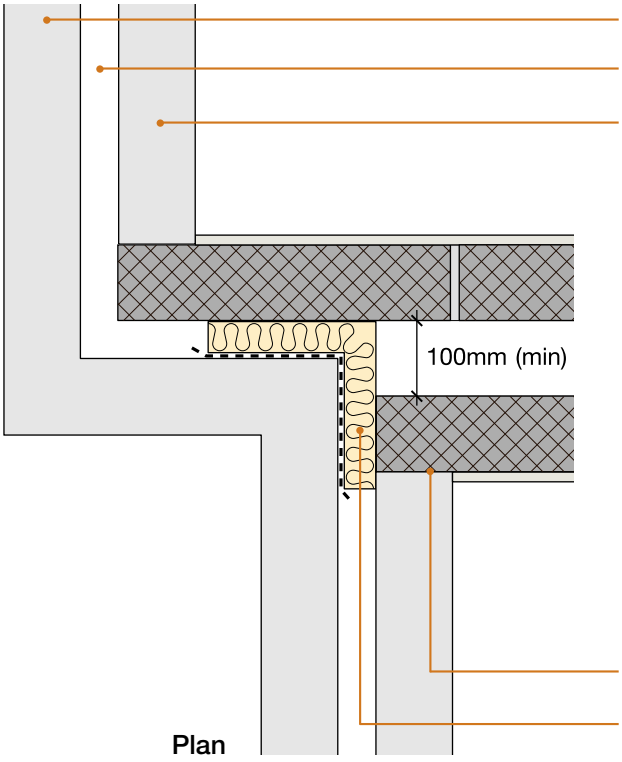
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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, 1850 kg/m³ to 2300 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

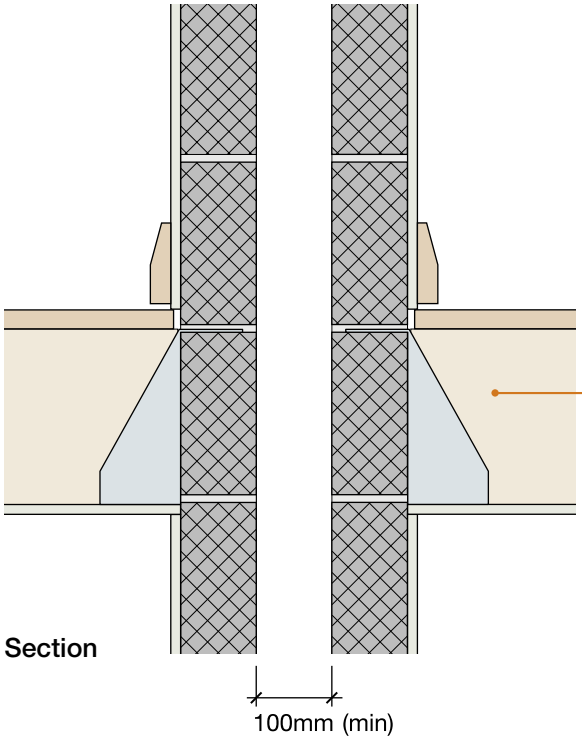
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

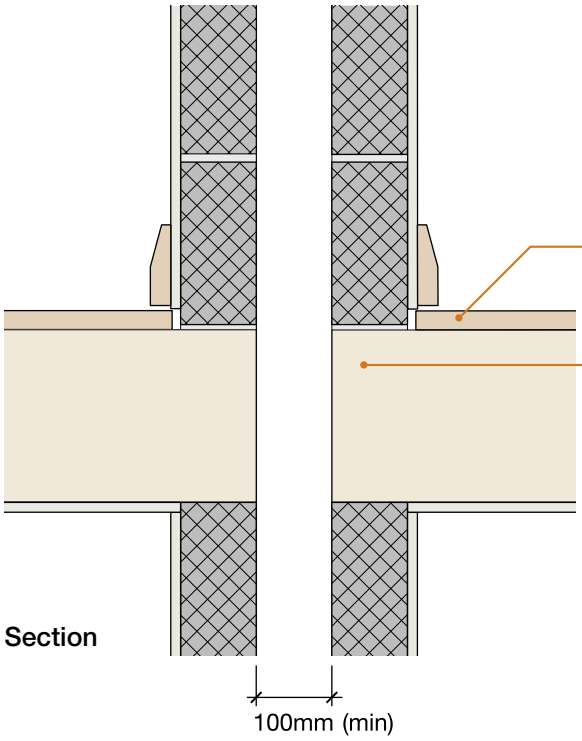
Tooth or tie walls together

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

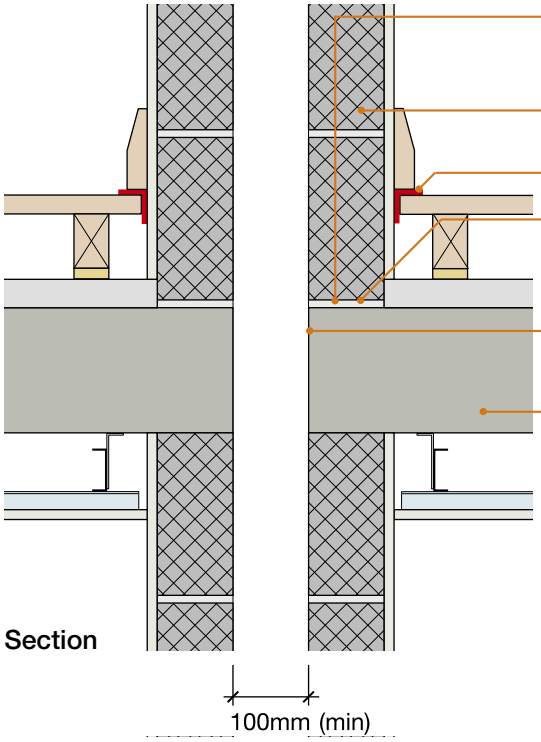


Floor construction:

- 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

Sketch shows timber joists built in

5. Separating floor junction



Section

Separating wall must not be continuous between storeys

Plaster complete wall surface

5mm (min) resilient flanking strip

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

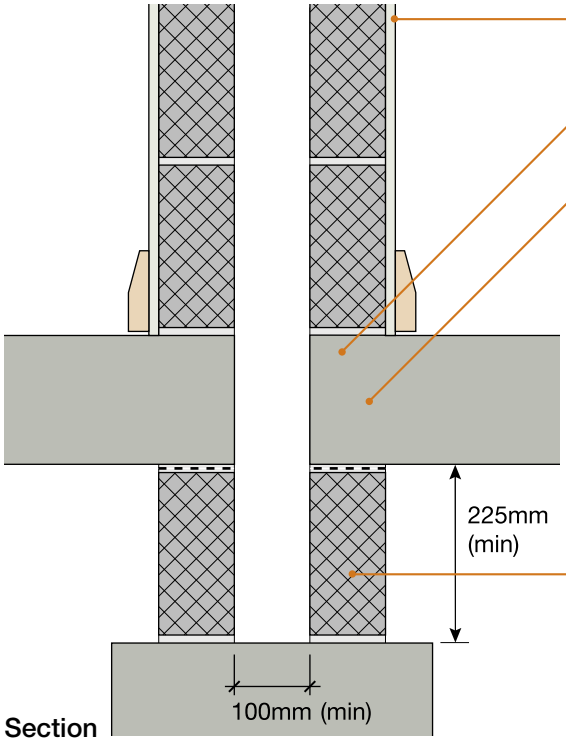
Separating floor must not be continuous between dwellings

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

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 concrete slab or ground bearing slab



Section

Plaster complete wall surface down to finished floor level

Ground floor not continuous between dwellings

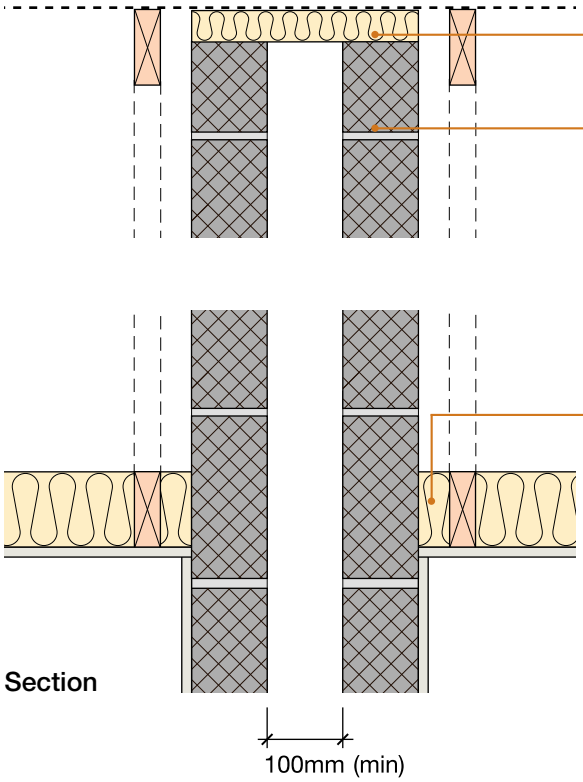
Ground floor construction:

- 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



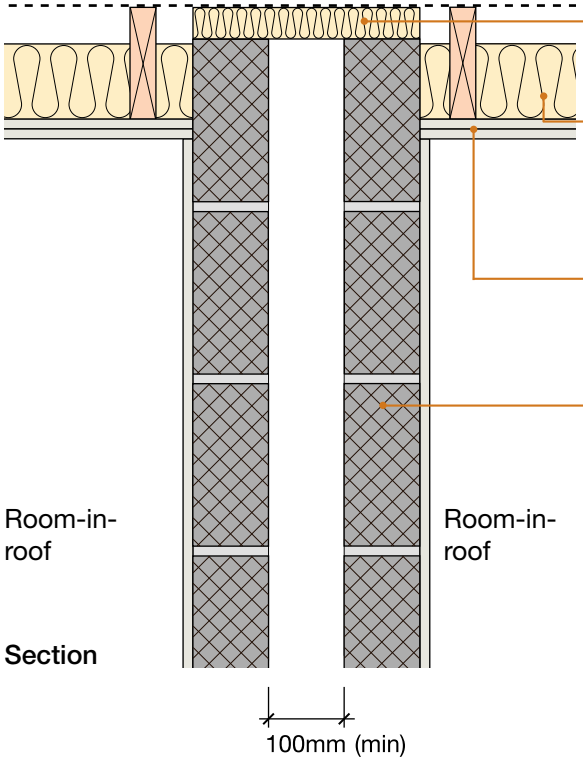
Junction between separating wall and roof filled with flexible closer

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

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

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:

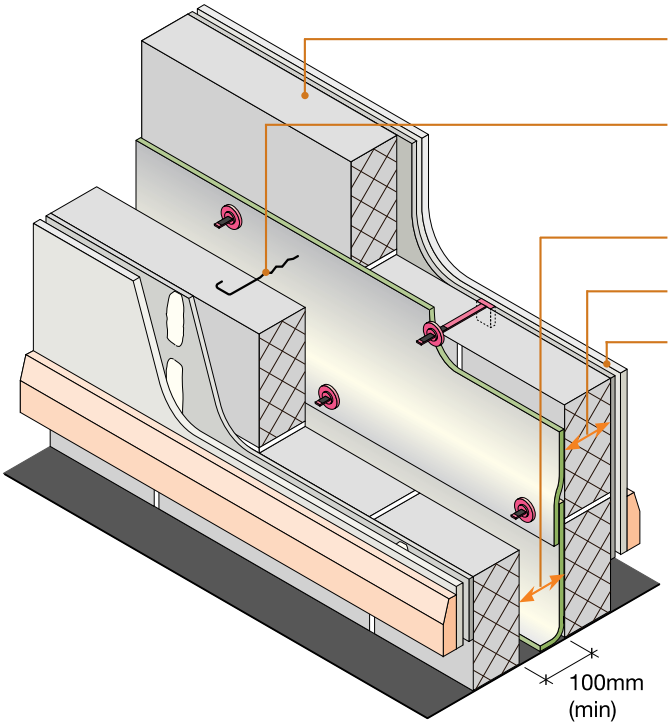
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks dense aggregate (1850 to 2300 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties 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.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
10.	Is separating wall satisfactorily complete?			

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 Besblock 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.

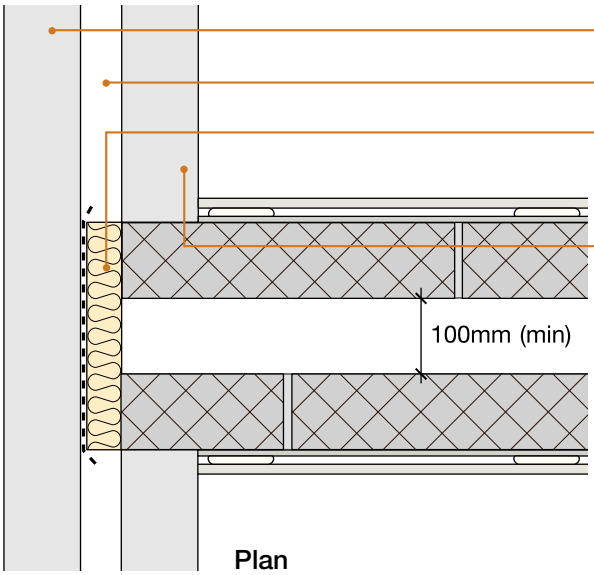
Separating wall cavity insulation (optional)

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

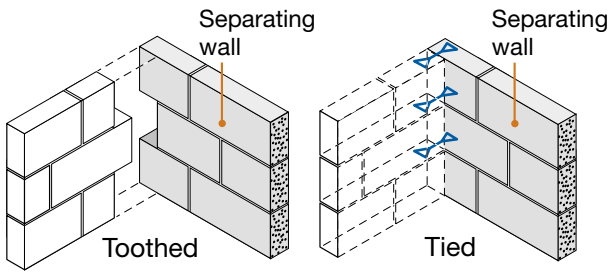
External wall cavity (min 50mm)

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

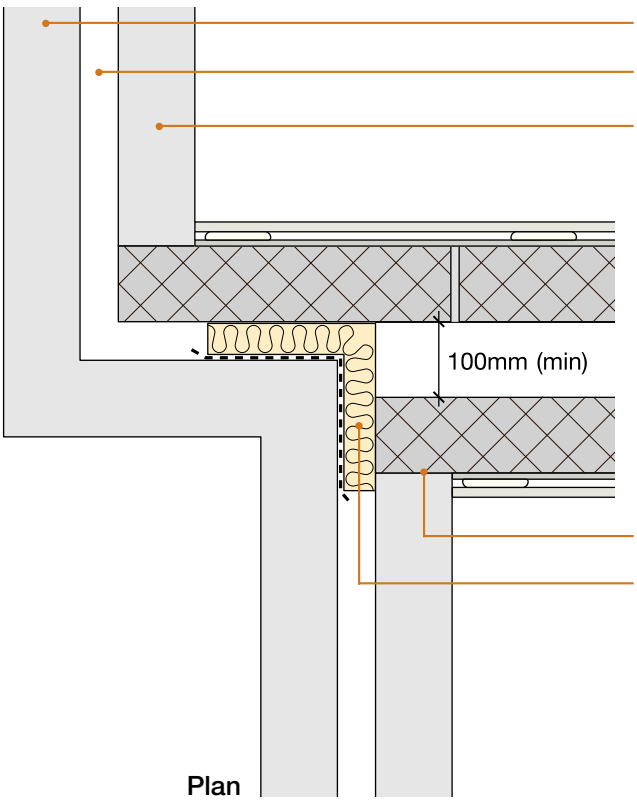
Inner leaf

- 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 Besblock "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)

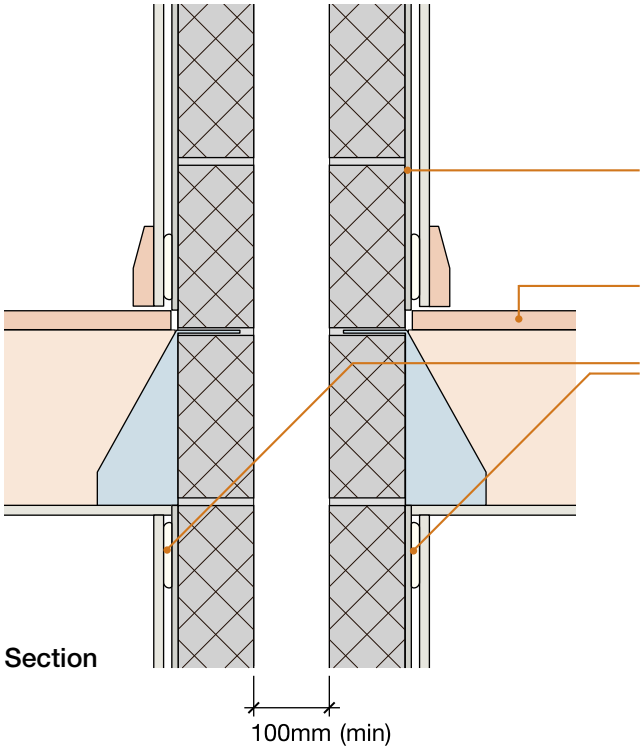
Inner leaf

- 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 Besblock "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)

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

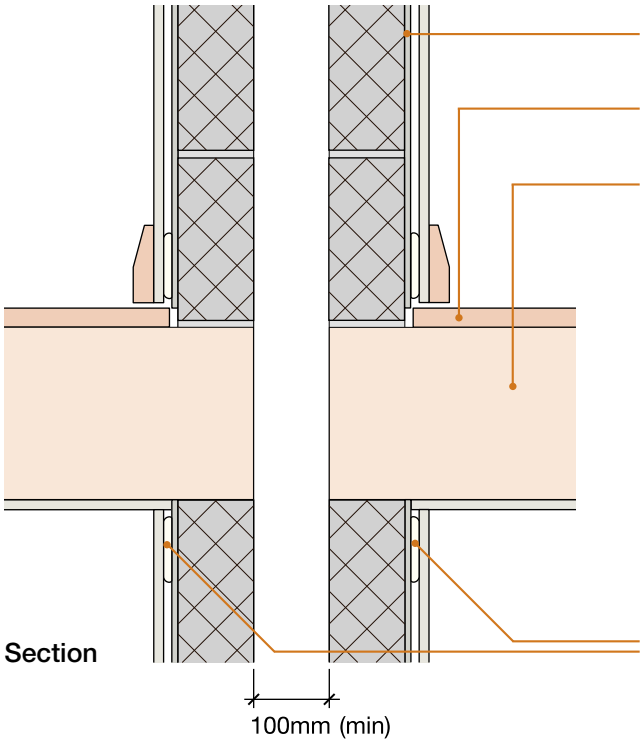


Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

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



Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

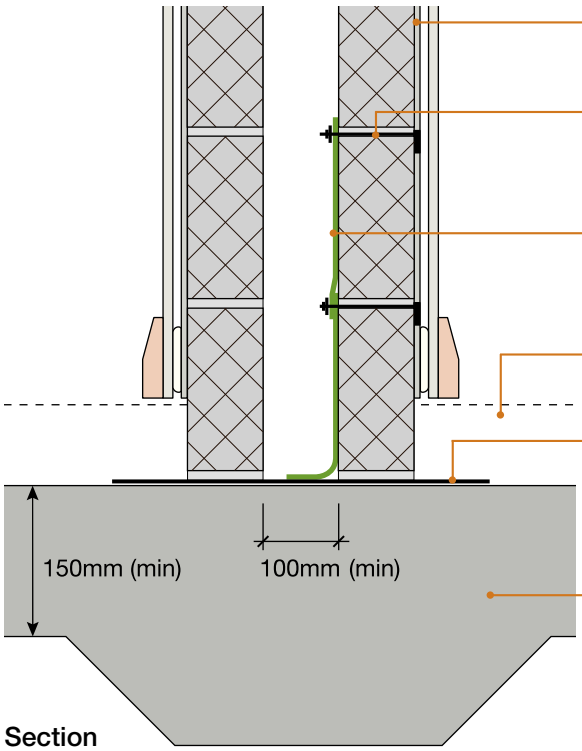
Floor construction:

- 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

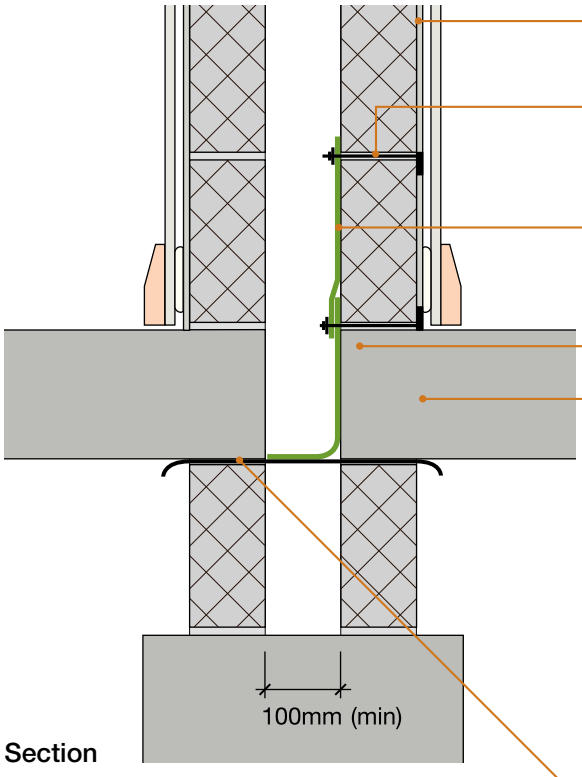
5. Ground floor junction: insulated raft foundation



Section

- Complete wall surface rendered (except in the floor joist/beam zone where it may be omitted)
- MONARFLOOR® BRIDGESTOP® Tie to penetrate at max 450mm centres. Ties are reversible. May also be used as render depth marker.
- MONARFLOOR® BRIDGESTOP® Quilt in two lifts to prevent mortar droppings touching both masonry leaves.
- Insulated screed or floating floor treatment (see Appendix A2 for details)
- 500mm wide MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane laid under the party wall over the dpm. This is an integral part of the system.
- Insitu concrete 365kg/m² (min) mass per unit area.

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

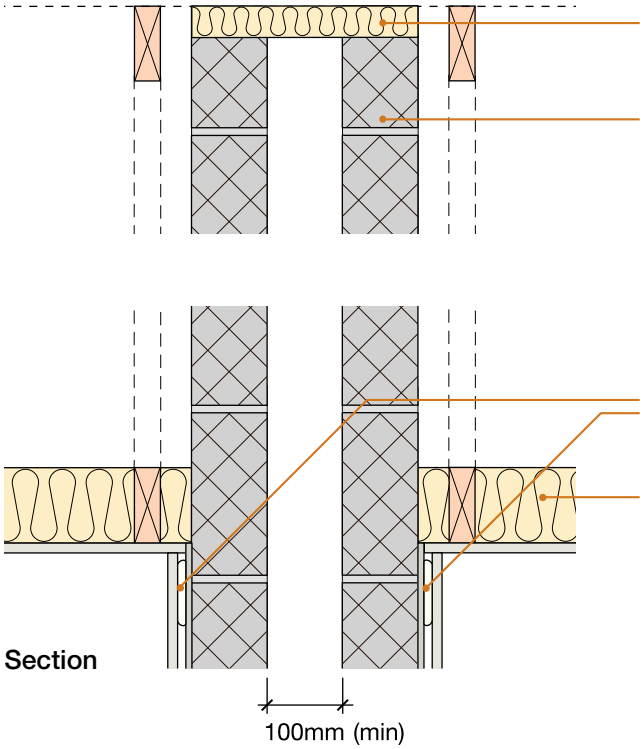


Section

- Complete wall face rendered (except in the floor joist/beam zone where it may be omitted)
- MONARFLOOR® BRIDGESTOP® Tie to penetrate at max 450mm centres. Ties are reversible. May also be used as render depth marker.
- MONARFLOOR® BRIDGESTOP® Quilt in two lifts to prevent mortar droppings touching both masonry leaves.
- 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
- 500mm wide MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane laid under the party wall over the dpm. This is an integral part of the system.

BRIDGESTOP® system can be positioned on top of floor structure.

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



Junction between separating wall and roof filled with flexible closer

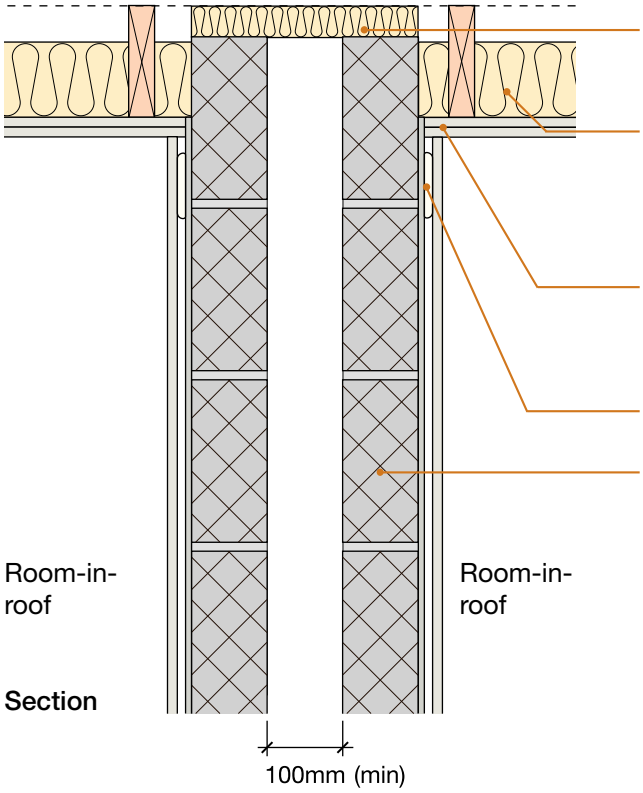
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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/m^3 or 1850-2300 kg/m^3) or Besblock "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:

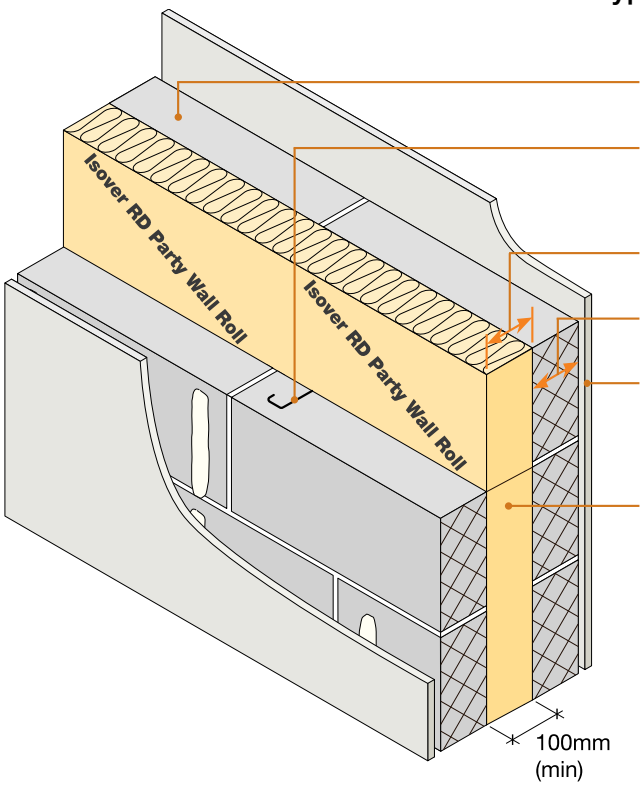
Telephone: 0161 866 6540 **Fax:** 0161 865 8433 **E-mail:** acoustics.uk@icopal.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-20

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

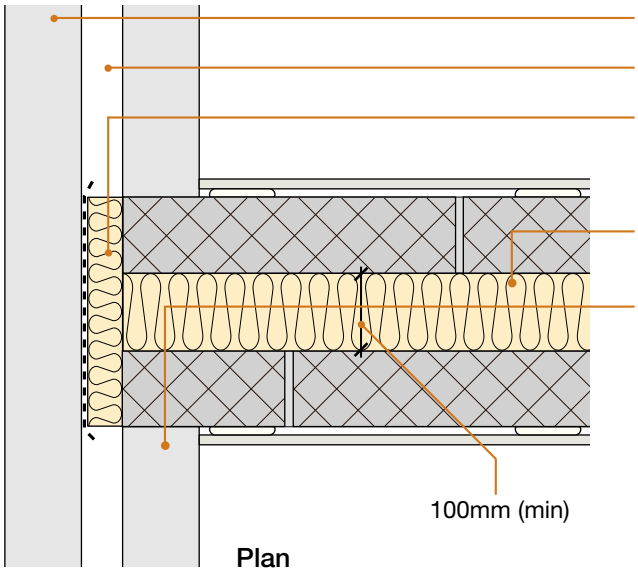


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	100mm Isover RD Party Wall Roll
External (flanking) wall	Masonry (both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

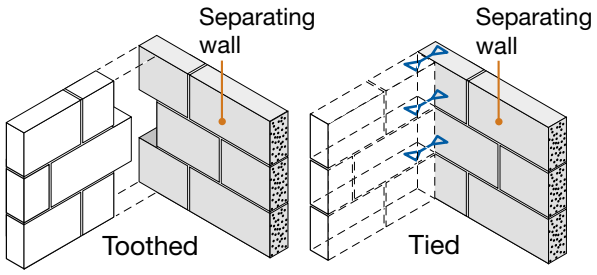
DO

- 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 blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all 100mm Isover RD Party Wall Rolls 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 'Isover RD Party Wall Roll' 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)

100mm Isover RD Party Wall Roll (no gaps to remain)

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

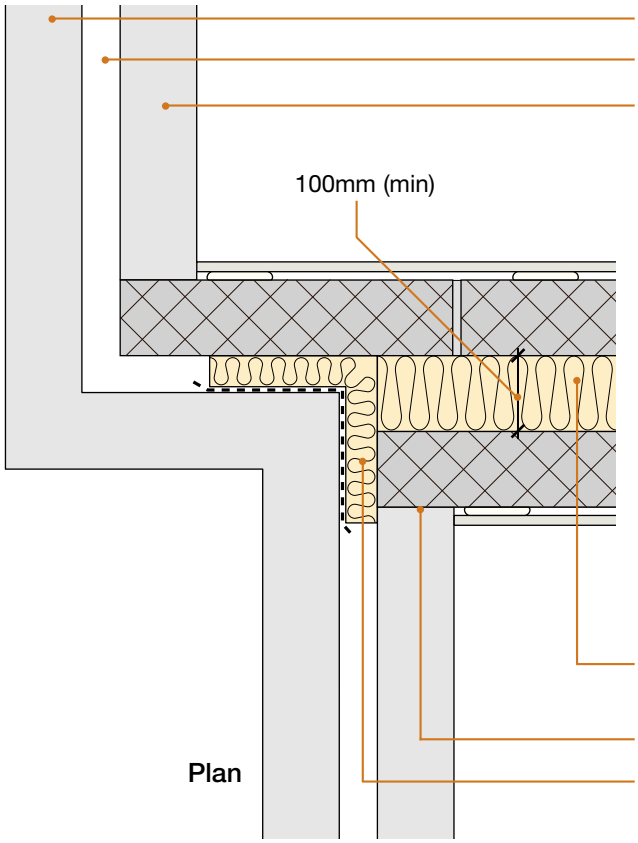
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

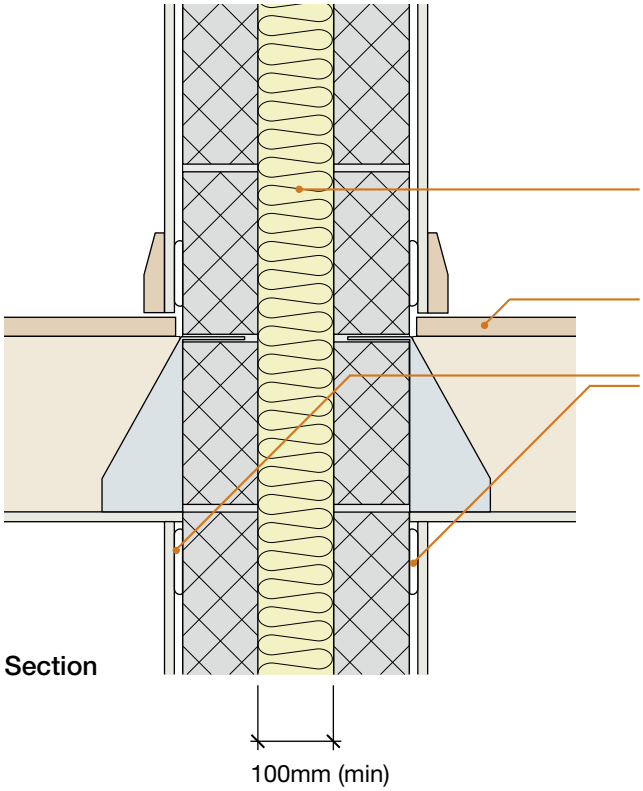
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

100mm 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)

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

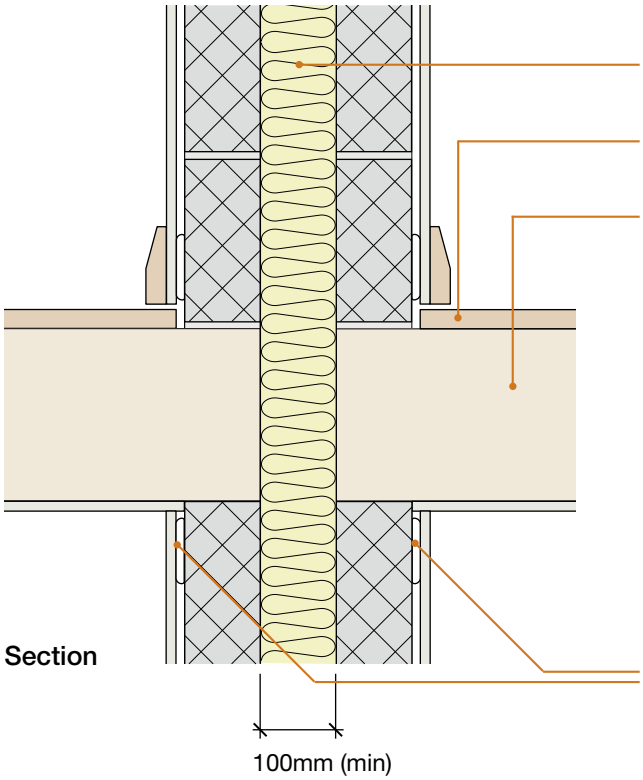


100mm Isover RD Party Wall Roll
(no gaps to remain)

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



100mm Isover RD Party Wall Roll
(no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

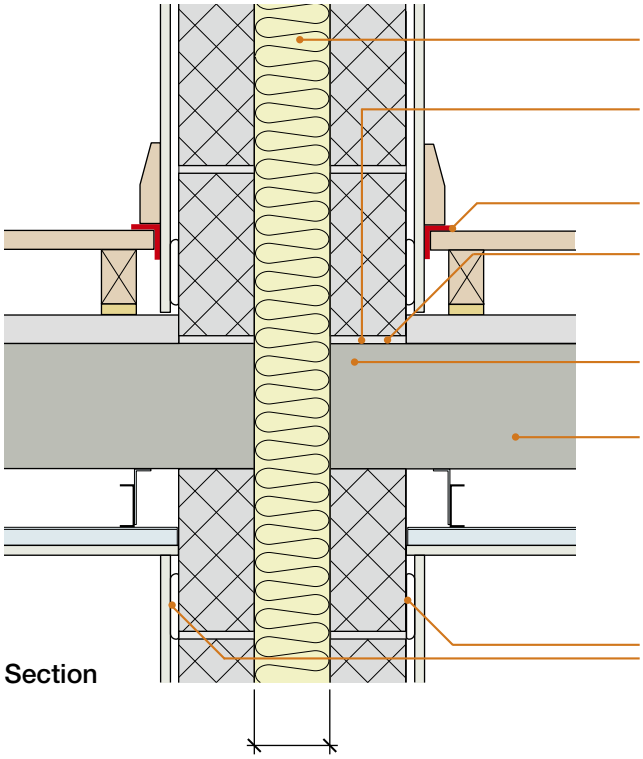
Floor construction:

- 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

100mm Isover RD 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

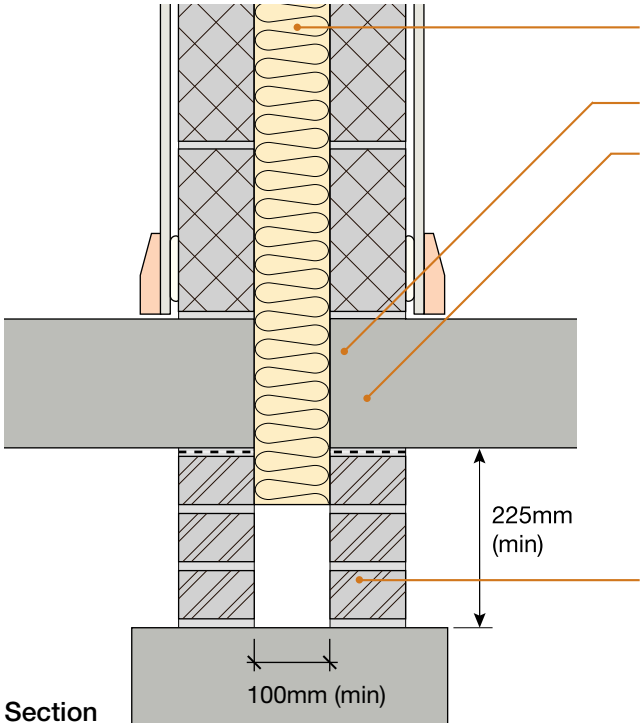
Separating floor:

- 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

100mm Isover RD Party Wall Roll (no gaps to remain)

Ground floor not continuous between dwellings

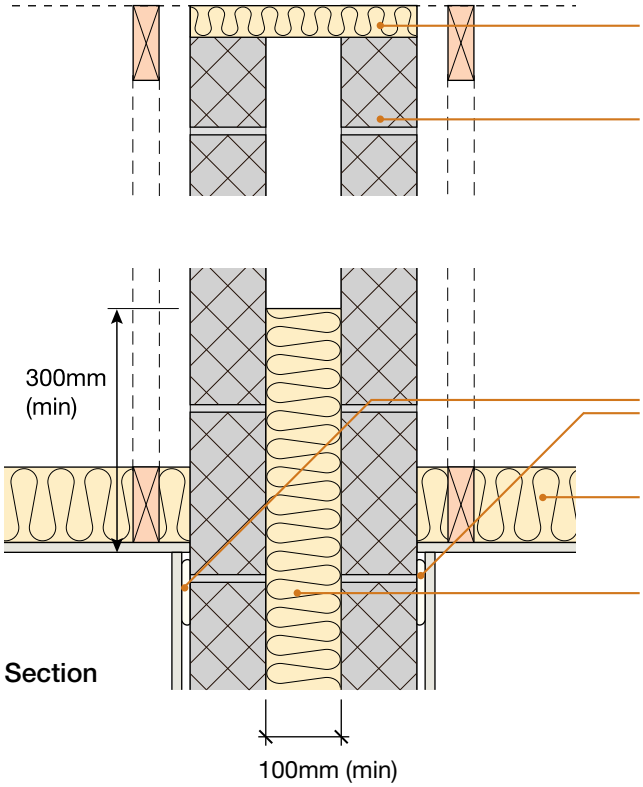
Ground floor construction:

- 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

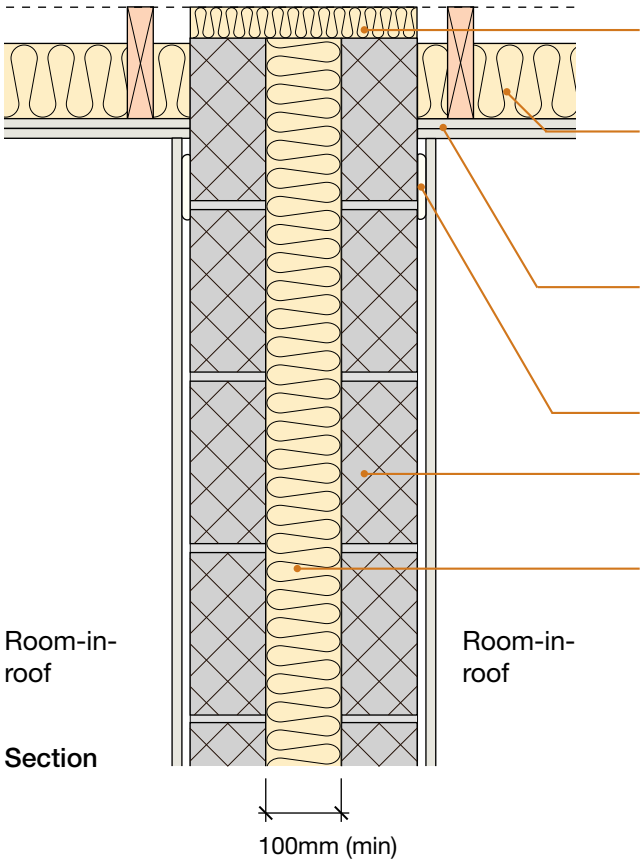
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

100mm Isover RD 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

100mm 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 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 100mm RD Party Wall Roll used?			
9.	Are insulation rolls 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 Saint Gobain-Isover, manufacturer of RD Party Wall Roll:

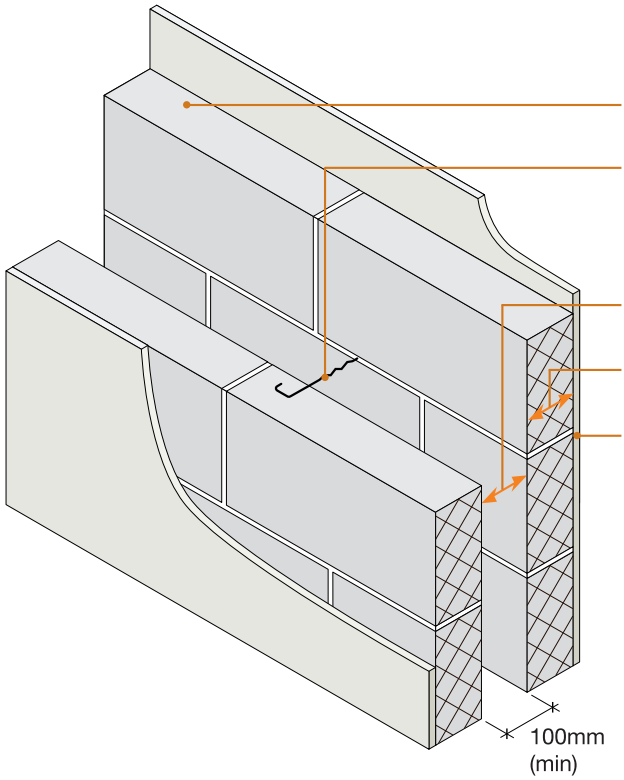
Telephone: 01159 451143 **Fax:** 0844 5618816 **E-mail:** isover.enquiries@saint-gobain.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-21

Lightweight aggregate blocks ■
Wet plaster ■
Minimum 100mm cavity ■



Block density	1350 to 1600 kg/m^3
Wall ties	Approved Document E "Tie type A" (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	13mm plaster or cement: sand render with plaster skim (min 10 kg/m^2), both sides
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

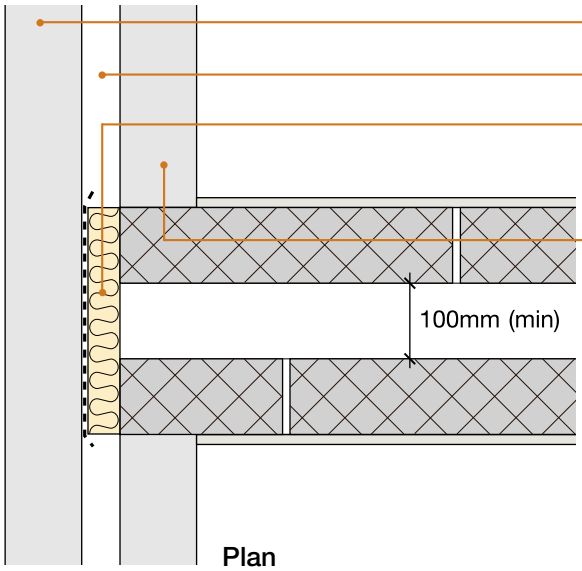
Separating wall cavity insulation (optional)

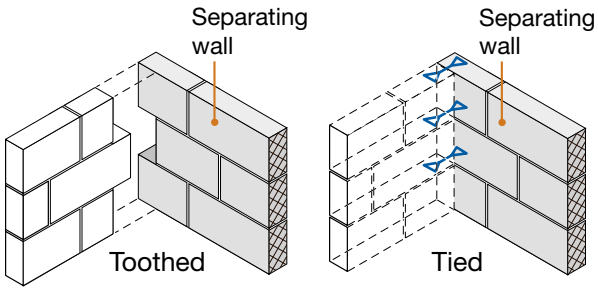
The cavity may be insulated with mineral wool with a maximum density of 40 kg/m^3.

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 that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- 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
- Select an alternative Robust Detail where flues are required in the separating wall
- 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

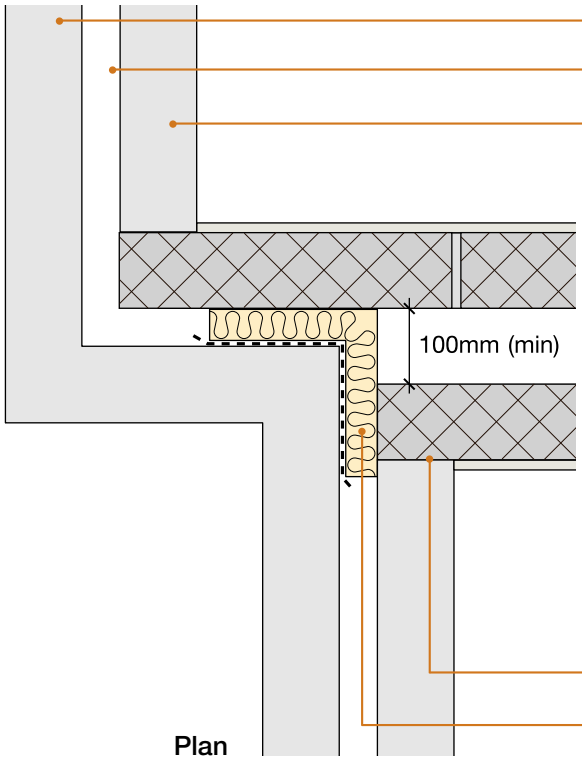
- 100mm (min) concrete block (850 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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).
- Internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board

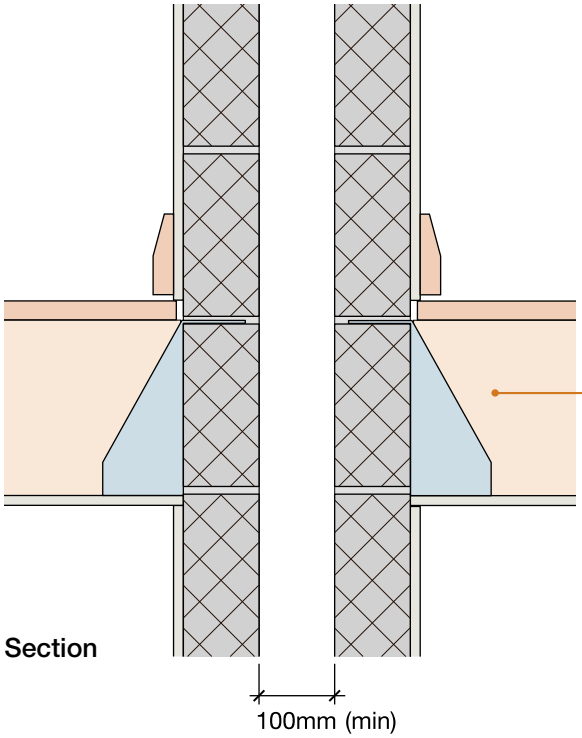
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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

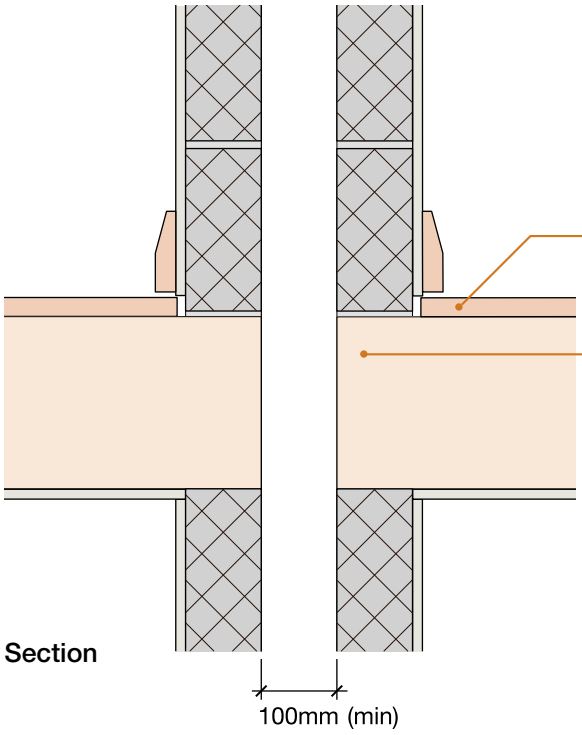
Tooth or tie walls together

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

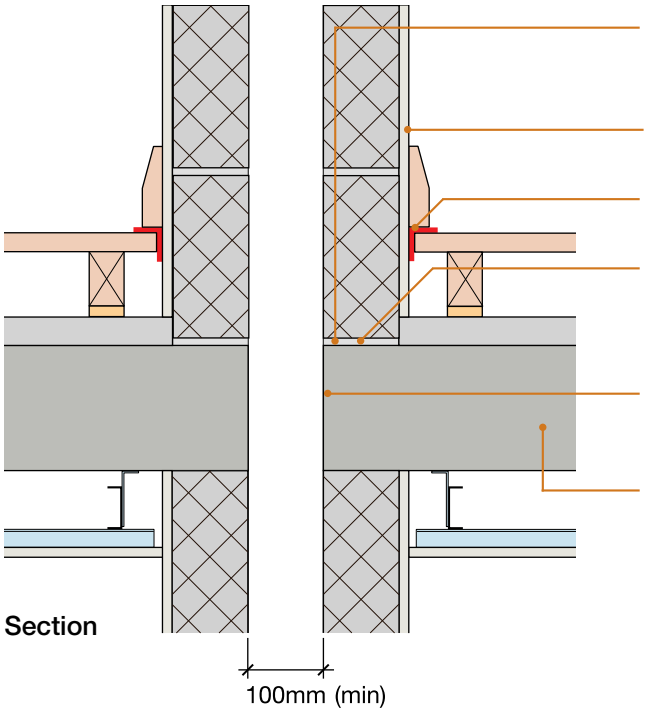


Floor construction:

- 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

Sketch shows timber joists built in

5. Separating floor junction



Section

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

Separating wall must not be continuous between storeys

Plaster complete wall surface

5mm (min) resilient flanking strip

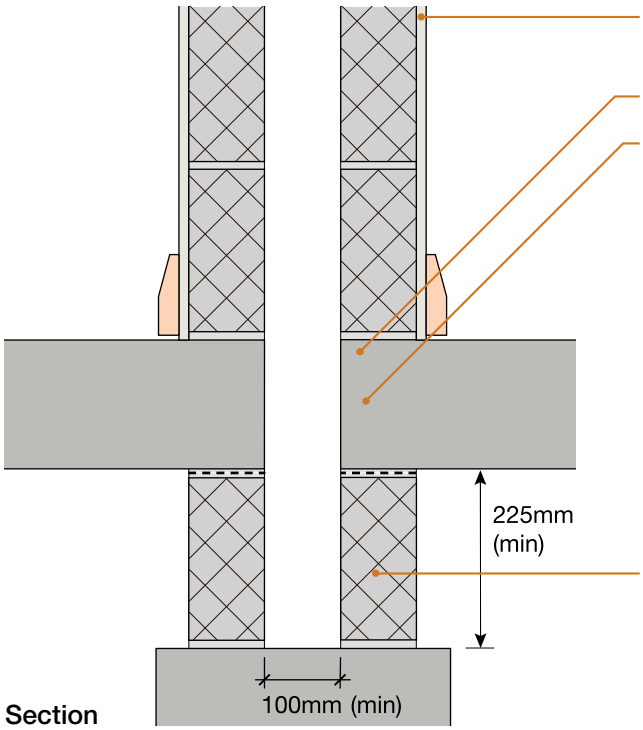
Concrete planks with all voids filled between planks and blockwork filled with mortar or flexible sealant

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

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



Section

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

Plaster complete wall surface down to finished floor level

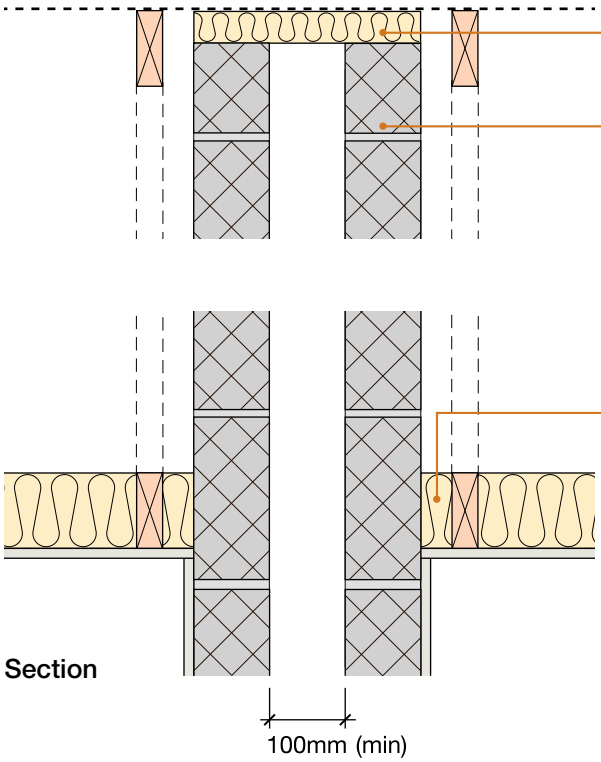
Ground floor not continuous between dwellings

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.

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



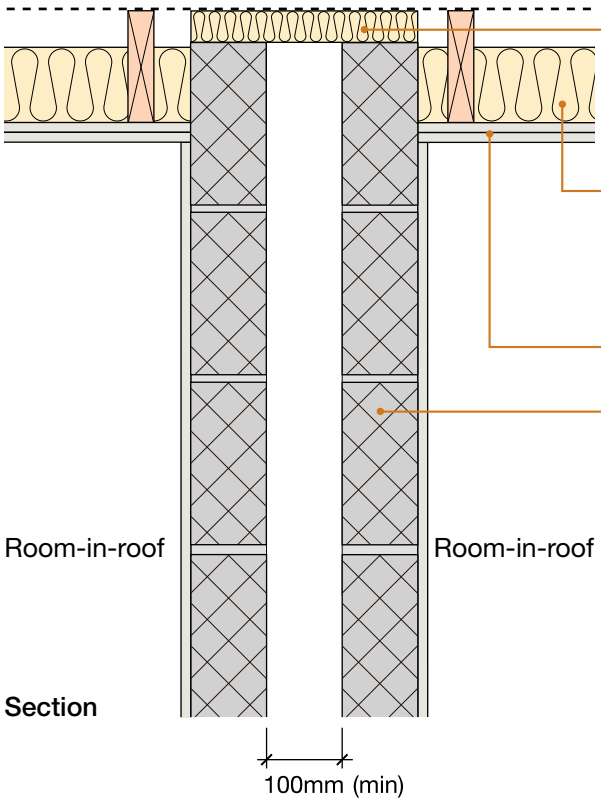
Junction between separating wall and roof filled with flexible closer

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.

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

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:

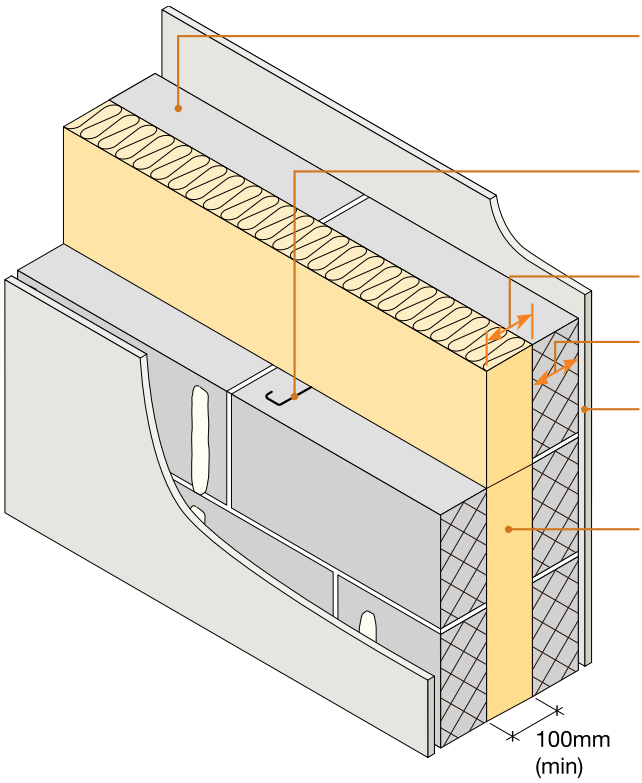
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating 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.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
10.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-22

Lightweight aggregate blocks ■
Knauf Earthwool 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 ■

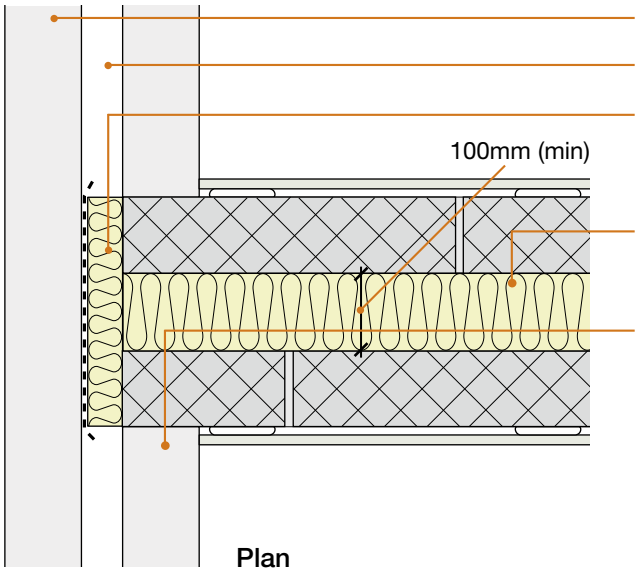


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	100mm Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall 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

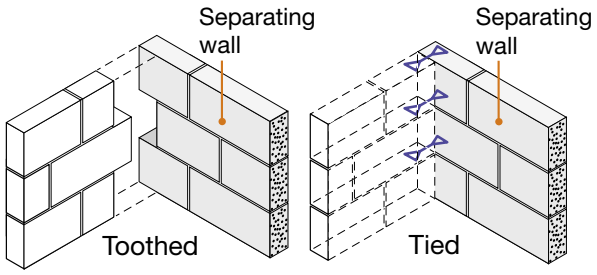
DO

- 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 100mm Knauf Earthwool 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)

100mm Knauf Earthwool 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

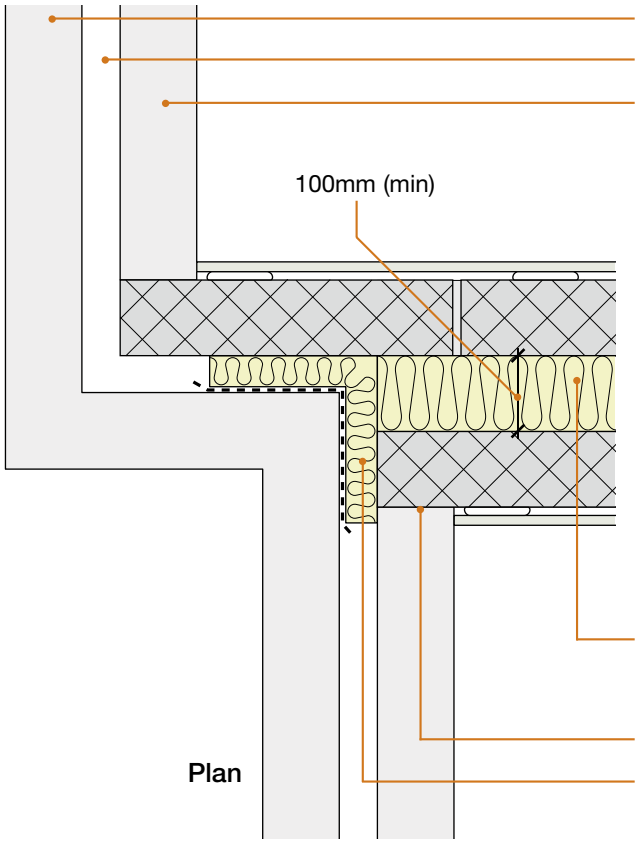
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

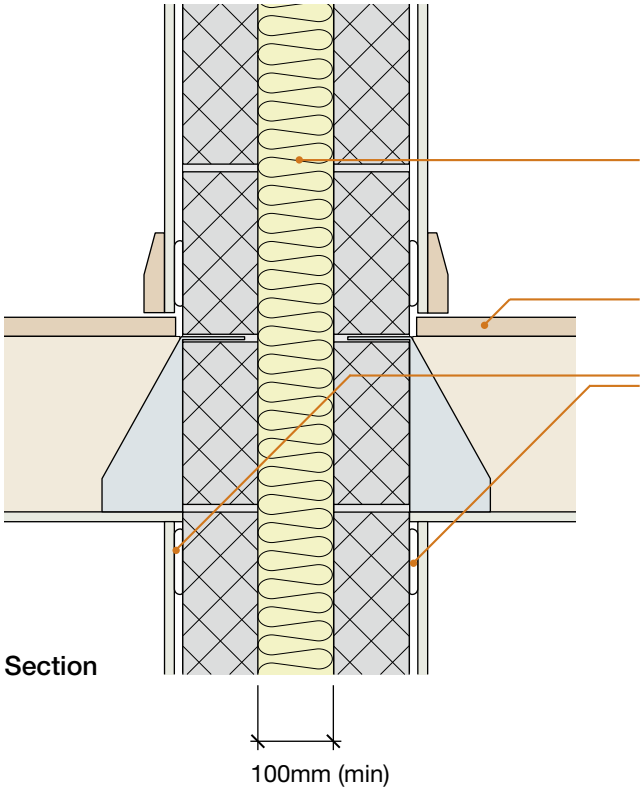
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

100mm Knauf Earthwool 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

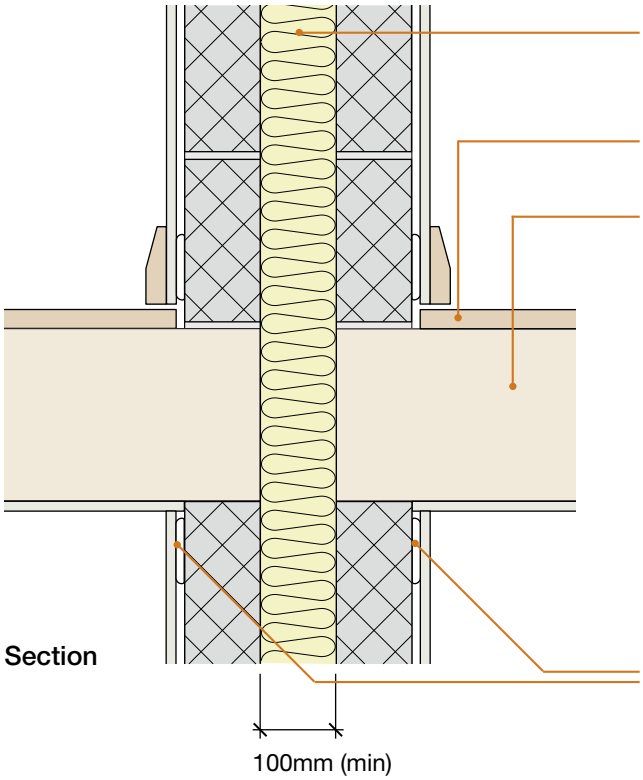


100mm Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain)

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



100mm Knauf Earthwool 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

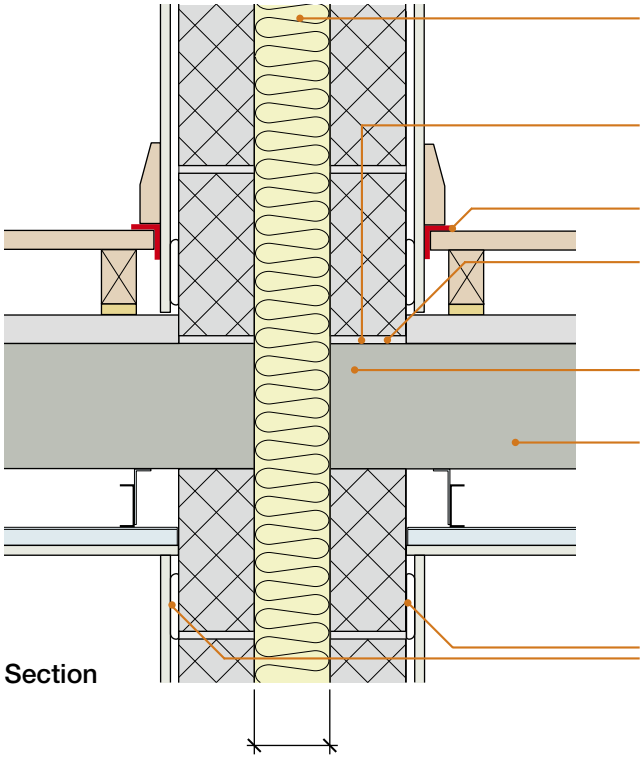
Floor construction:

- 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

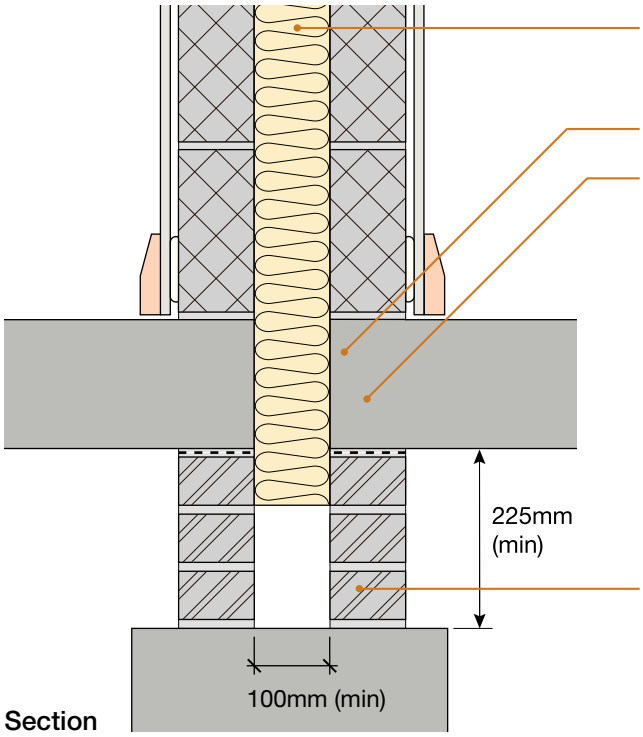


Section

- 100mm Knauf Earthwool 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

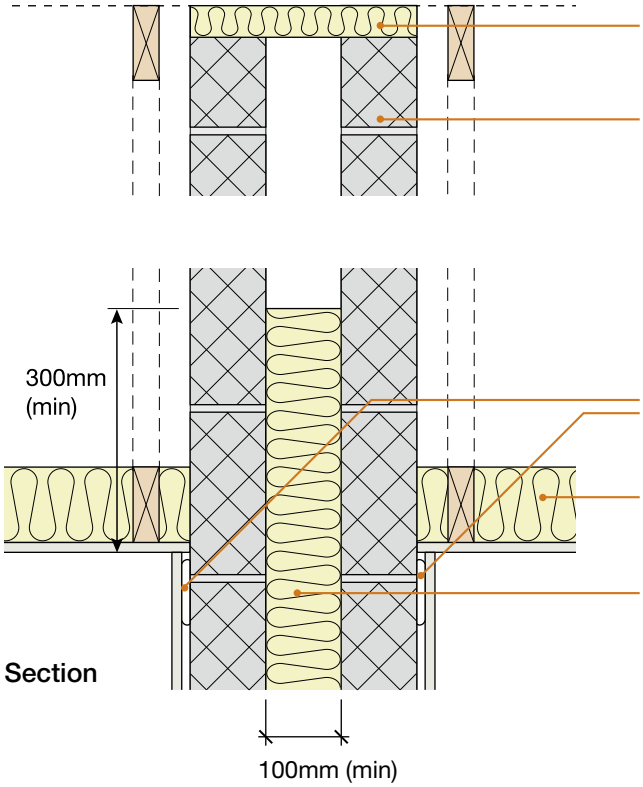


Section

- 100mm Knauf Earthwool 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

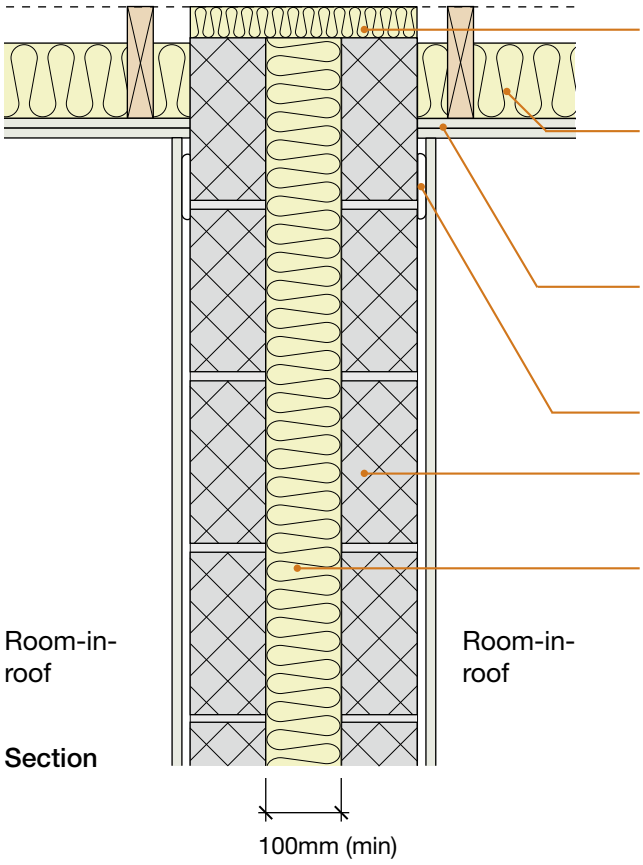
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

100mm Knauf Earthwool 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/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

100mm Knauf Earthwool 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:

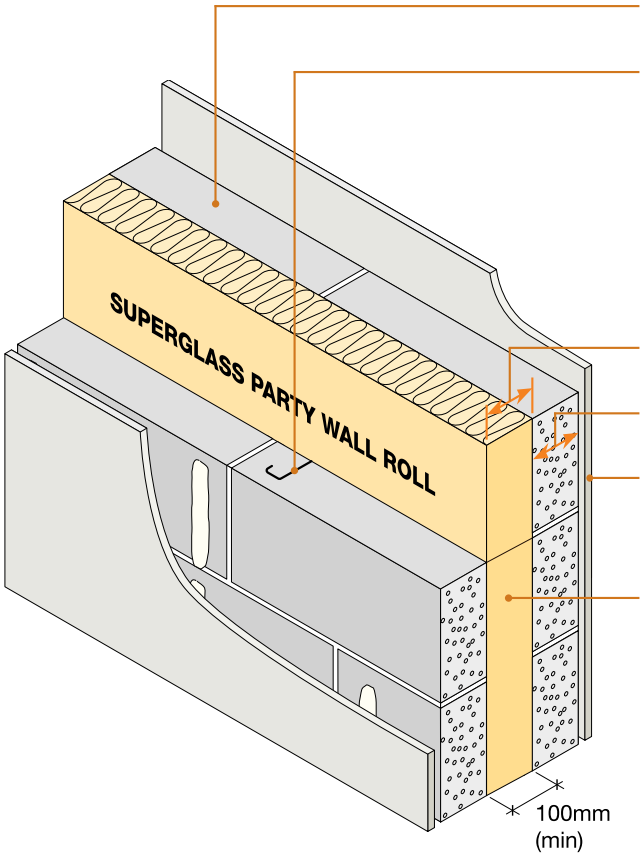
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall 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 100mm Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL used?			
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-23

Aircrete blocks - standard and thin joint ■
Superglass Party Wall Roll ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

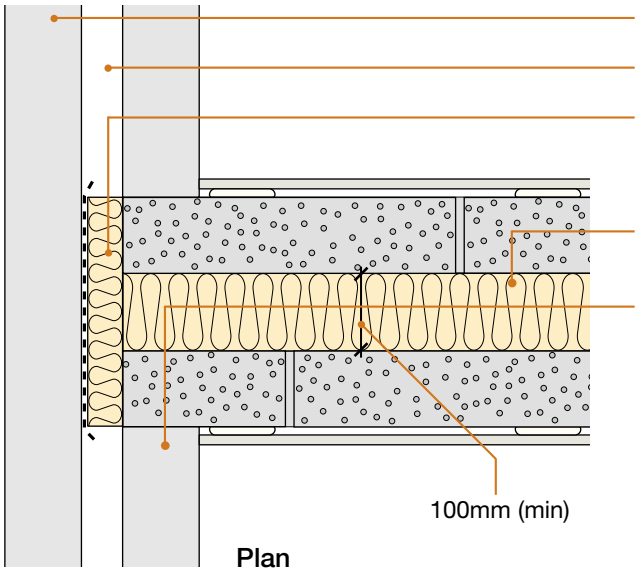


Block density	600 to 800 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A) For thin joint, wall ties must be Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	100mm Superglass Party Wall Roll
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

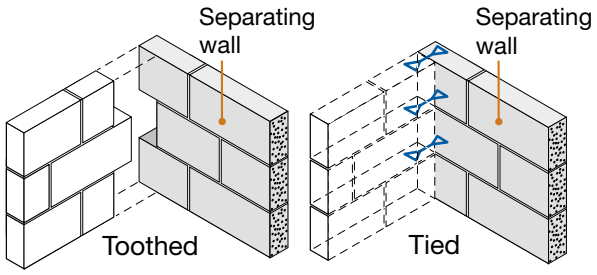
DO

- 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 100mm Superglass Party Wall Rolls 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 'Superglass Party Wall Roll' 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)

100mm Superglass Party Wall Rolls (no gaps to remain)

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

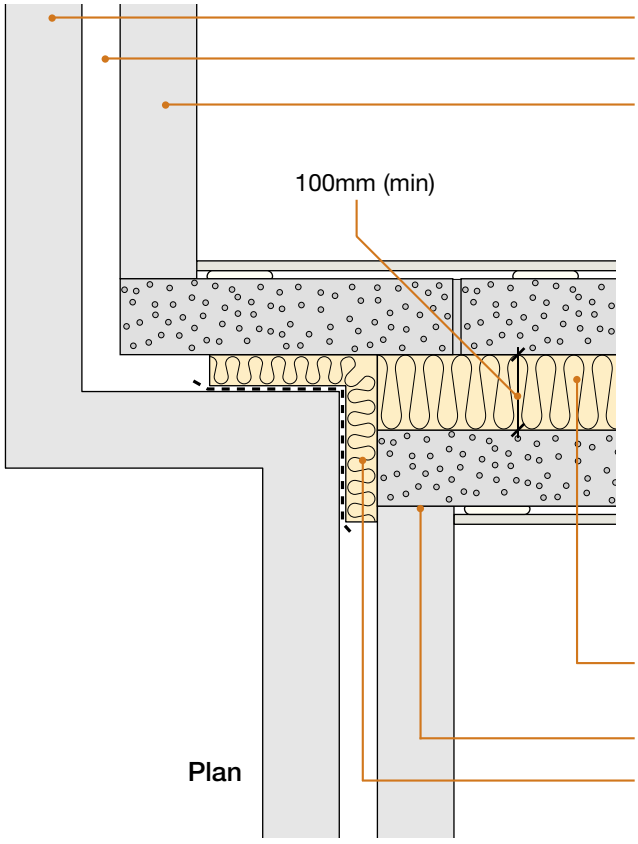
- 100mm (min) aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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) 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

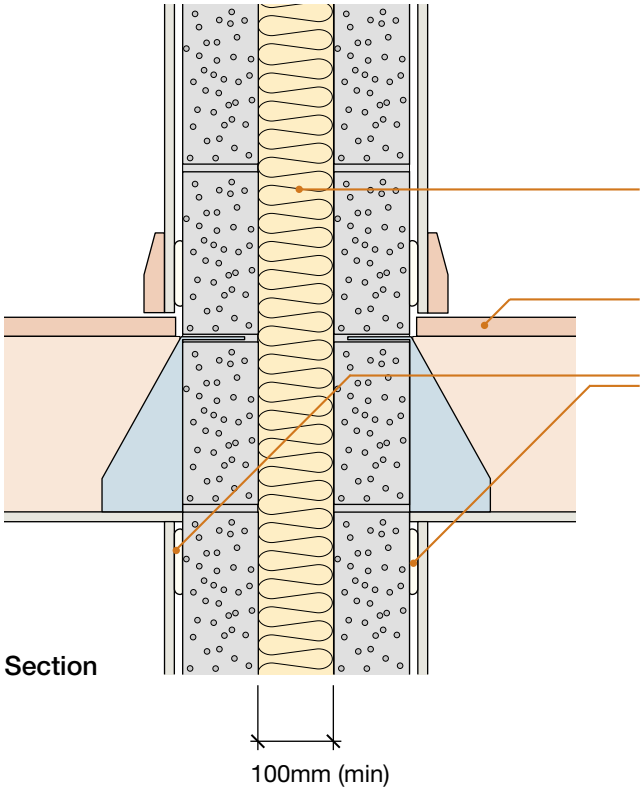
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

100mm Superglass Party Wall Rolls (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

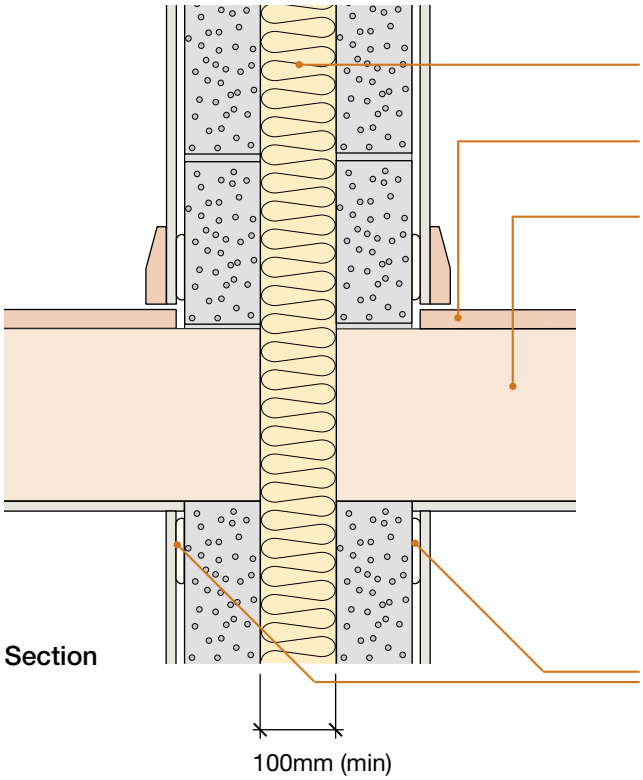


100mm Superglass Party Wall Rolls (no gaps to remain)

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



100mm Superglass Party Wall Rolls (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

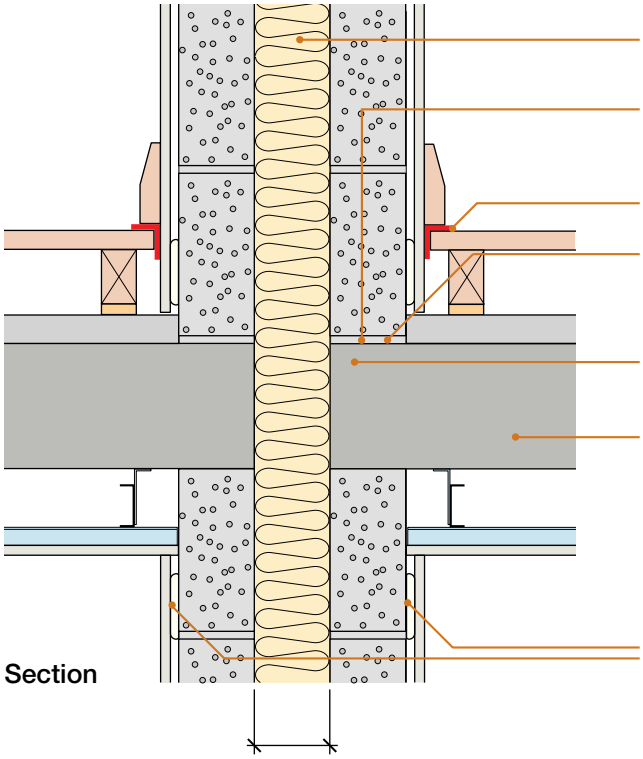
Floor construction:

- 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

100mm Superglass Party Wall Rolls (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

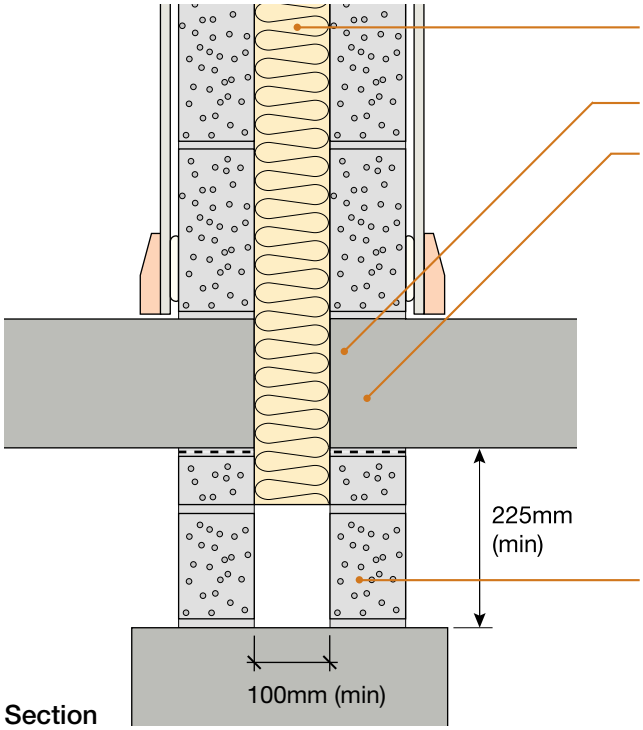
Separating floor:

- 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

100mm Superglass Party Wall Rolls (no gaps to remain)

Ground floor not continuous between dwellings

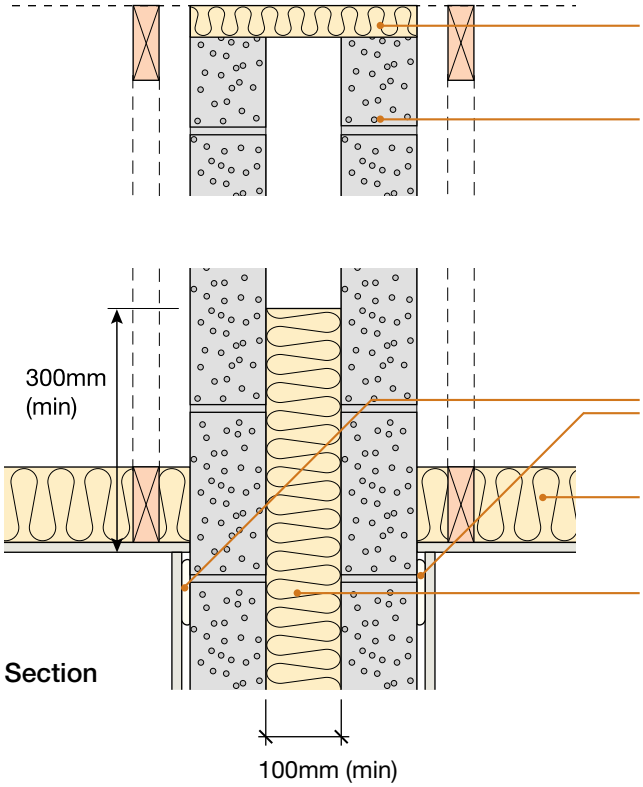
Ground floor construction:

- 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

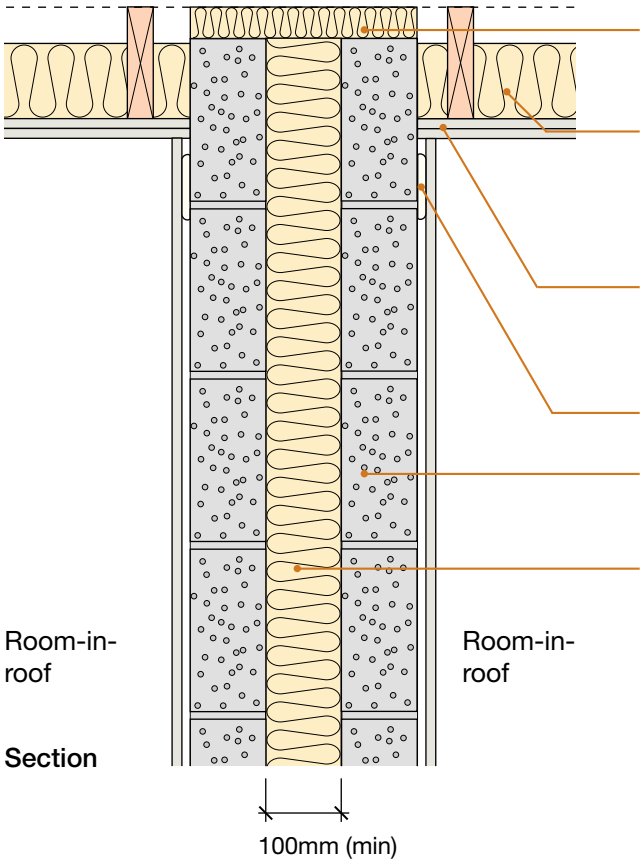
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

100mm Superglass Party Wall Rolls (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

100mm Superglass Party Wall Rolls (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.	Is external (flanking) wall inner leaf aircrete (450 to 800 kg/m^3)?			
4.	Are separating wall blocks aircrete (600 to 800 kg/m^3)?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)? For thin joint, are wall ties Ancon Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled?			
9.	Is 100mm Superglass 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 Superglass, manufacturer of the Party Wall Roll:

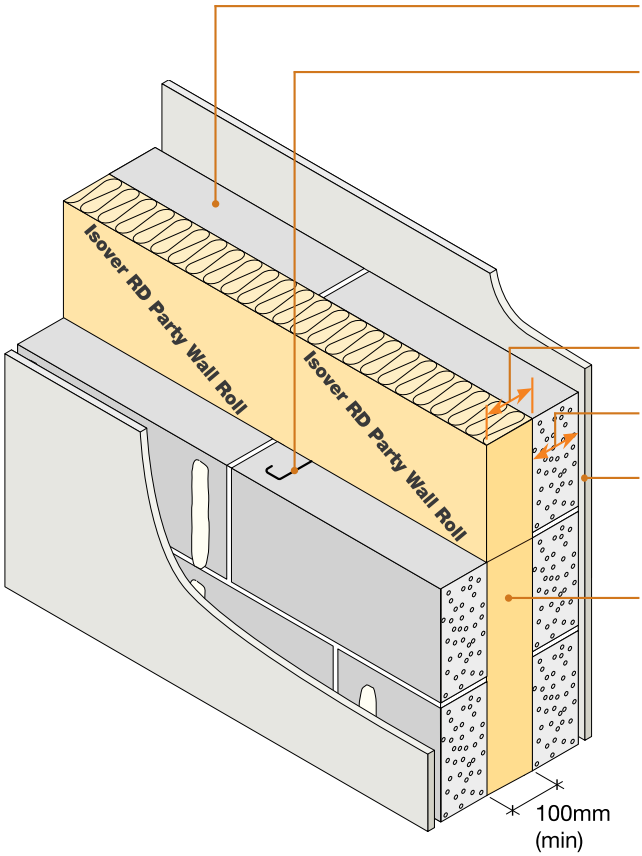
Telephone: 0844 3814022 **Fax:** 01786 451245 **E-mail:** technical@superglass.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-24

- Aircrete blocks - standard and thin joint
- Isover RD Party Wall Roll
- Gypsum-based board (nominal 8 kg/m²) on dabs

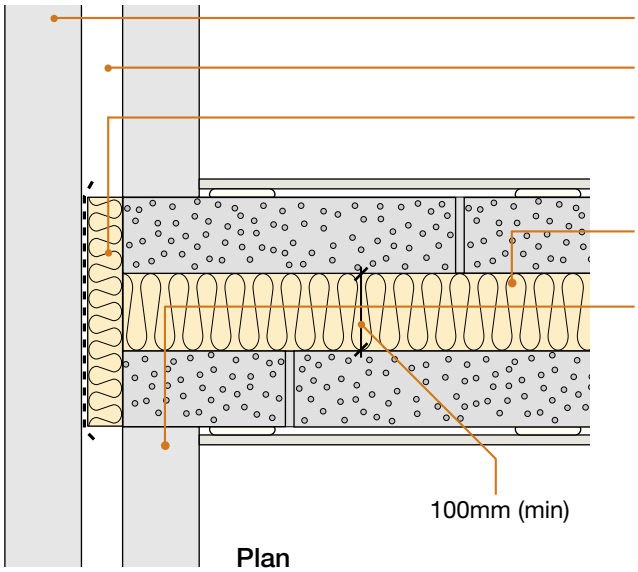


Block density	600 to 800 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A) For thin joint, wall ties must be Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	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

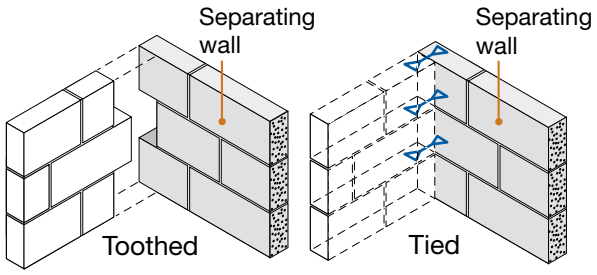
DO

- 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 blocks (i.e. not hollow or cellular) 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 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 'Isover RD Party Wall Roll' 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)

Isover RD Party Wall Roll (no gaps to remain)

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

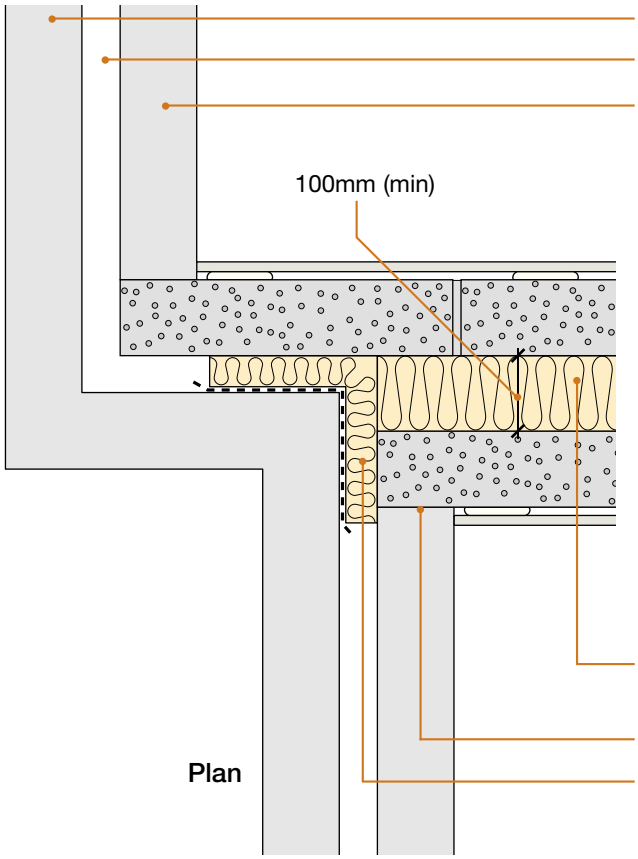
- 100mm (min) aircrete block (450 kg/m^3 to 800 kg/m^3)
- internal finish – 13mm plaster or nominal 8 kg/m^2 gypsum-based board

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
- 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) aircrete block (450 kg/m^3 to 800 kg/m^3)
- 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

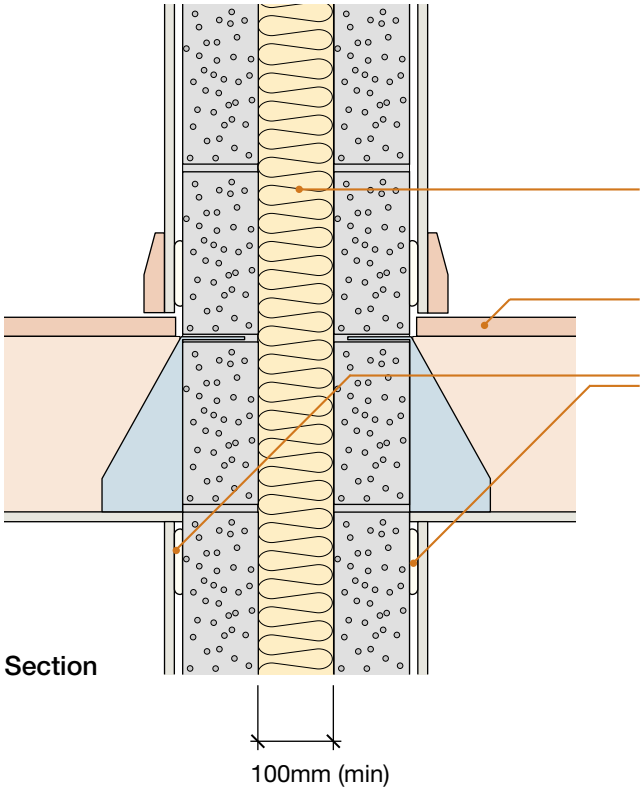
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

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)

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

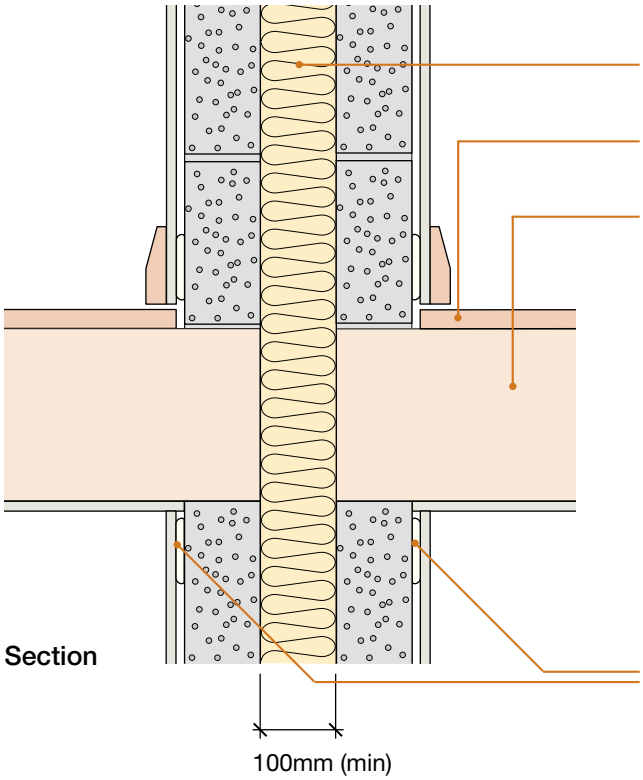


Isover RD Party Wall Roll (no gaps to remain)

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



Isover RD Party Wall Roll (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

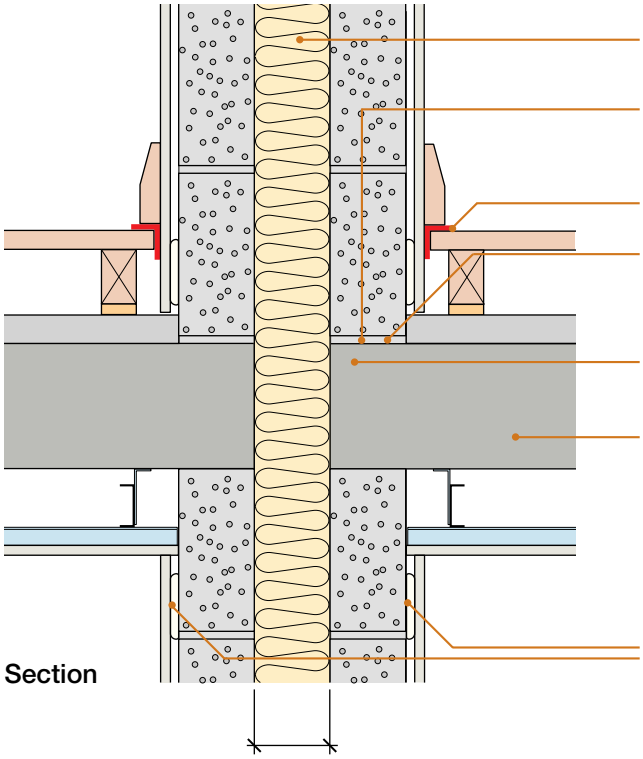
Floor construction:

- 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

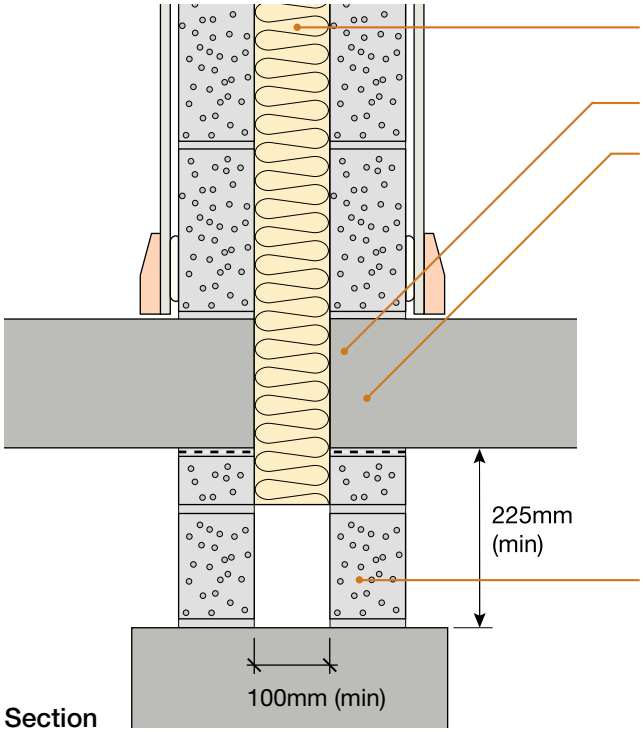


Section

- Isover RD 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

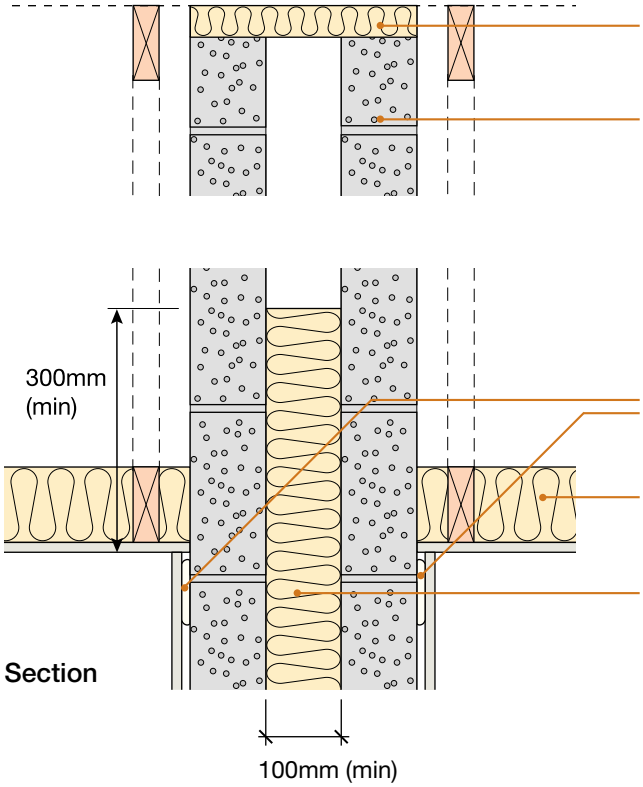


Section

- Isover RD 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

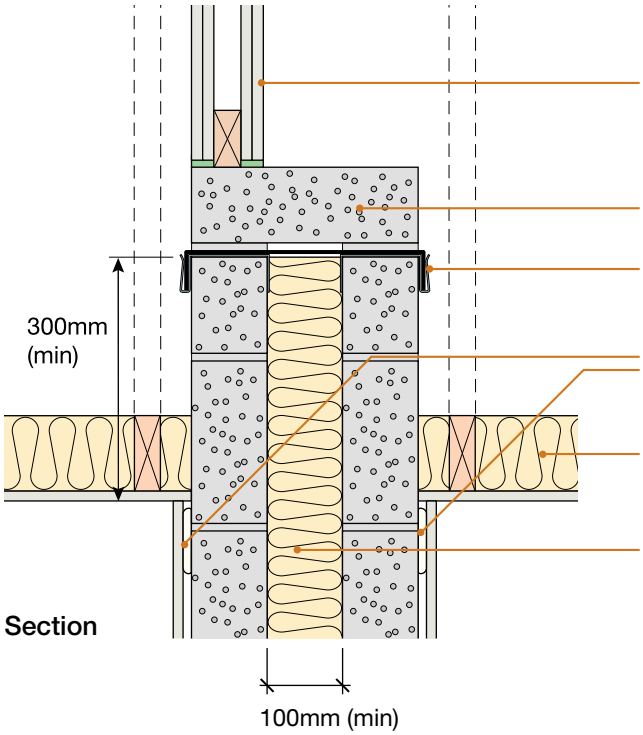
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Isover RD Party Wall Roll (no gaps to remain)

Alternative head detail



Spandrel panel (refer to Appendix A)

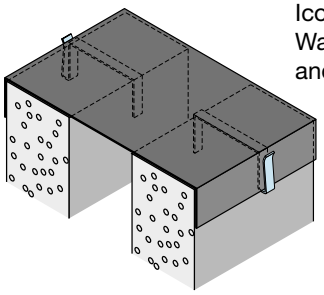
Cut aircrete block (600-800 kg/m³) laid flat

Icopal-MONARFLOOR® Wall Cap 400 and Wall Cap Clips

Continuous horizontal ribbon of adhesive

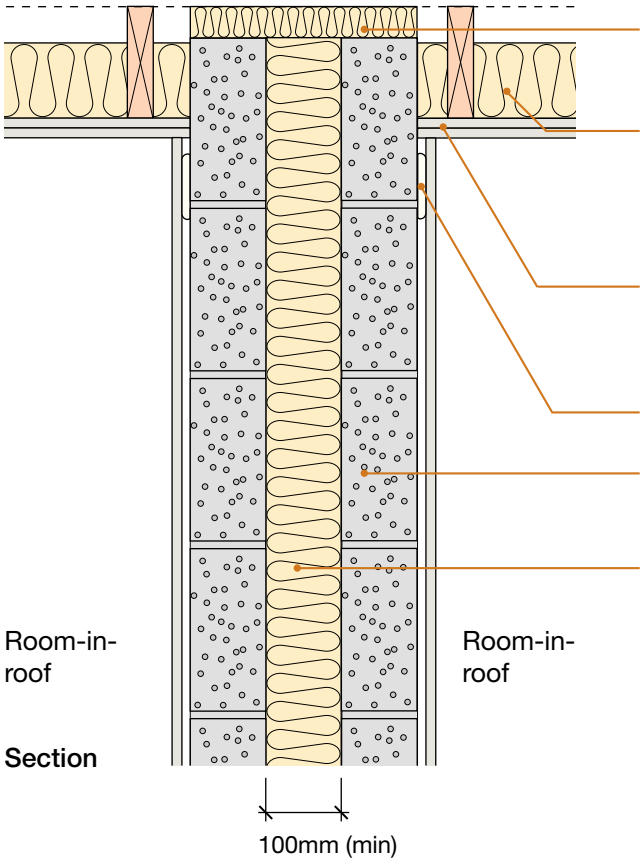
100mm (min) mineral wool insulation – 10 kg/m³ (min)

Isover RD Party Wall Roll (no gaps to remain)



Icopal-MONARFLOOR® Wall Cap 400 Membrane and Wall Cap Clips

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



Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

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

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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.	Is external (flanking) wall inner leaf aircrete (450 to 800 kg/m^3)?			
4.	Are separating wall blocks aircrete (600 to 800 kg/m^3)?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)? For thin joint, are wall ties Ancon Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre?			
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 Roll:

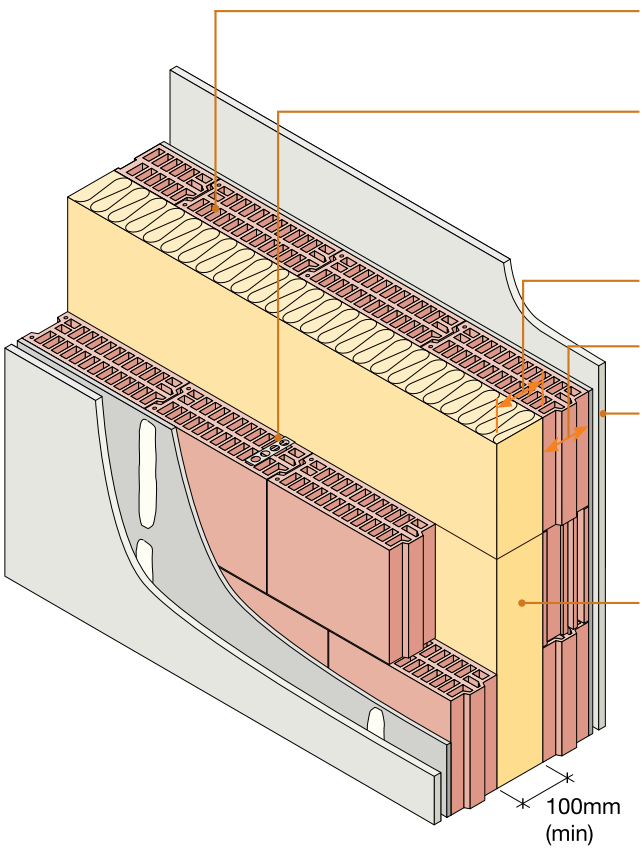
Telephone: 01159 451143 **Fax:** 0844 5618816 **E-mail:** isover.enquiries@saint-gobain.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-25

Porotherm blocks - thin joint ■
Insulated cavity ■
Ecoparge and gypsum-based board (nominal 8 kg/m²) on dabs ■



Block	Minimum 100mm Porotherm perforated clay blocks
Wall ties	Wall ties, as approved list below, and installed at no more than 2.5 ties per square metre
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs on Porothem Ecoparge (nominal 4mm, minimum 3mm)
Insulation	Mineral wool rolls or batts, maximum 20 kg/m³
External	Porotherm inner leaf and masonry outer leaf with 50mm (min) cavity - clear, fully filled or partially filled with insulation

IMPORTANT

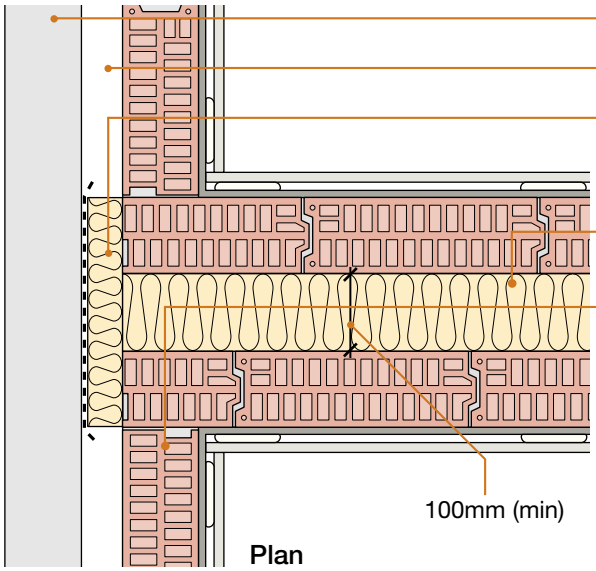
Only the following wall ties may be used in this separating wall:

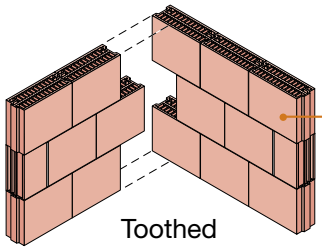
- Ancon Building Products CCBA 'Type A'

DO

- Keep cavity, insulation and wall ties free from mortar droppings and debris
- When using cut blocks, perpends must be jointed with mortar. Perpends exceeding 15mm must be fully filled; alternatively, those up to 15mm may be pointed.
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only Porotherm PTH blocks and Porotherm bed joint mortar are used in the construction of separating walls and flanking structures in accordance with manufacturer's instructions
- Ensure that the Porotherm Ecoparge is applied to the separating walls in accordance with manufacturer's instructions, paying particular attention to sealing the vertical joints between blocks
- 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
- Ensure no chasing for services are made in the separating wall leaves
- 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)

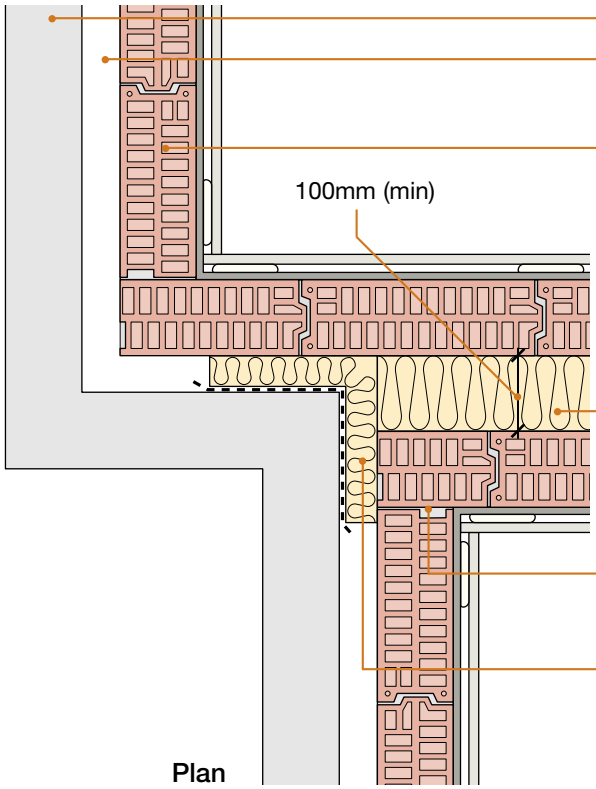
Mineral wool insulation (no gaps to remain)

Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m² gypsum board on dabs

The separating wall must be toothed into the inner leaf of the flanking wall. Cut blocks should be used to give a 'square' end to the leafs

Traditional mortar is required on perpend joints that do not have both parts of the interlocking t&g feature

2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

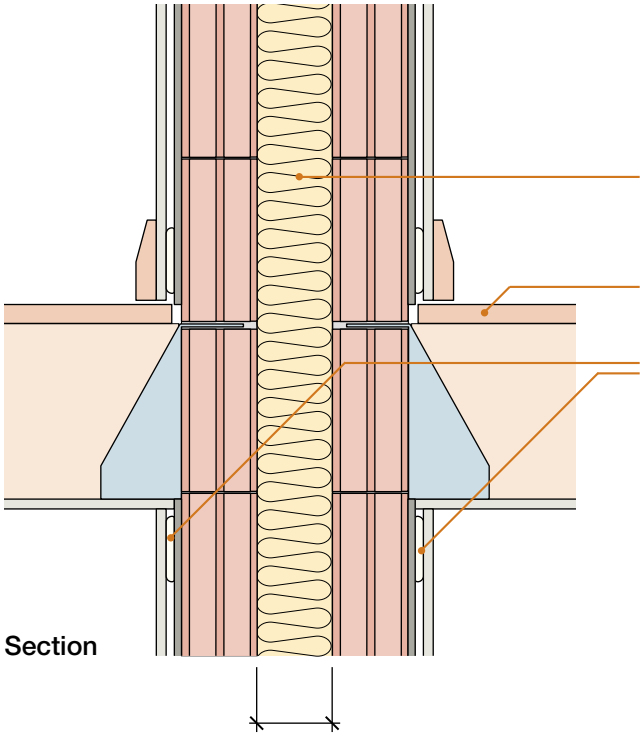
Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m² gypsum board on dabs

Mineral wool insulation (no gaps to remain)

Tooth 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

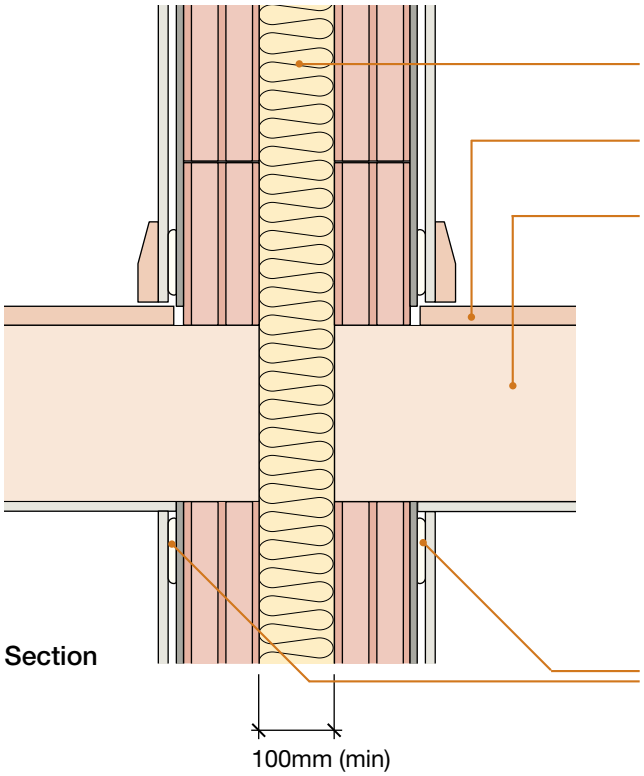


Mineral wool insulation (no gaps to remain)

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



Mineral wool insulation (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

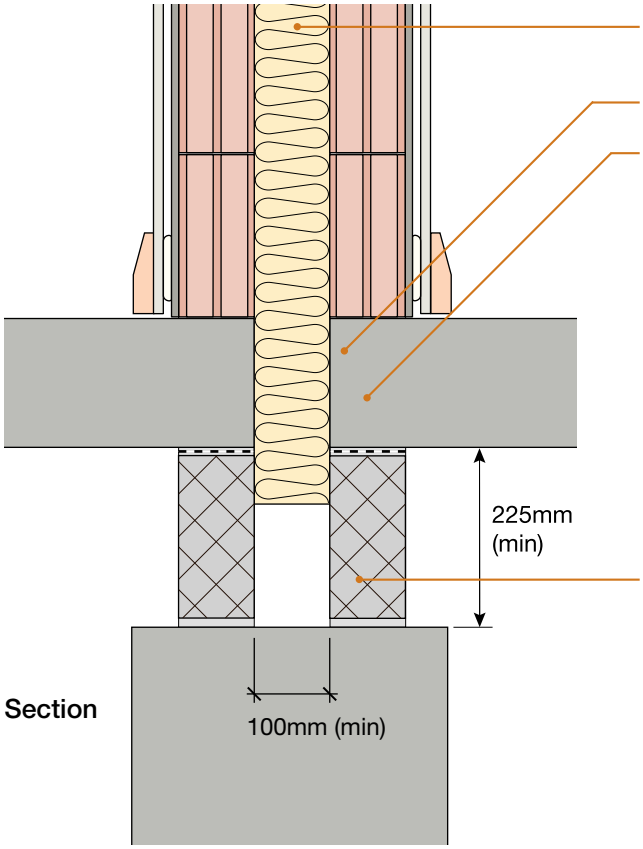
Floor construction:

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



Mineral wool insulation (no gaps to remain)

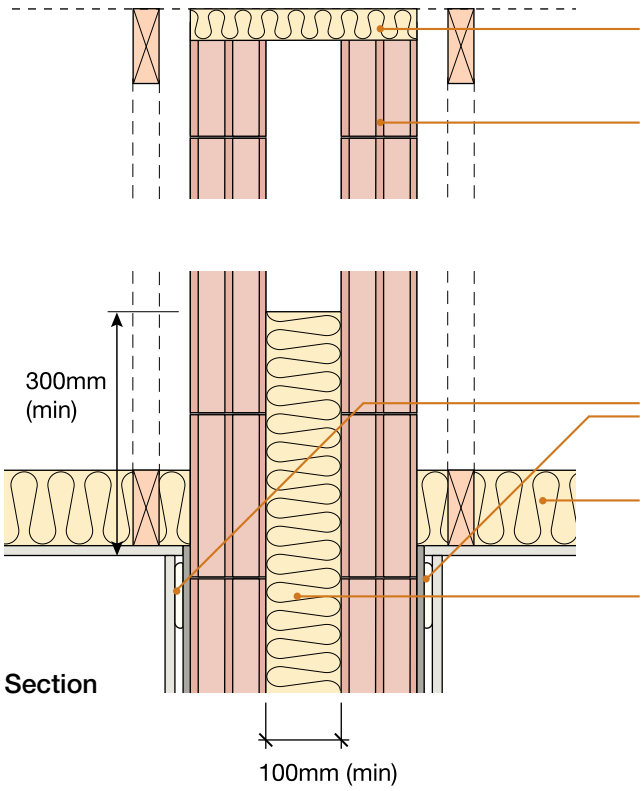
Ground floor not continuous between dwellings

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

6. 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)

Mineral wool insulation (no gaps to remain)

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are 100mm (min) Porotherm blocks used in separating wall?			
2.	Is separating wall cavity at least 100mm?			
3.	Are only the named 'Type A' wall ties installed at no more than 2.5 ties per square metre in separating wall?			
4.	Are insulation sections tightly butted together?			
5.	Is cavity free from droppings and debris?			
6.	Is Ecoparge (nominal 4mm, minimum 3mm) applied to both leafs?			
7.	Is the separating wall free from service chasing?			
8.	Is external (flanking) wall inner leaf 100mm (min) Porotherm blocks with Ecoparge applied?			
9.	Is junction with flanking wall toothed using cut blocks and mortared perpends?			
10.	Is external (flanking) wall cavity at least 50mm?			
11.	Are cavity stops installed where specified in the Robust Detail?			
12.	Are voids around floor joists fully filled/sealed?			
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 Wienerberger, supplier of Porotherm products:

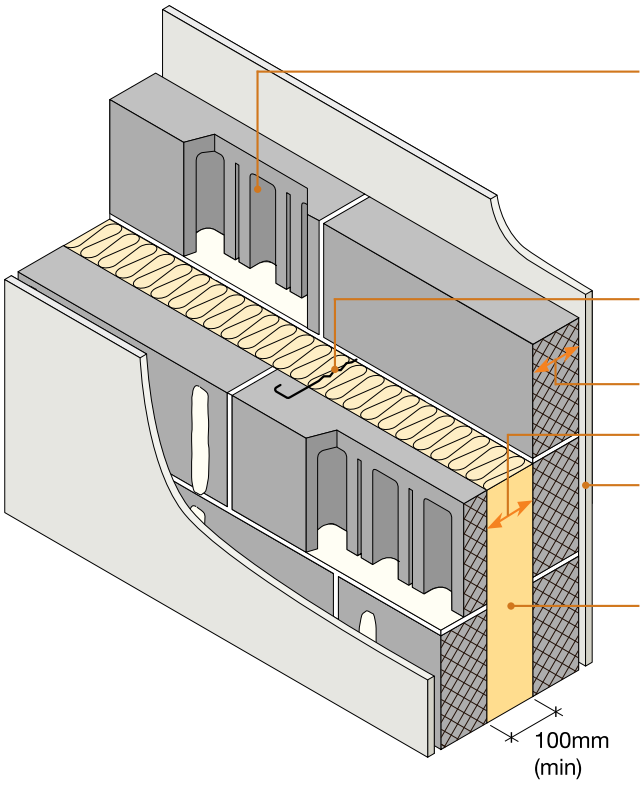
Telephone: 0161 491 8200 **Fax:** 0161 491 6529 **E-mail:** Regional Tech Manager - see www.wienerberger.co.uk/blocks for contact information

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-26

Besblock “Star Performer” dense aggregate cellular blocks ■
Gypsum-based board on dabs ■

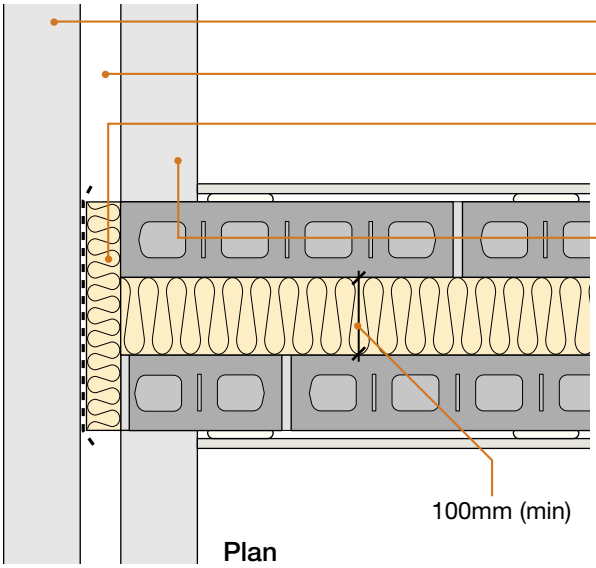


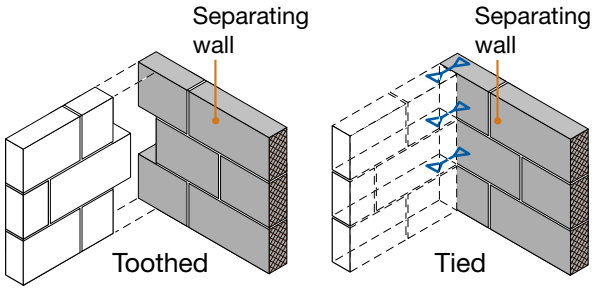
Block	Only Besblock “Star Performer” 5-bridge cellular block (4-core, concrete density 1995 kg/m³, block density 1528 kg/m³, unit weight 14.5 kg)
Wall ties	Approved Document E ‘Tie type A’ (see Appendix A)
Block thickness	100mm (min), each leaf
Cavity width	100mm (min)
Wall finish	Gypsum based-board (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





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

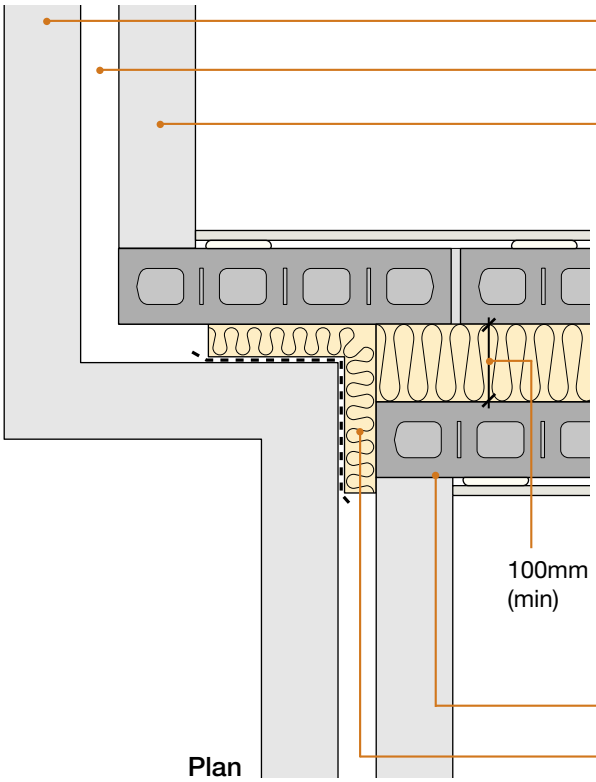
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Besblock "Star Performer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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 Besblock "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 Besblock "Star Performer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

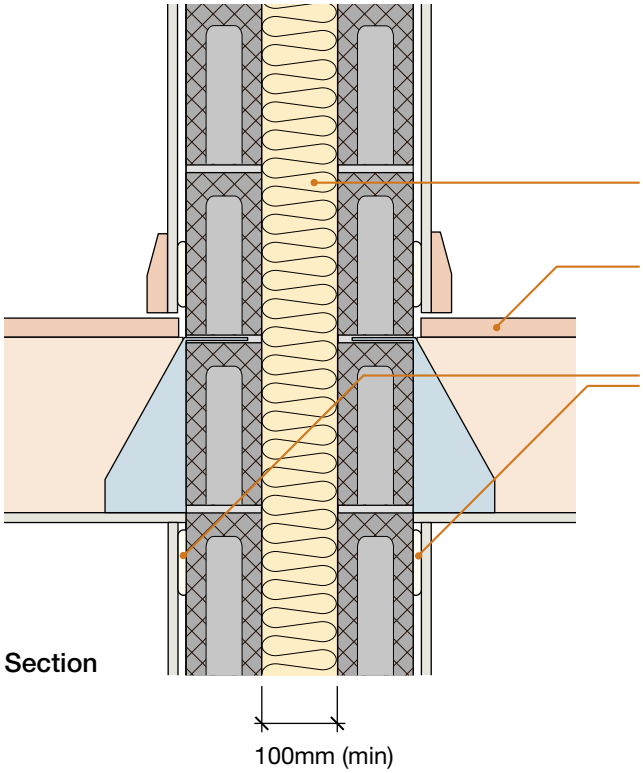
Inner leaf where there is a separating floor e.g. for flats/apartments

- 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 Besblock "Star Performer" block
- if using floor requiring pre-completion testing, seek specialist advice

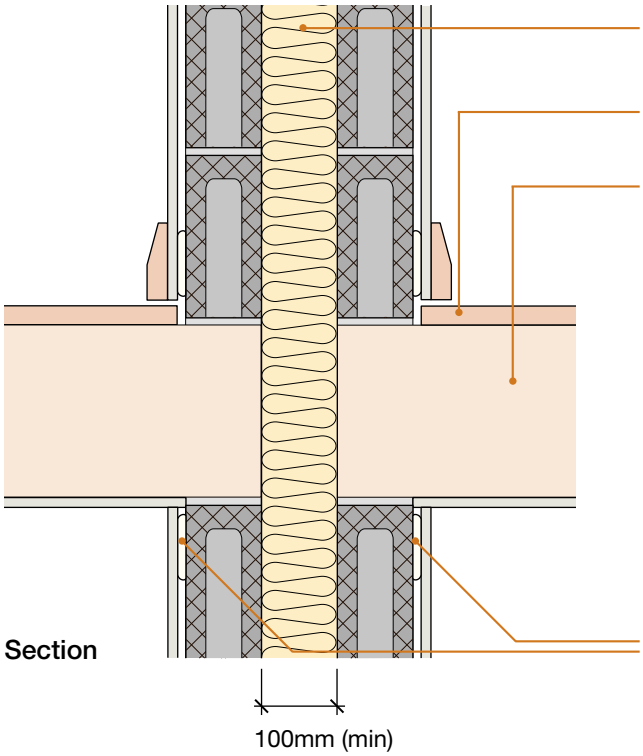
Tooth or tie walls together

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

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

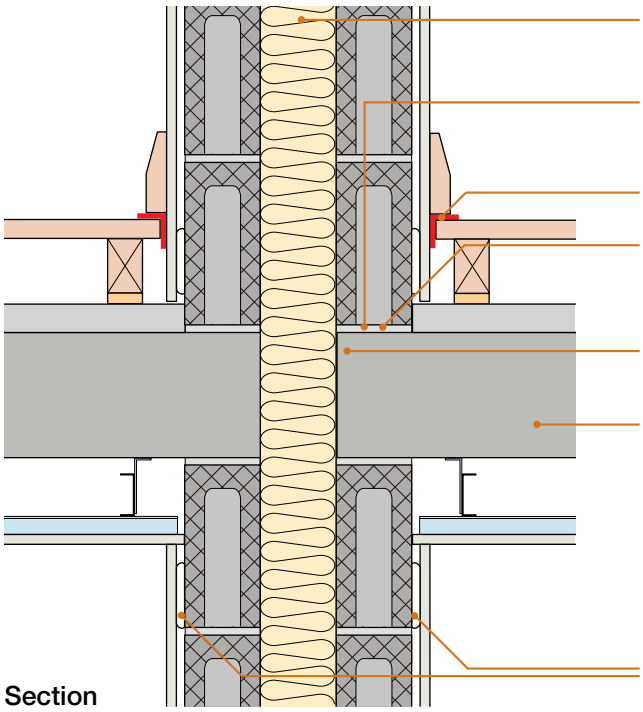


4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



Sketch shows timber joists built in

5. Separating floor junction

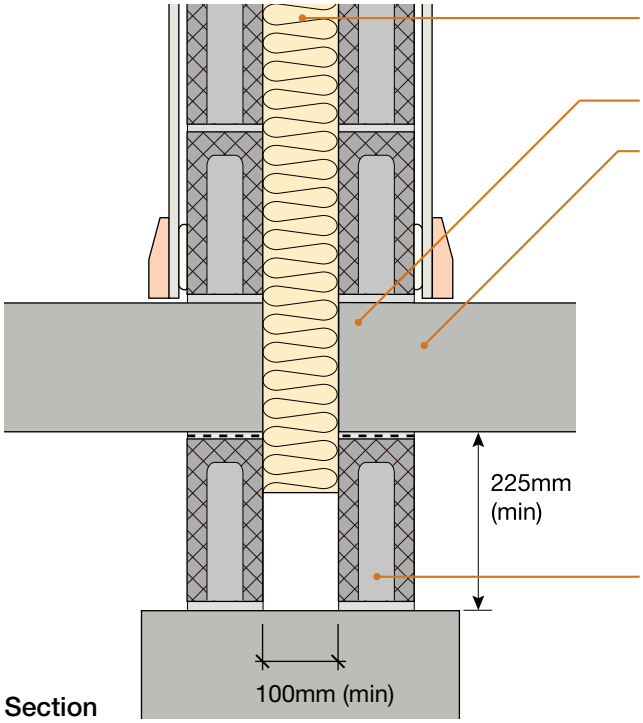


Section

- 100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³
- 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

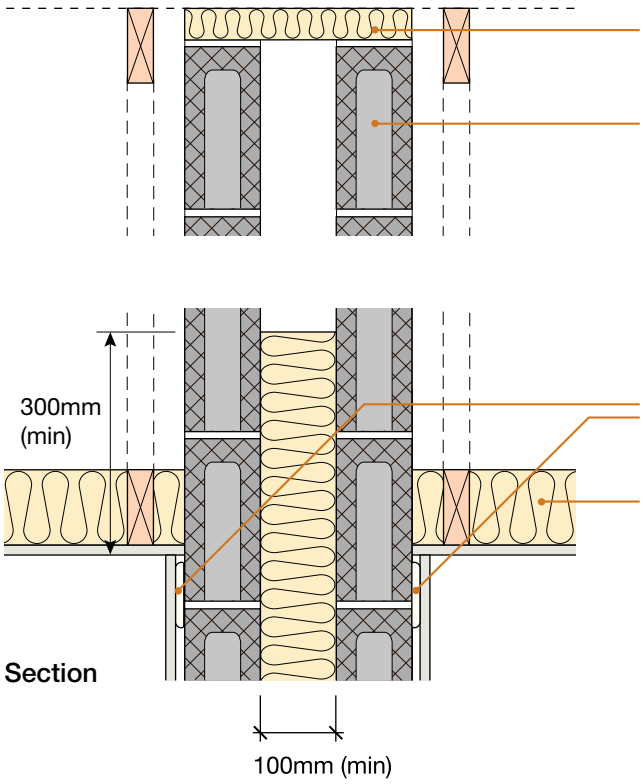


Section

- 100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³
- 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

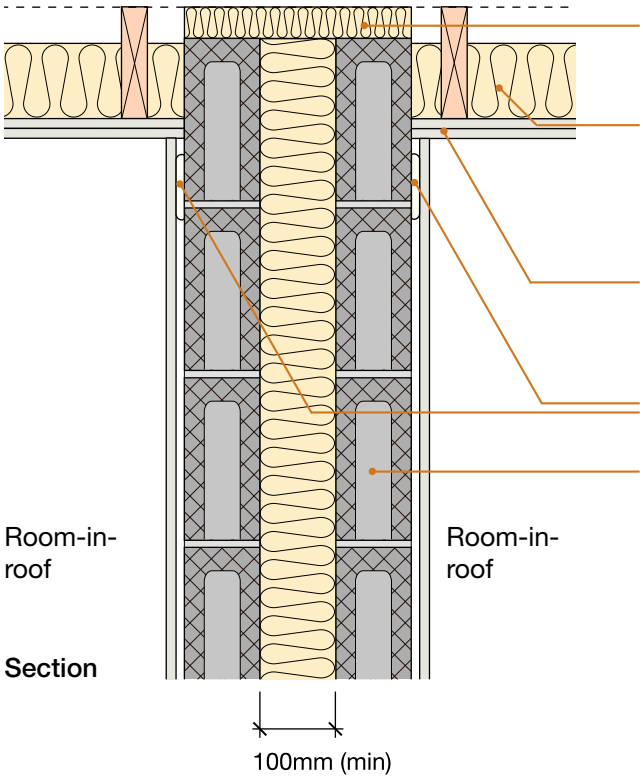
Cavity masonry separating wall continuous to underside of roof. Alternatively use spandrel panel – see Appendix A

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/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 Besblock 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 Besblock, manufacturer of ‘Star Performer’ dense aggregate cellular blocks:

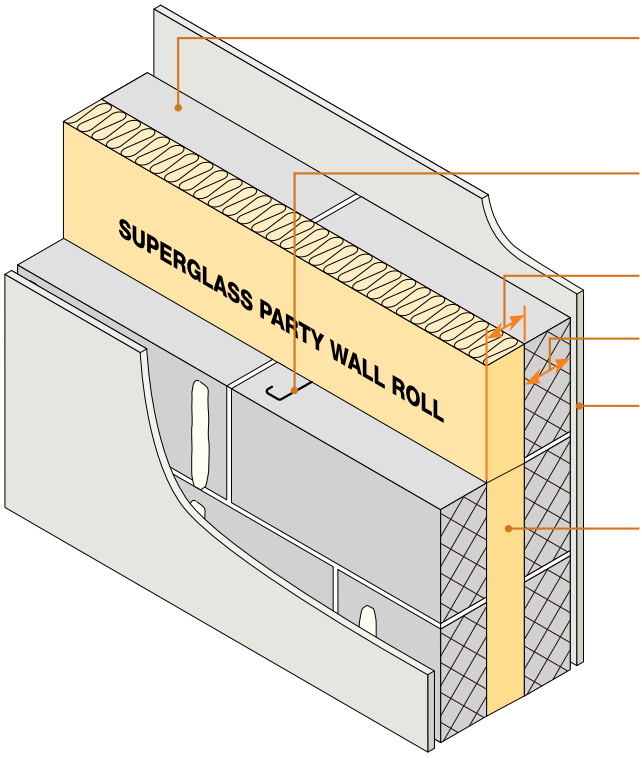
Telephone: 01952 685000 **Fax:** 01952 585224 **E-mail:** technical@besblock.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-27

Lightweight aggregate blocks ■
Superglass Party Wall Roll ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

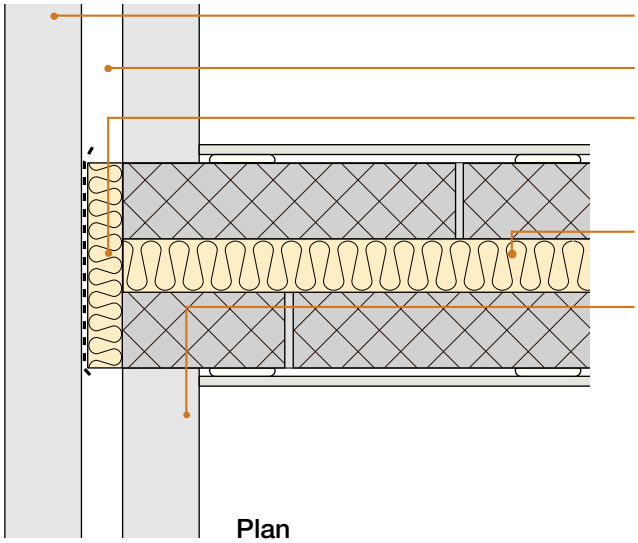


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Superglass Party Wall Roll
External (flanking) wall	Masonry (both leaves)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

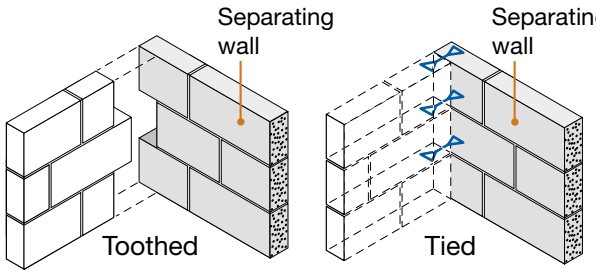
DO

- 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 Superglass Party Wall Rolls 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 'Superglass Party Wall Roll' is printed on the insulation material

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)
- Superglass Party Wall Roll (no gaps to remain)

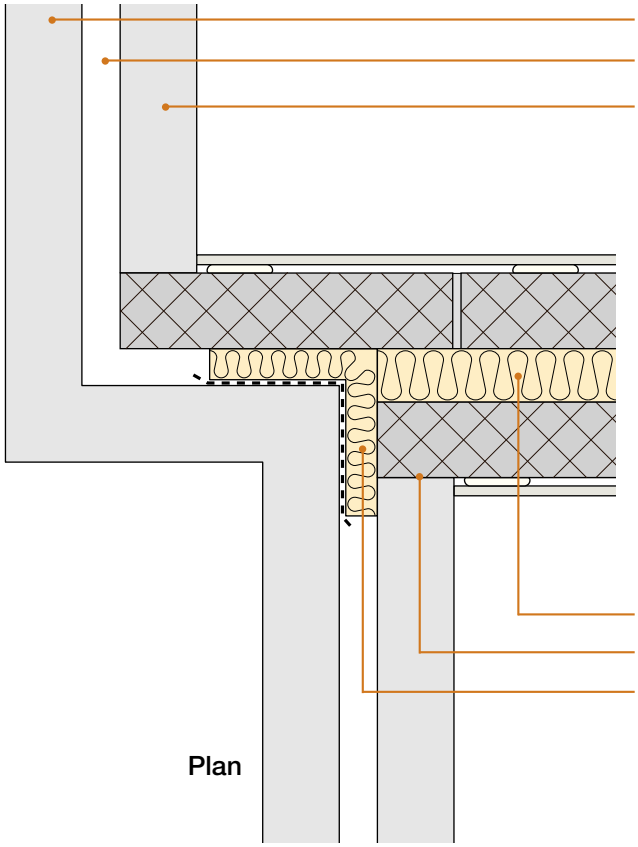
Inner leaf where there is no separating floor e.g. for houses

- 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

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

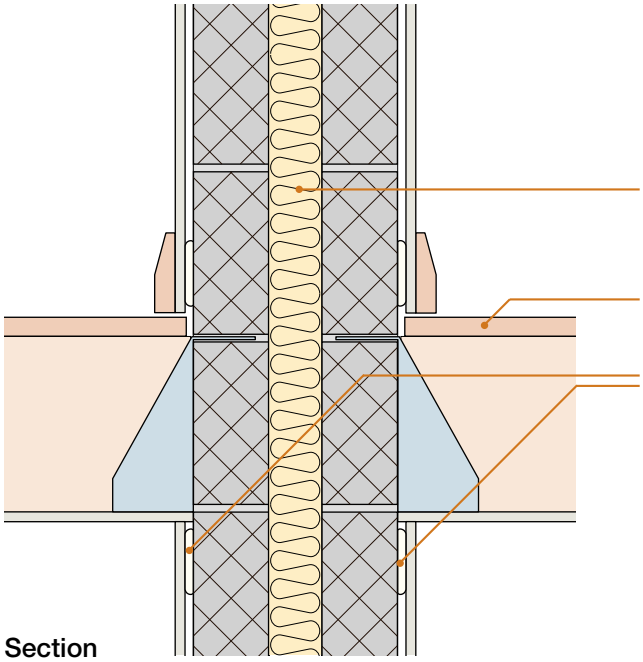
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

- Superglass 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



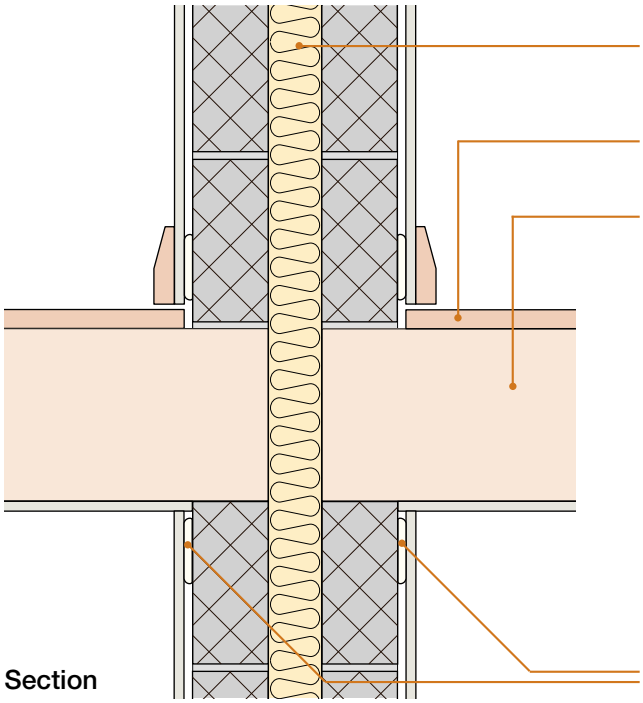
Section

Superglass 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



Section

Superglass Party Wall Roll (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

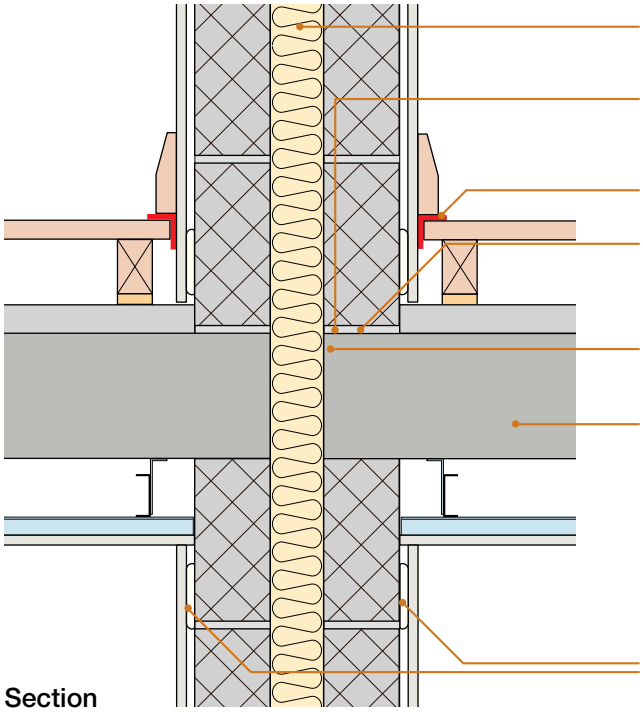
Floor construction:

- 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

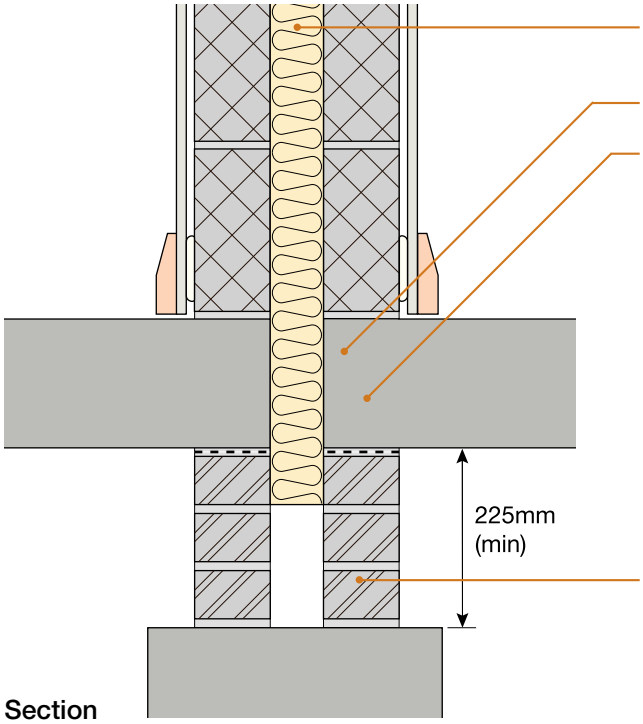


Section

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

- Superglass 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

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

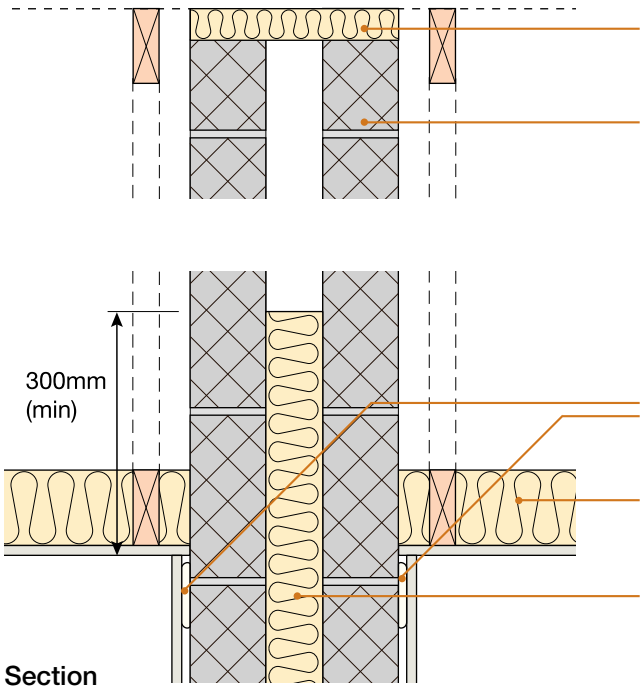


Section

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

- Superglass 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.

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

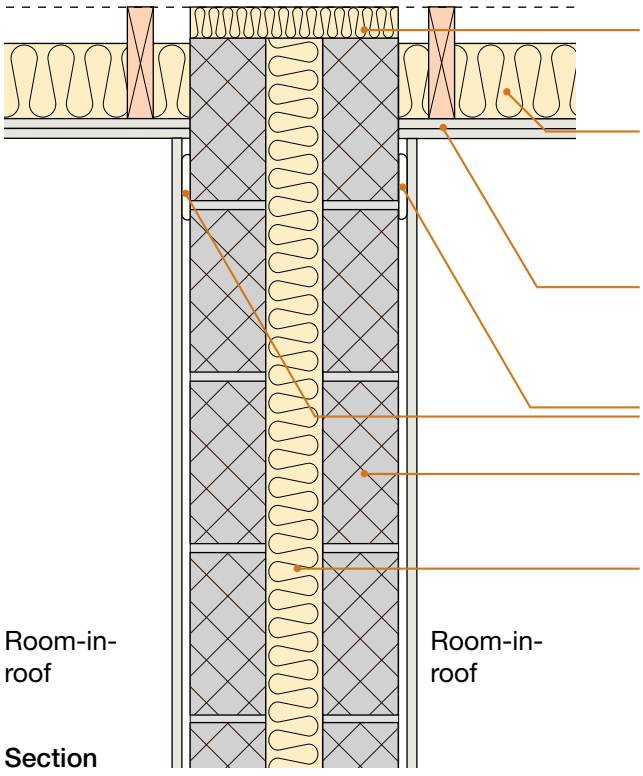
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Superglass 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

Superglass 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)?			
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 Superglass Party Wall Roll used?			
9.	Are insulation rolls 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 Superglass, manufacturer of the Party Wall Roll:

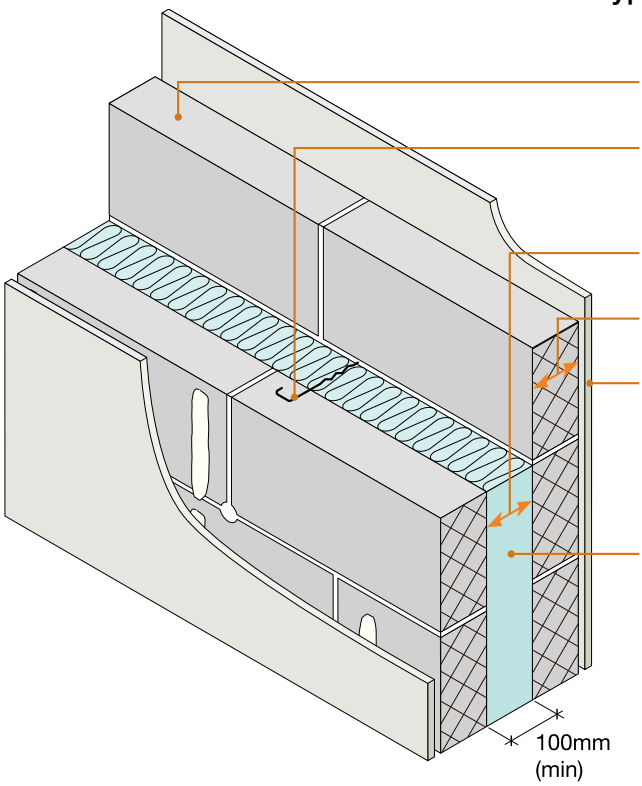
Telephone: 0844 3814022 **Fax:** 01786 451245 **E-mail:** technical@superglass.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-28

Lightweight aggregate blocks ■
Knauf Insulation Supafil® Party Wall blown glass mineral wool insulation ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

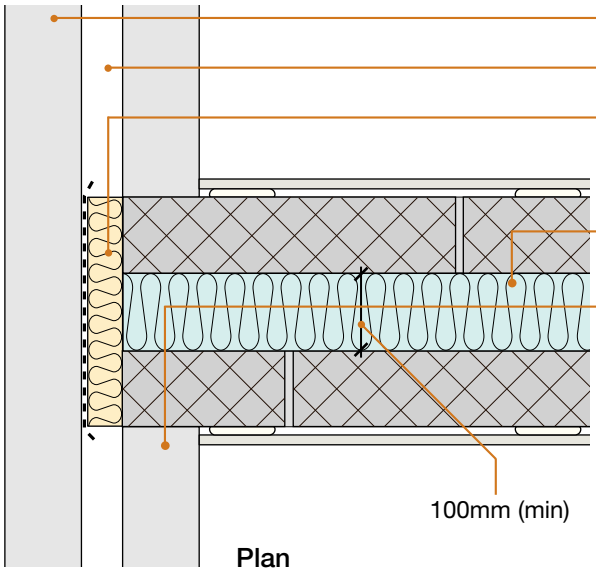


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Knauf Supafil® Party Wall blown glass mineral wool insulation
External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

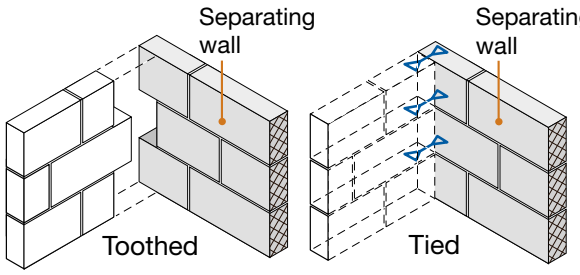
DO

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

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

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

Supafil® Party Wall

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

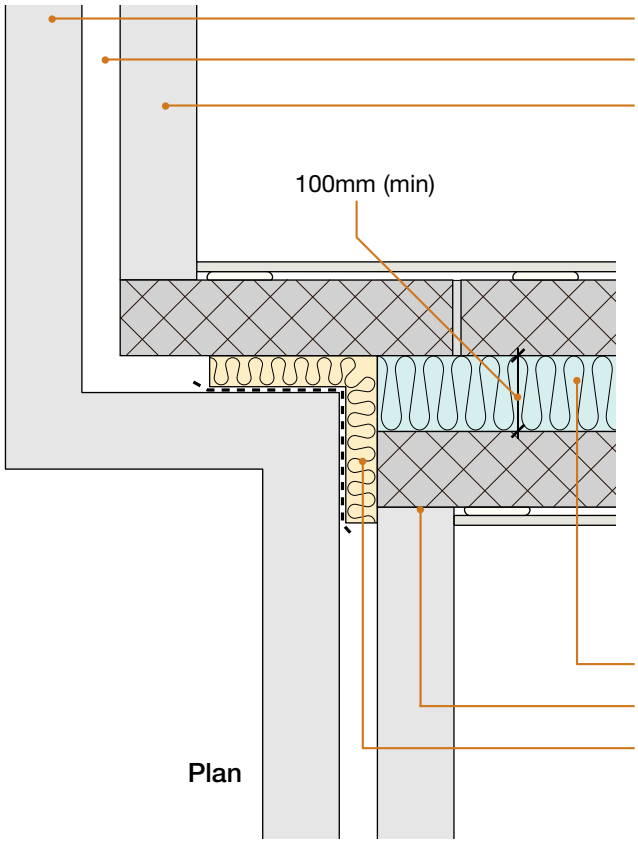
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

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

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

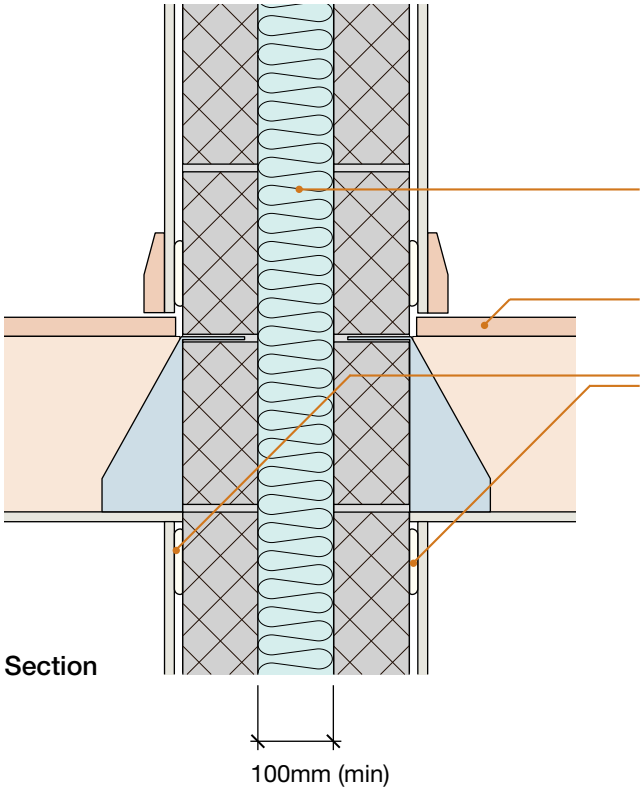
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Supafil® Party Wall

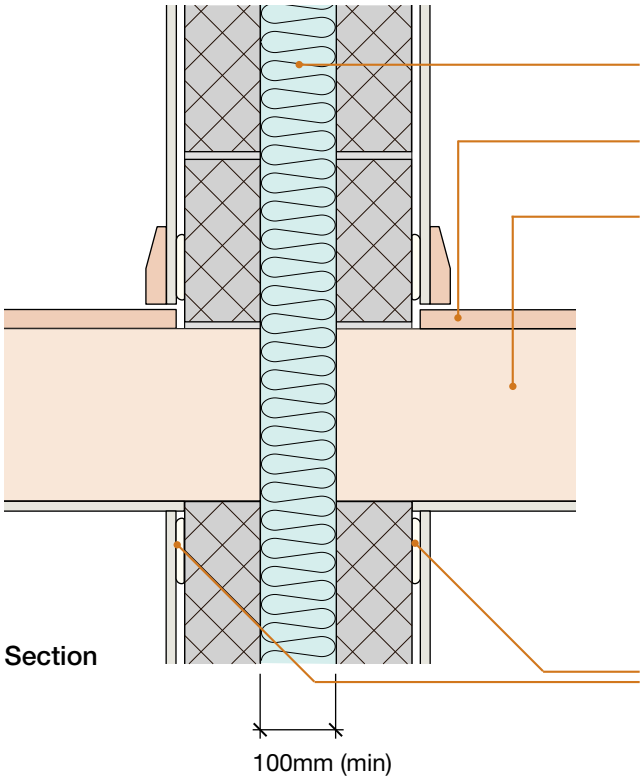
Tooth or tie walls together

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

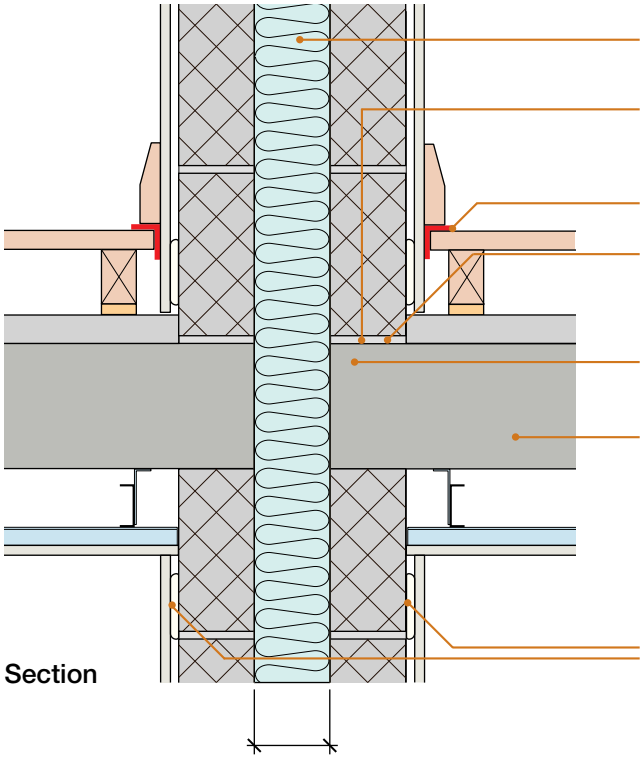


4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



Sketch shows timber joists built in

5. Separating floor junction



Section

Supafil® Party Wall

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

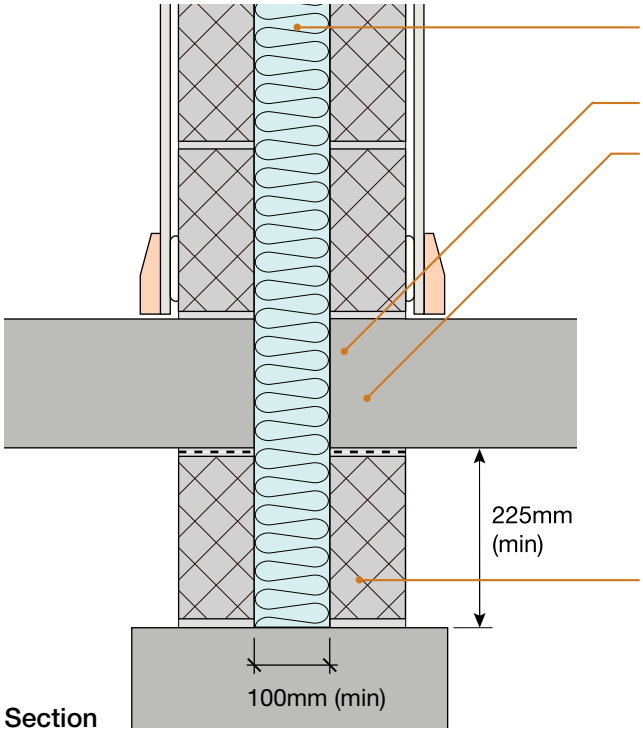
Separating floor must not be continuous between dwellings

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

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

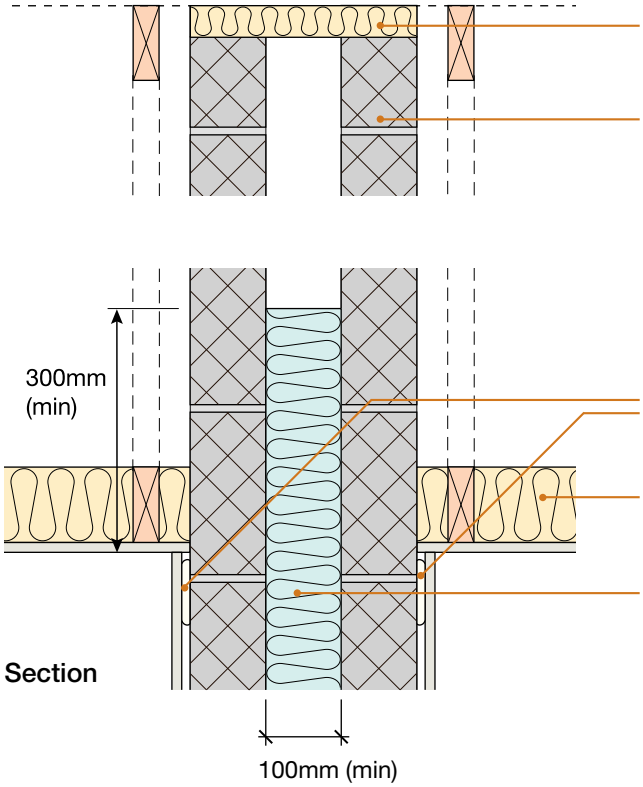
Supafil® Party Wall

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.

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

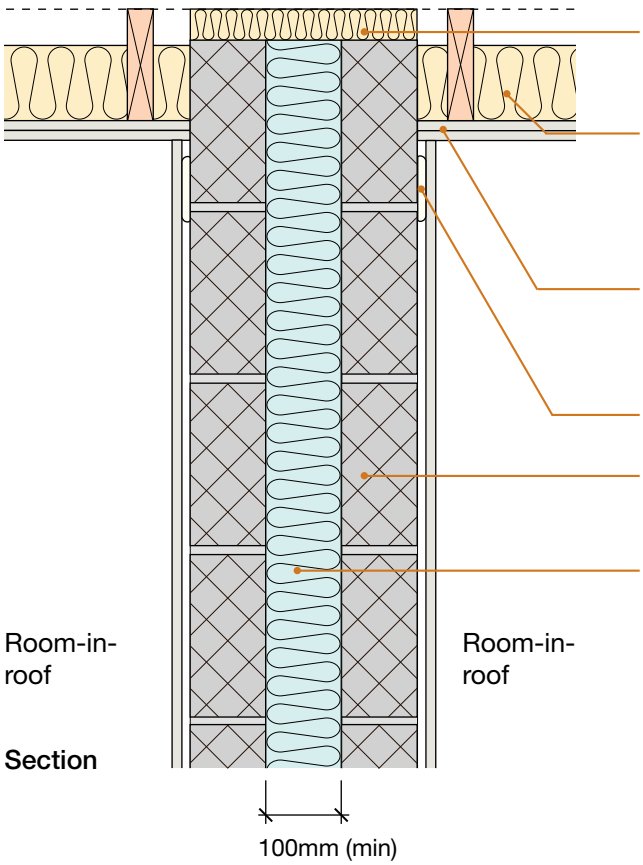
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Supafil® Party Wall

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

Supafil® Party Wall

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

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

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

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

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

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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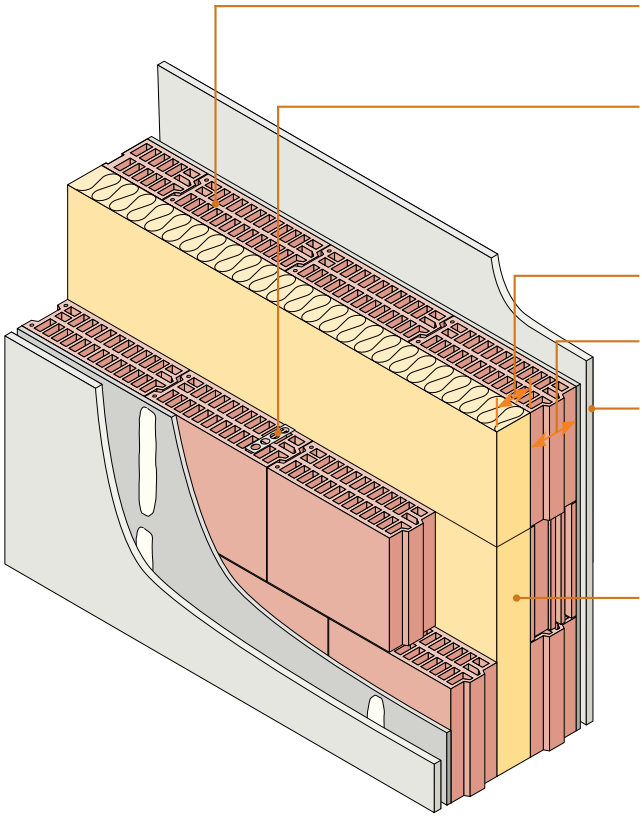
Separating Wall – Cavity Masonry E-WM-29

Porotherm blocks - thin joint ■
Insulated cavity ■
Ecoparge and gypsum-based board (nominal 8 kg/m²) on dabs ■



Block	Minimum 100mm Porotherm perforated clay blocks
Wall ties	Wall ties, as approved list below, and installed at no more than 2.5 ties per square metre
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs on Porotherm Ecoparge (nominal 4mm, minimum 3mm)
Insulation	Mineral wool rolls or batts, maximum 24 kg/m³
External	Porotherm inner leaf and masonry outer leaf with 50mm (min) cavity - clear, fully filled or partially filled with insulation

IMPORTANT

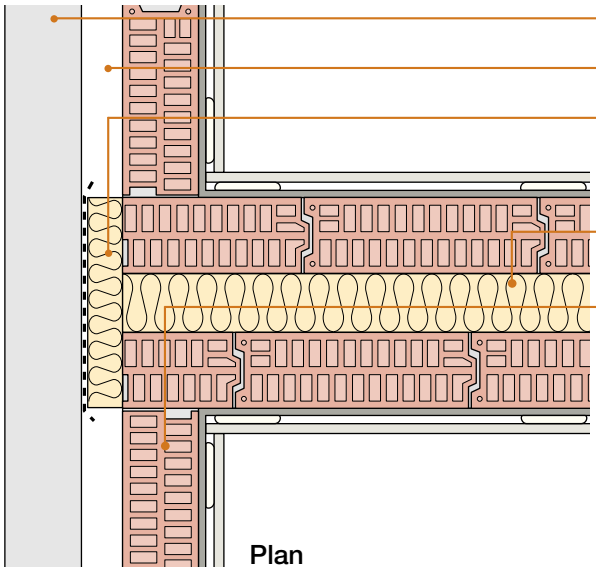
Only the following wall ties may be used in this separating wall:

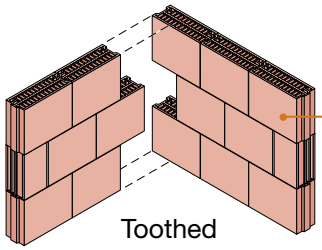
- Ancon Building Products CCBA 'Type A'

DO

- Keep cavity, insulation and wall ties free from mortar droppings and debris
- When using cut blocks, perpends must be jointed with mortar. Perpends exceeding 15mm must be fully filled; alternatively, those up to 15mm may be pointed.
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only Porotherm PTH blocks and Porotherm bed joint mortar are used in the construction of separating walls and flanking structures in accordance with manufacturer's instructions
- Ensure that the Porotherm Ecoparge is applied to the separating walls in accordance with manufacturer's instructions, paying particular attention to sealing the vertical joints between blocks
- 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
- Ensure no chasing for services are made in the separating wall leaves
- 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)

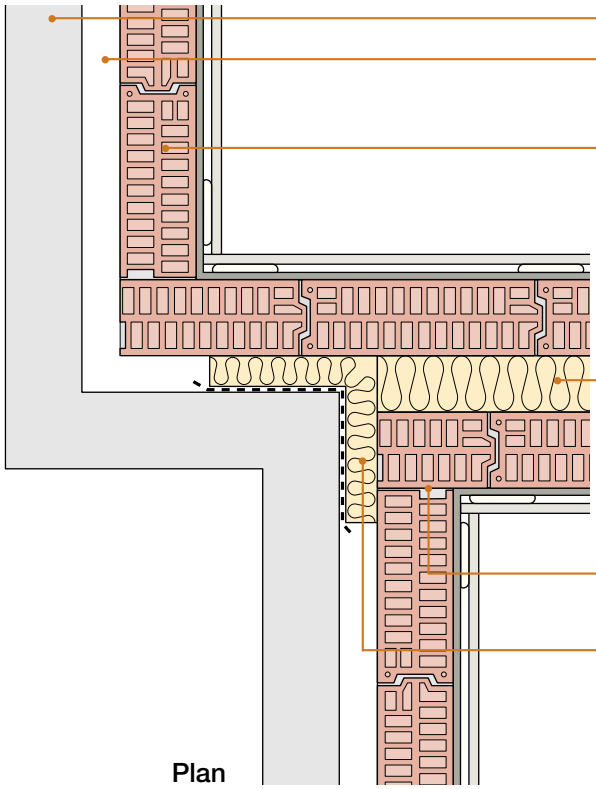
Mineral wool insulation (no gaps to remain)

Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m^2 gypsum board on dabs

The separating wall must be toothed into the inner leaf of the flanking wall. Cut blocks should be used to give a ‘square’ end to the leafs

Traditional mortar is required on perpend joints that do not have both parts of the interlocking t&g feature

2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

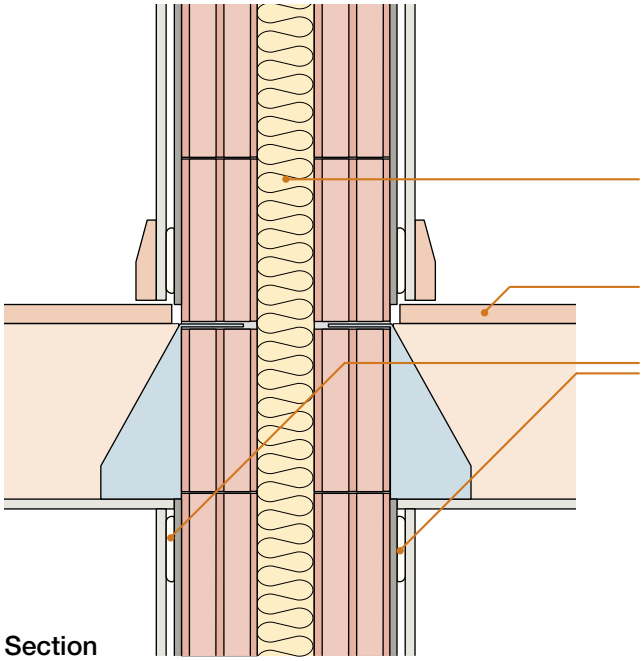
Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m^2 gypsum board on dabs

Mineral wool insulation (no gaps to remain)

Tooth 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



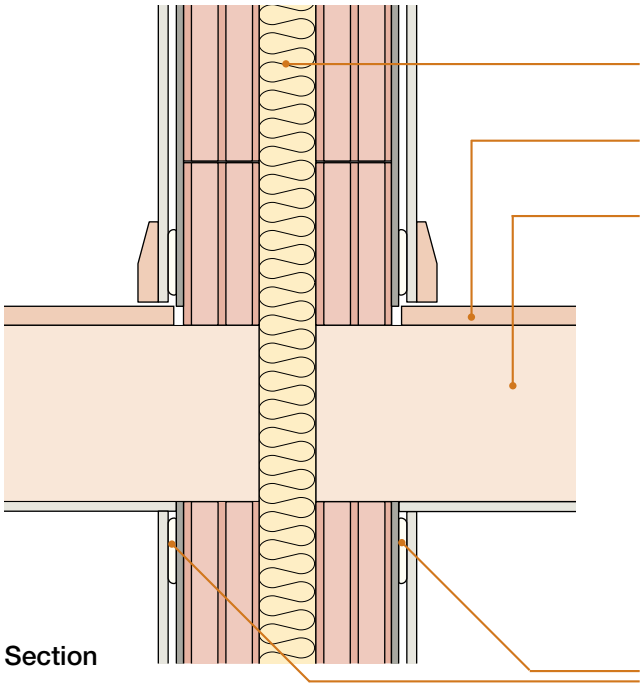
Section

Mineral wool insulation (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



Section

Mineral wool insulation (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

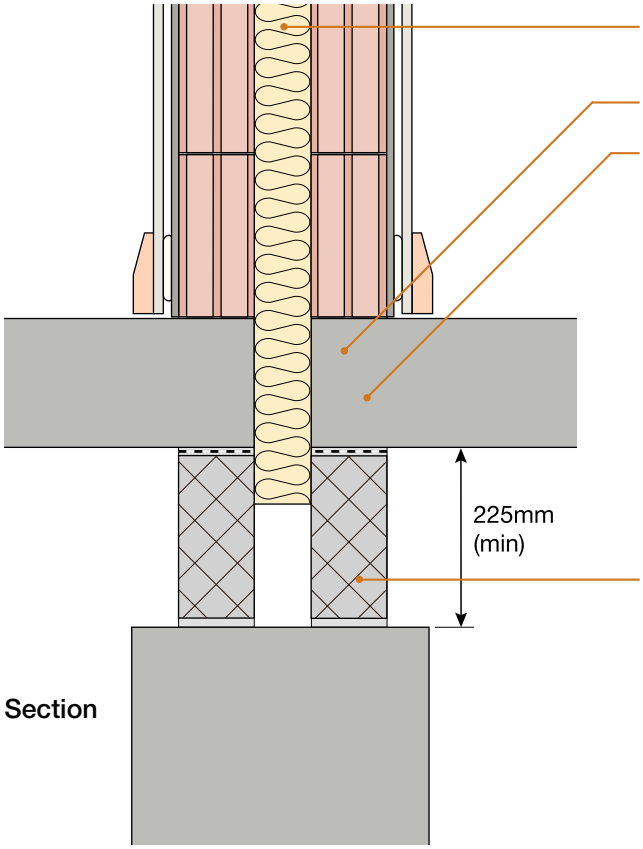
Floor construction:

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



Mineral wool insulation (no gaps to remain)

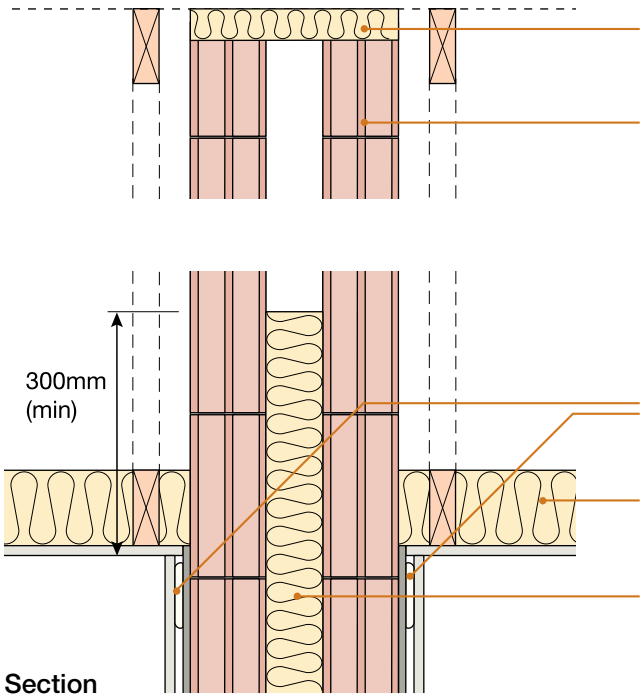
Ground floor not continuous between dwellings

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

6. 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)

Mineral wool insulation (no gaps to remain)

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are 100mm (min) Porotherm blocks used in separating wall?			
2.	Is separating wall cavity at least 75mm?			
3.	Are only the named 'Type A' wall ties installed at no more than 2.5 ties per square metre in separating wall?			
4.	Are insulation sections tightly butted together?			
5.	Is cavity free from droppings and debris?			
6.	Is Ecoparge (nominal 4mm, minimum 3mm) applied to both leafs?			
7.	Is the separating wall free from service chasing?			
8.	Is external (flanking) wall inner leaf 100mm (min) Porotherm blocks with Ecoparge applied?			
9.	Is junction with flanking wall toothed using cut blocks and mortared perpends?			
10.	Is external (flanking) wall cavity at least 50mm?			
11.	Are cavity stops installed where specified in the Robust Detail?			
12.	Are voids around floor joists fully filled/sealed?			
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 Wienerberger, supplier of Porotherm products:

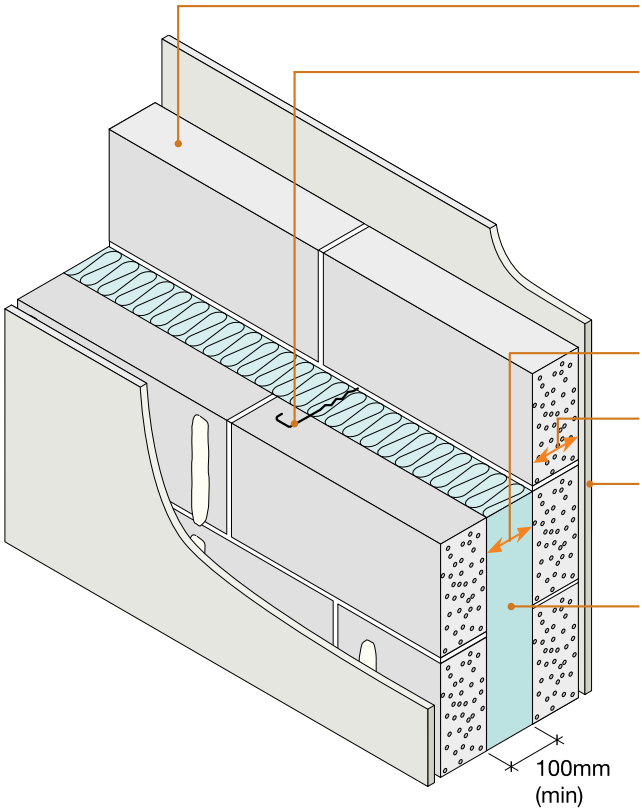
Telephone: 0161 491 8200 **Fax:** 0161 491 6529 **E-mail:** Regional Tech Manager - see www.wienerberger.co.uk/blocks for contact information

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-30

- Aircrete blocks - standard and thin joint
- Knauf Insulation Supafil® Party Wall blown glass mineral wool insulation
- Gypsum-based board (nominal 8 kg/m²) on dabs

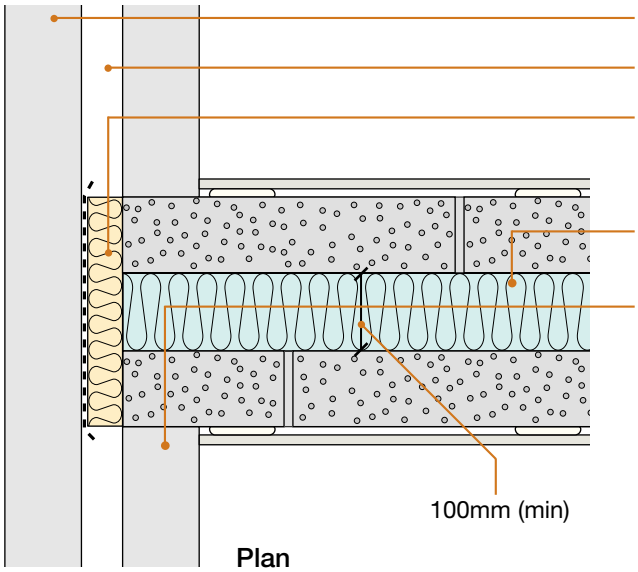


Block density	600 to 800 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A) For thin joint, wall ties must be Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Knauf Supafil® Party Wall blown glass mineral wool insulation
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

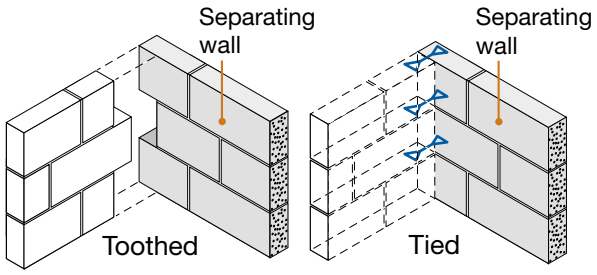
DO

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

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

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

Supafil® Party Wall

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

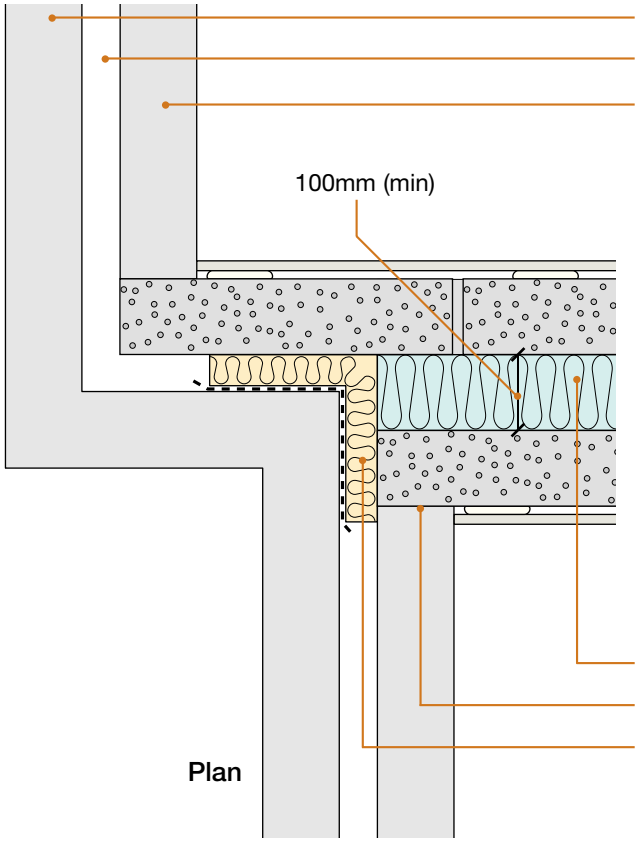
- 100mm (min) aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

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

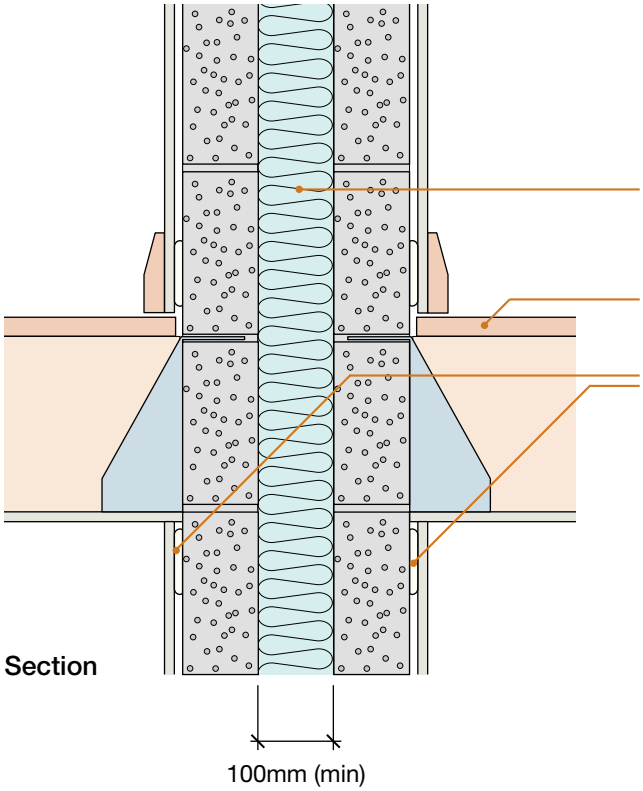
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Supafil® Party Wall

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

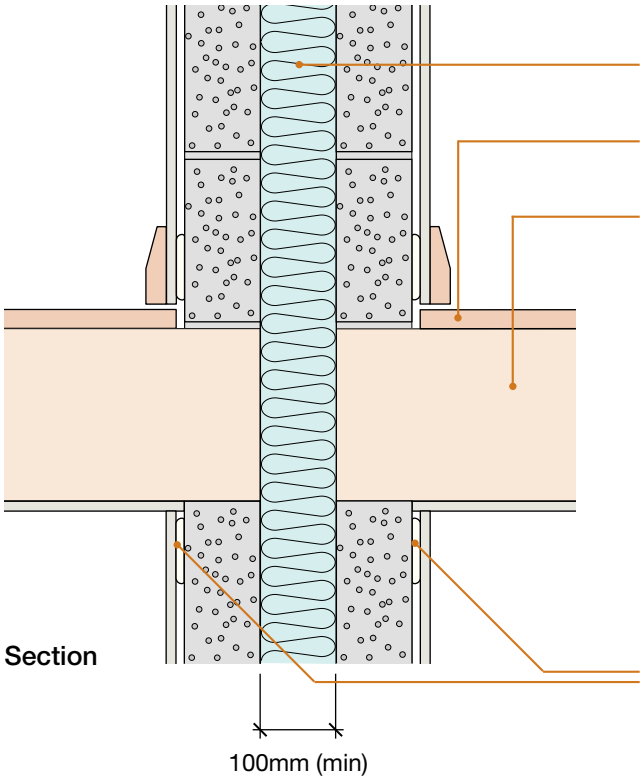


Supafil® Party Wall

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



Supafil® Party Wall

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

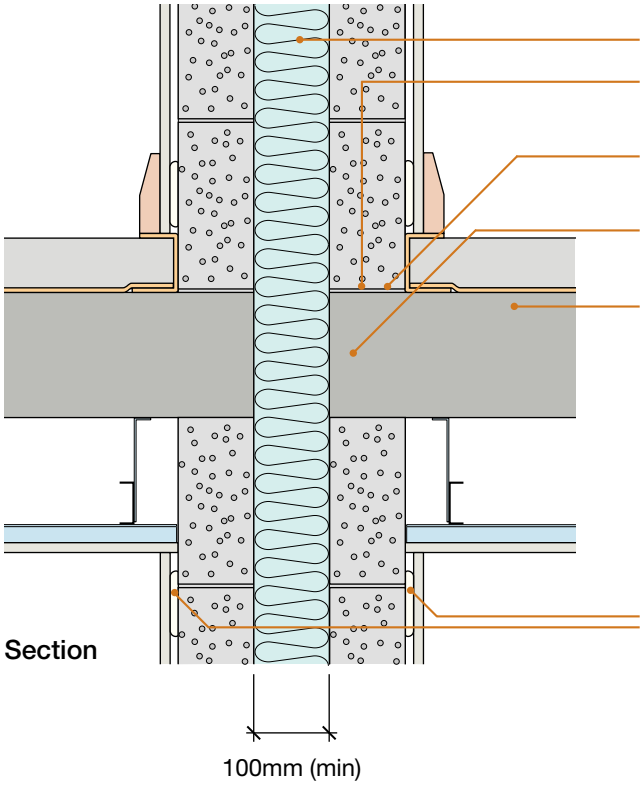
Floor construction:

- 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



Supafil® Party Wall

Separating wall must not be continuous between storeys

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

Separating floor must not be continuous between dwellings

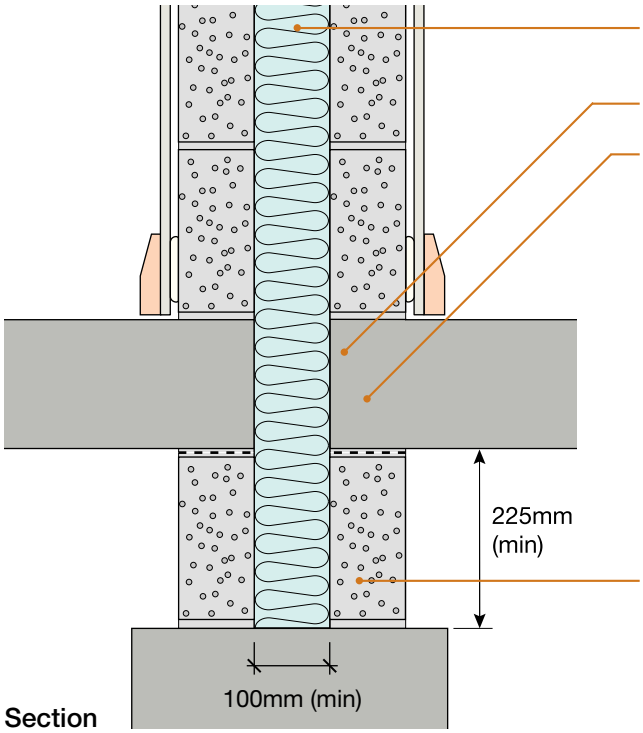
Separating floor:

- if using robustdetails® for floor, refer to Table 3a in Introduction and see separating floor Robust Detail for floating floor and ceiling options
- at least one storey of the separating wall flanking the separating floor must be built in aircrete of minimum density 680 kg/m^3
- if using floor requiring pre-completion testing, seek specialist advice

Continuous horizontal ribbon of adhesive

Sketch shows E-FC-4 type separating floor and CT0 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



Supafil® Party Wall

Ground floor not continuous between dwellings

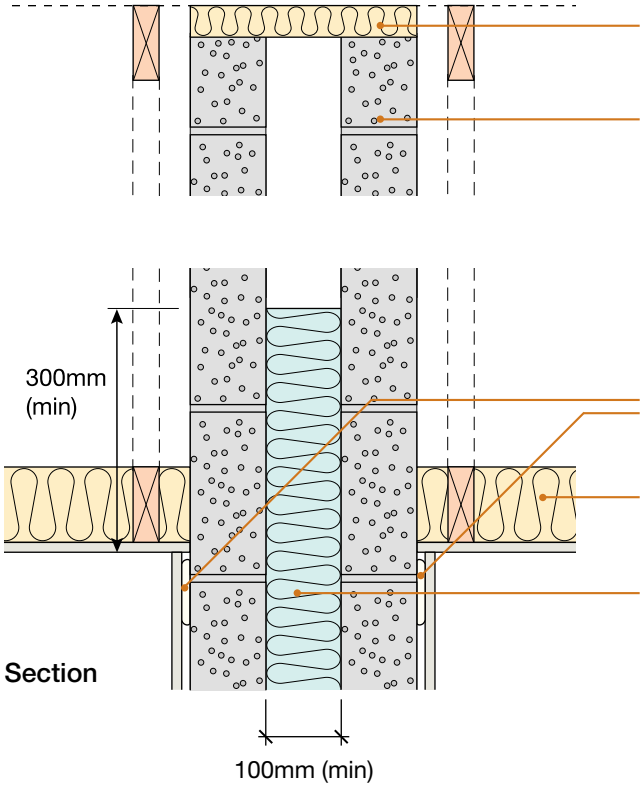
Ground floor construction:

- 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

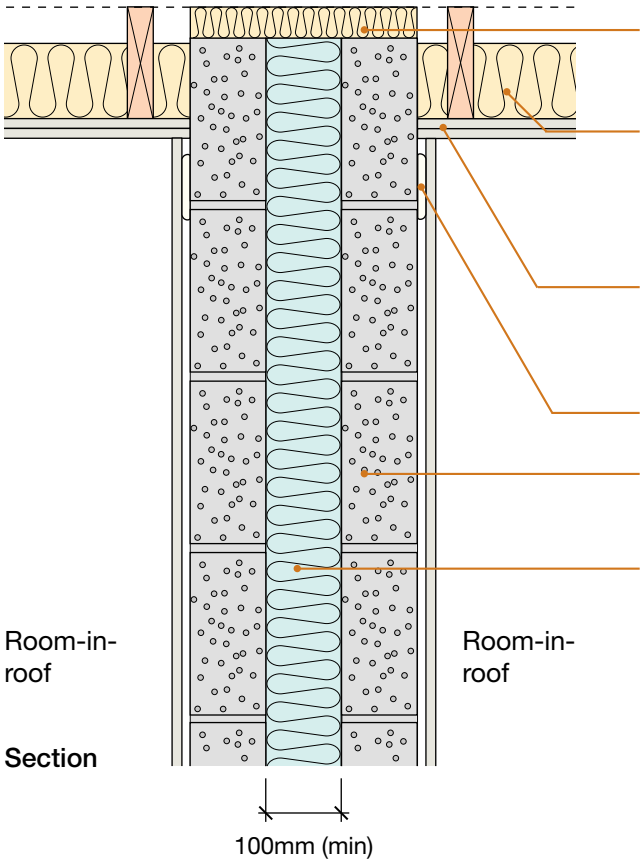
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Supafil® Party Wall

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

Supafil® Party Wall

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 aircrete (600 to 800 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)? For thin joint, are wall ties Ancon Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre?			
6.	Are cavity stops installed where specified in the Robust Detail?			
7.	Are joints fully filled?			
8.	Is blue Supafil® Party Wall installed to a maximum density of 25 kg/m^3, and was it by an approved installer?			
9.	Are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
13.	Is separating wall satisfactorily complete?			

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

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

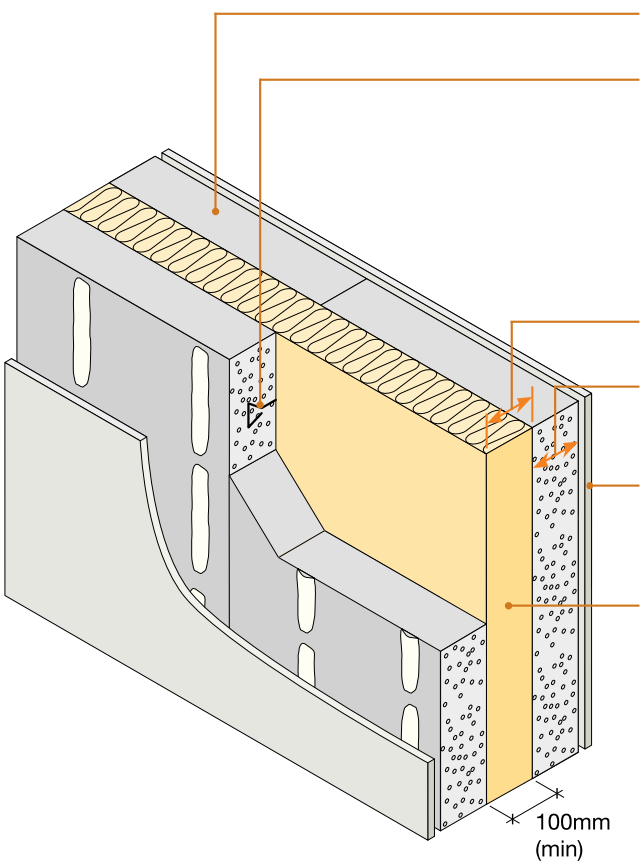
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

E-WM-31

- Attached houses only
- H+H - Celcon Vertical Wall Panels - thin joint
- Gypsum-based board (nominal 8 kg/m²) on dabs
- Used with 'RoofSpace I-House System'

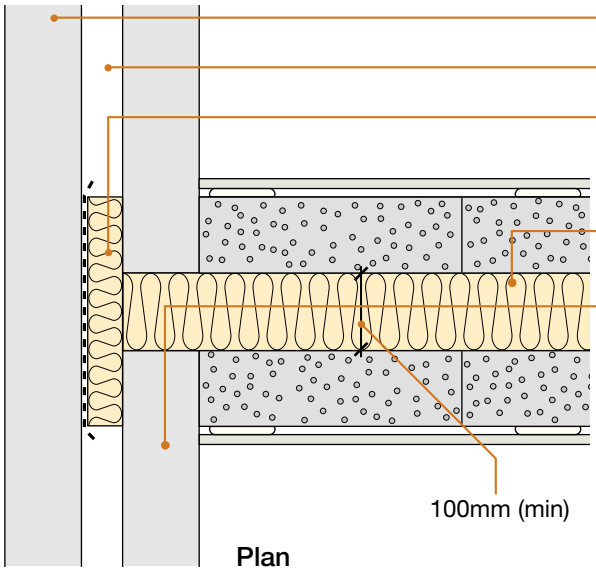


Panel density	575 kg/m³
Wall ties	Wall ties must be Vista VE4, Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 3 ties per storey height (see section 3)
Cavity width	100mm (min)
Panel thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	100mm mineral wool maximum density 40 kg/m³
External (flanking) wall	Celcon Vertical Wall Panels or aircrete (450-800 kg/m³) 50mm (min) cavity – clear, fully filled or partially filled with insulation – and masonry outer leaf

DO

- Keep cavity, insulation and wall ties free from debris
- Fully fill all joints
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- 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

1. External (flanking) wall junction



Plan

Masonry outer leaf

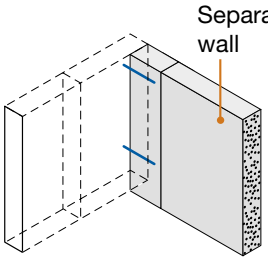
External wall cavity (min 50mm)

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

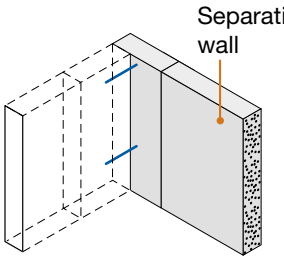
100mm mineral wool max. 40 kg/m³ (no gaps to remain)

Inner leaf

- Celcon Vertical Wall Panels or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 8 kg/m² gypsum-based board



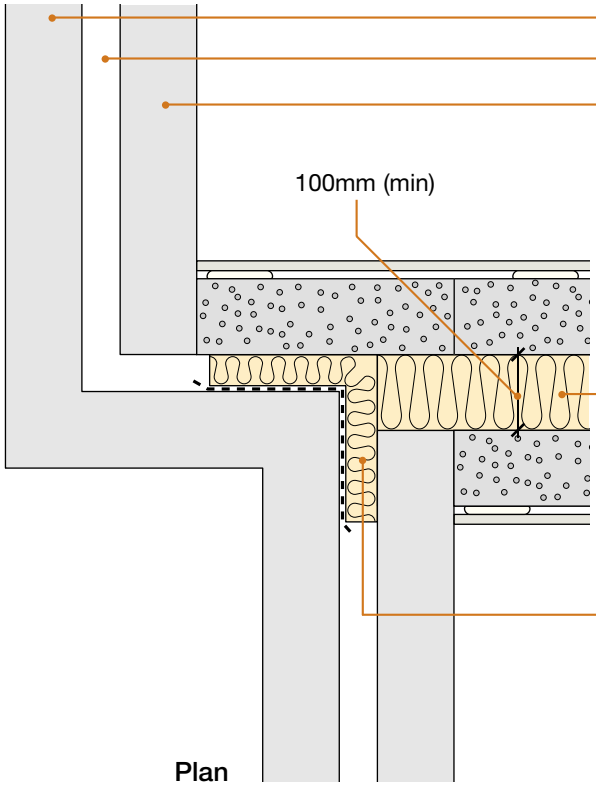
Abutting inner leaf



Through inner leaf

Vertical Wall Panels forming the separating wall may abut, or be taken through to the cavity face of the inner leaf

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf

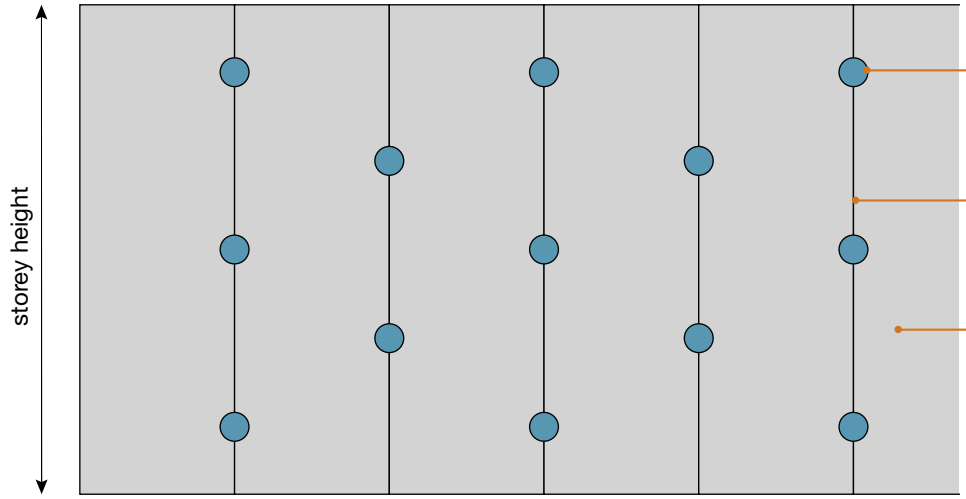
- Celcon Vertical Wall Panels or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 8 kg/m² gypsum-based board

See jointing options in diagram 1

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

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

3. Wall tie placement

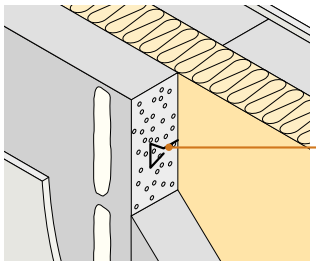


Only the following wall ties are permitted:

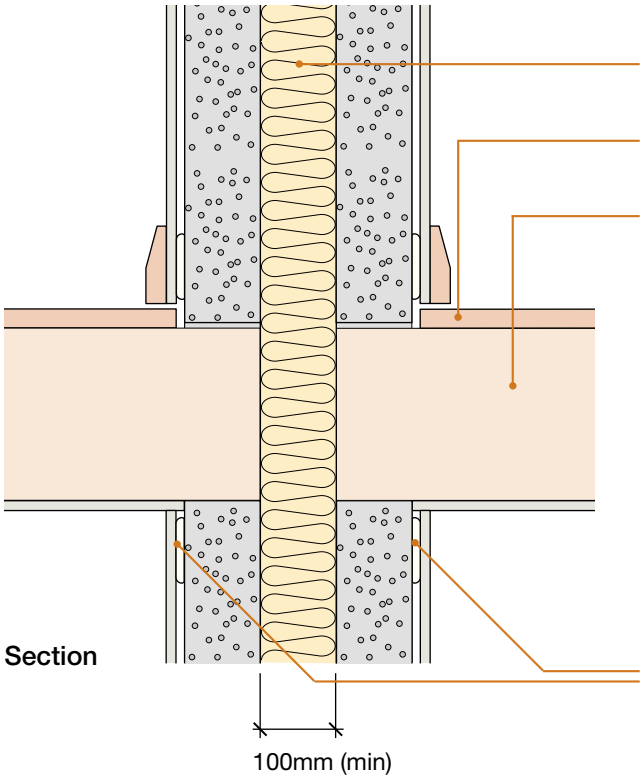
- Vista VE4
- Ancon Building Products Staifix HRT4
- Clan PWT4

Wall ties to be positioned following the alternating pattern shown above.

No more than 3 ties per storey-height joint



4. Internal floor junction: timber floor joists built in



Section

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

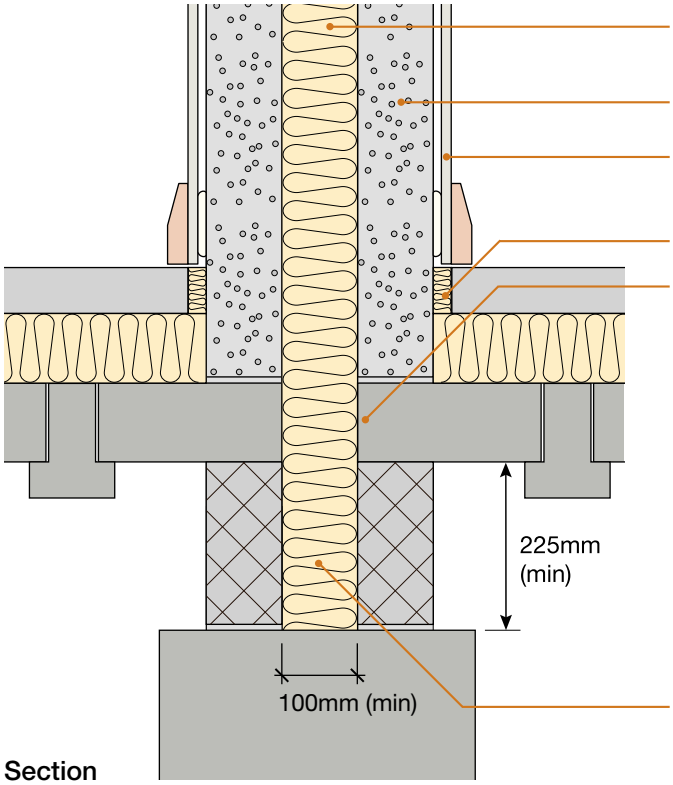
Internal floors should not be continuous between dwellings

Floor construction:

- timber joists built into aircrete block course:
  - 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)

Continuous horizontal ribbon of adhesive

5. Ground floor junction: beam and block or precast concrete plank



Section

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

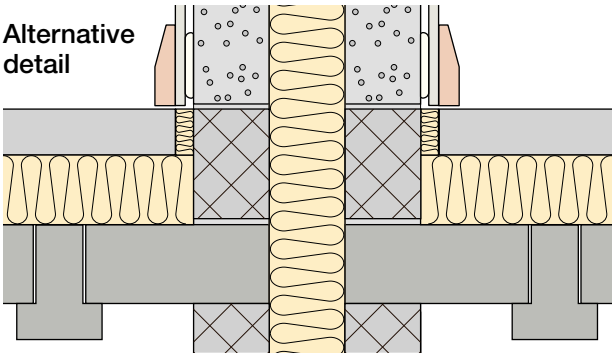
Celcon Vertical Wall Panels

Gypsum-based board (nominal 8 kg/m²) mounted on dabs

Perimeter insulation isolating screed from wall

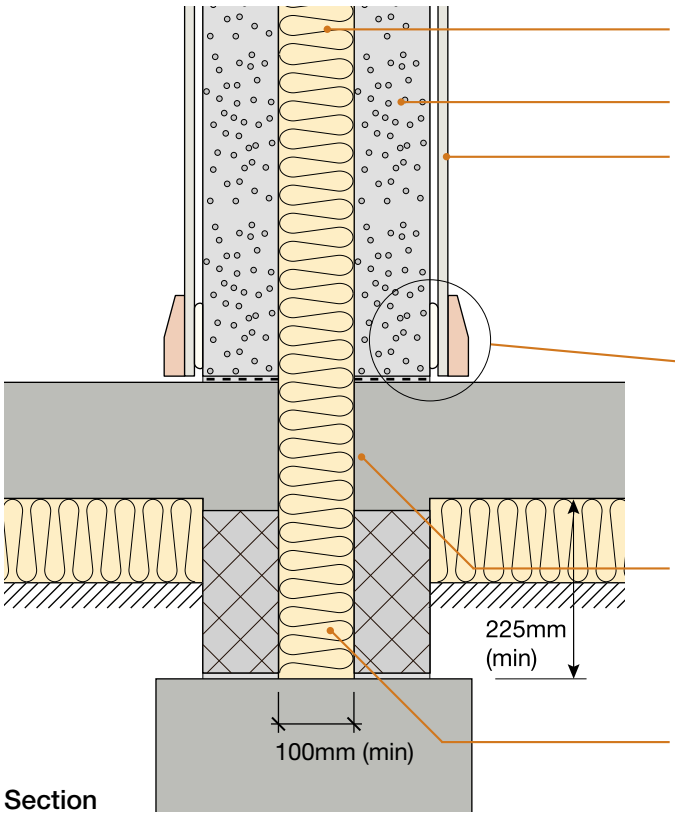
Ground floor not continuous between dwellings

Alternative detail



Cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable

6. Ground floor junction: cast in-situ suspended concrete slab or ground bearing concrete slab

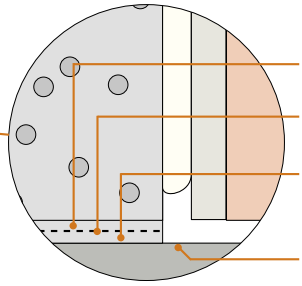


Section

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

Celcon Vertical Wall Panels

Gypsum-based board (nominal 8 kg/m²) mounted on dabs



Thin layer mortar

DPM

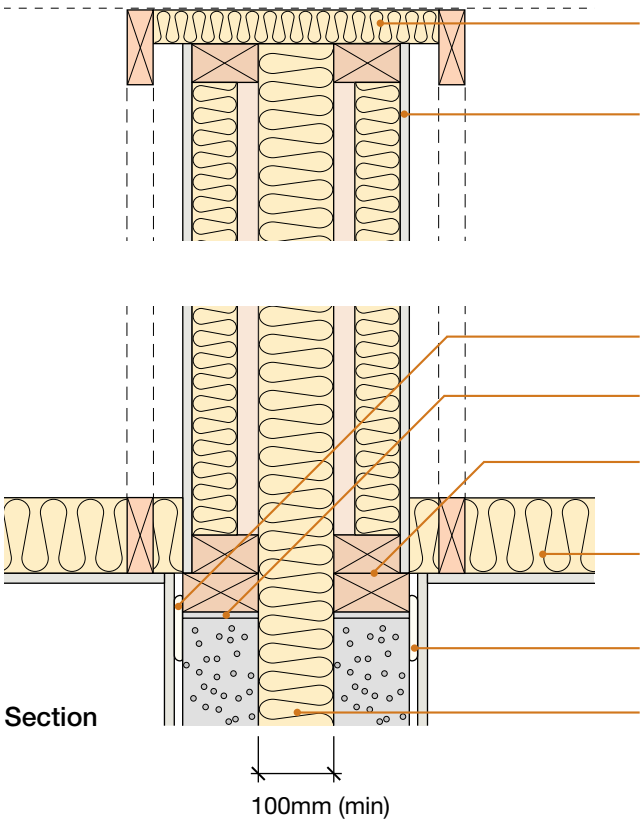
Levelling mortar bed as appropriate

Floor slab

Ground floor not continuous between dwellings

Cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable

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



Section

Junction between separating wall and roof filled with flexible closer

RoofSpace I-Roof™ spandrel panel lined with 2 layers of 8 kg/m² gypsum board, or 1 layer 15mm Fermacell

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

Wall plate bedded on min. 2mm thin-joint mortar

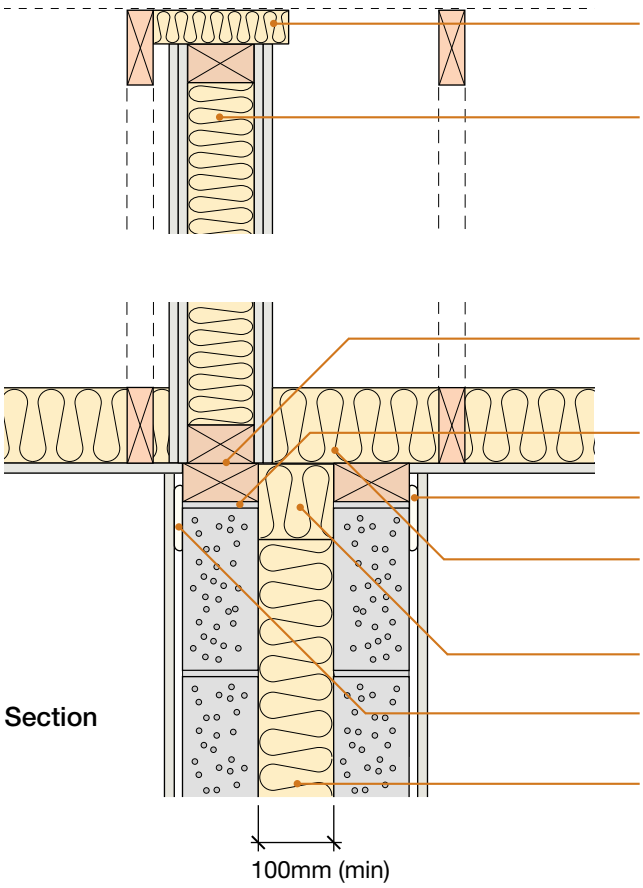
Spandrel panels to be bedded on flexible sealant or mineral wool strips

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

Continuous horizontal ribbon of adhesive

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

Alternative detail with single spandrel panel



Section

Junction between separating wall and roof filled with flexible closer

RoofSpace I-Roof™ spandrel panel lined with 2 layers of 8 kg/m² gypsum board, or 1 layer 15mm Fermacell

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

Spandrel panels to be bedded on flexible sealant or mineral wool strips

Wall plate bedded on min. 2mm thin-joint mortar

Continuous horizontal ribbon of adhesive

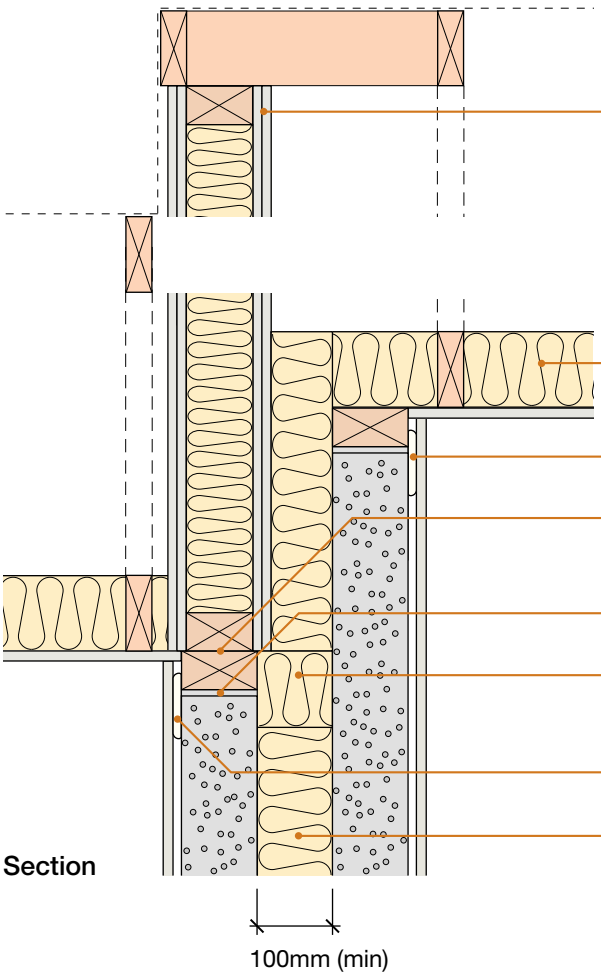
100mm (min) mineral wool insulation – 10 kg/m³ (min)

Cavity closer

Continuous horizontal ribbon of adhesive

100mm mineral wool max. 40 kg/m³ (no gaps to remain)

8. Stepped roof junction – pitched roof without room-in-roof



RoofSpace I-Roof™ spandrel panel lined with 2 layers of 8 kg/m^2 gypsum board, or 1 layer 15mm Fermacell

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

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

Continuous horizontal ribbon of adhesive

Spandrel panels to be bedded on flexible sealant or mineral wool strips

Wall plate bedded on min. 2mm thin-joint mortar

Cavity closer

Continuous horizontal ribbon of adhesive

100mm mineral wool max. 40 kg/m^3 (no gaps to remain)

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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.	Is external (flanking) wall inner leaf constructed from Celcon Vertical Wall Panels or aircrete (450 to 800 kg/m^3)?			
4.	Are separating wall leafs constructed from Celcon Vertical Wall Panels or aircrete (600 to 800 kg/m^3)?			
5.	Is cavity free from droppings and debris?			
6.	Are separating wall ties Vista VE4, Ancon Staifix HRT4 or Clan PWT4 installed at no more than 3 ties per storey-height joint?			
7.	Are cavity stops installed where specified in the Robust Detail?			
8.	Are joints fully filled?			
9.	Is 100mm mineral wool max. 40 kg/m^3 used, with no gaps remaining?			
10.	Is spandrel wall plate fully bedded on mortar, with no air gaps?			
11.	Are voids around floor joists, chases, etc. fully filled/sealed?			
12.	Where the ground floor has a floating floor treatment, has the perimeter insulation 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: H+H UK

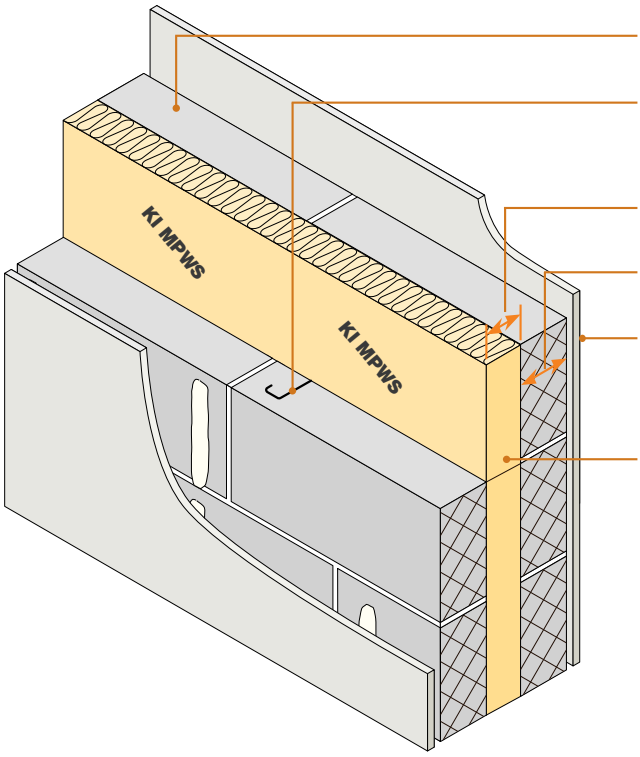
Telephone: 01732 886333 **E-mail:** info@hhcelcon.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

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

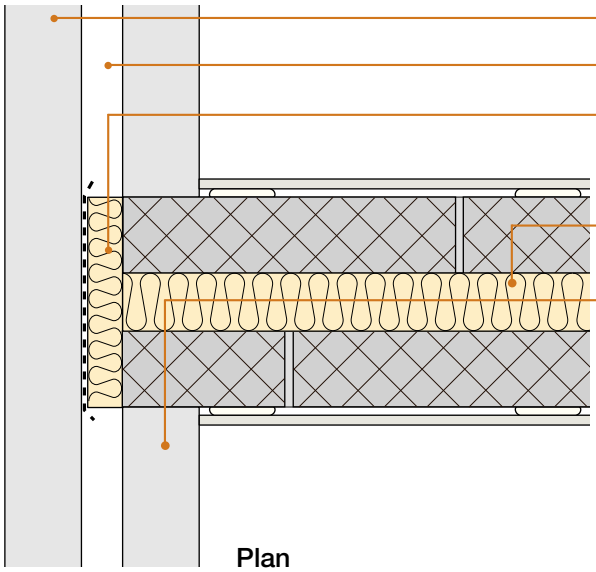


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	75mm Knauf Earthwool Masonry Party Wall Slab
External (flanking) wall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

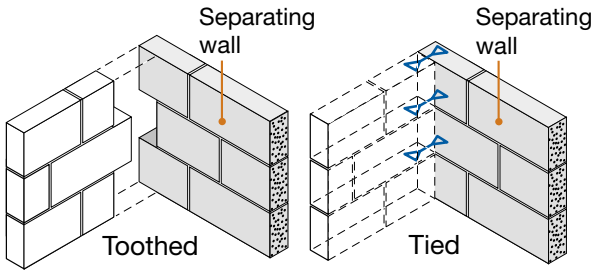
DO

- 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)

75mm Knauf Earthwool Masonry Party Wall Slab (no gaps to remain)

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

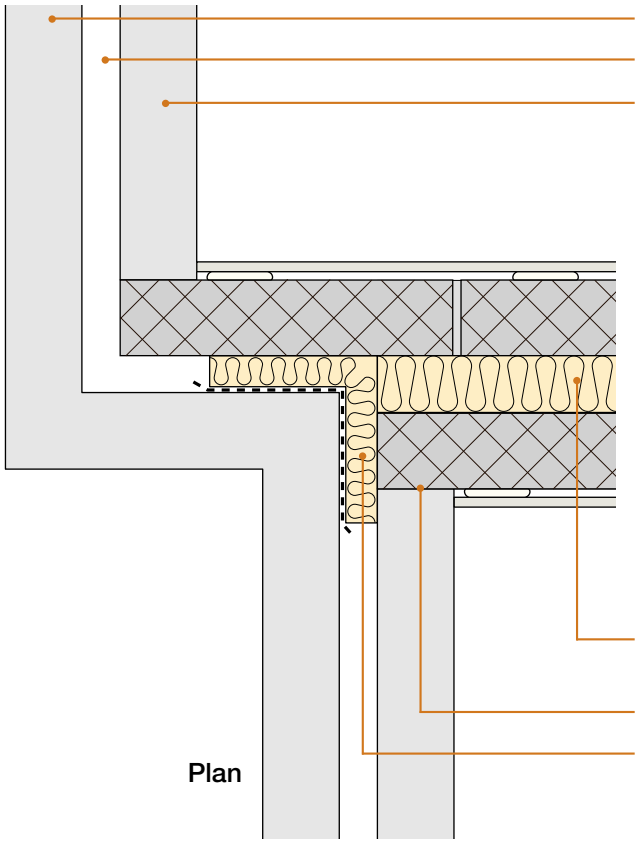
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

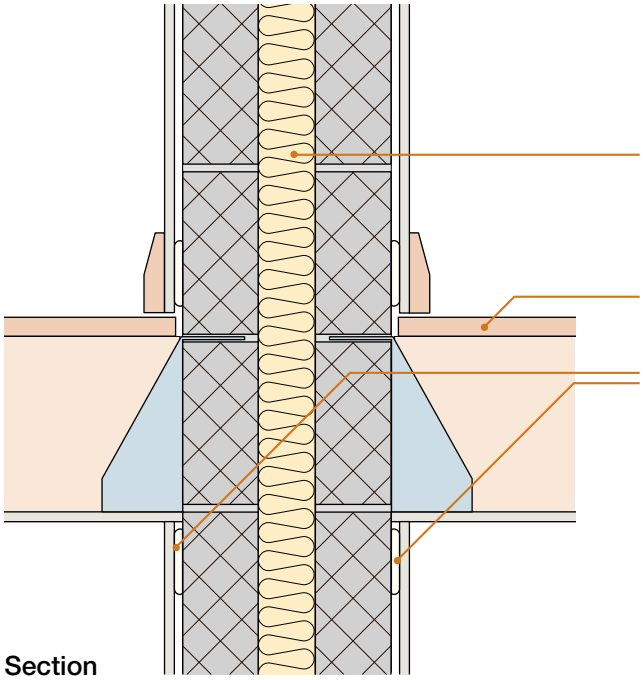
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

75mm Knauf Earthwool 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



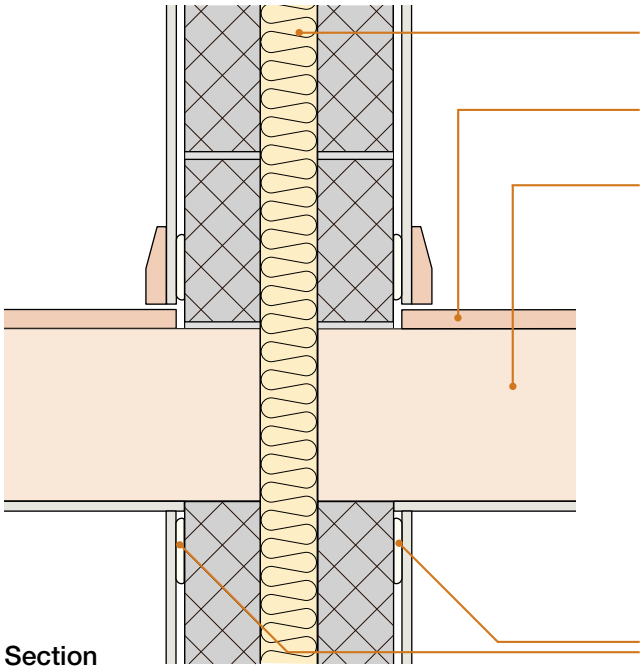
Section

75mm Knauf Earthwool Masonry Party Wall Slab (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



Section

75mm Knauf Earthwool Masonry Party Wall Slab (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

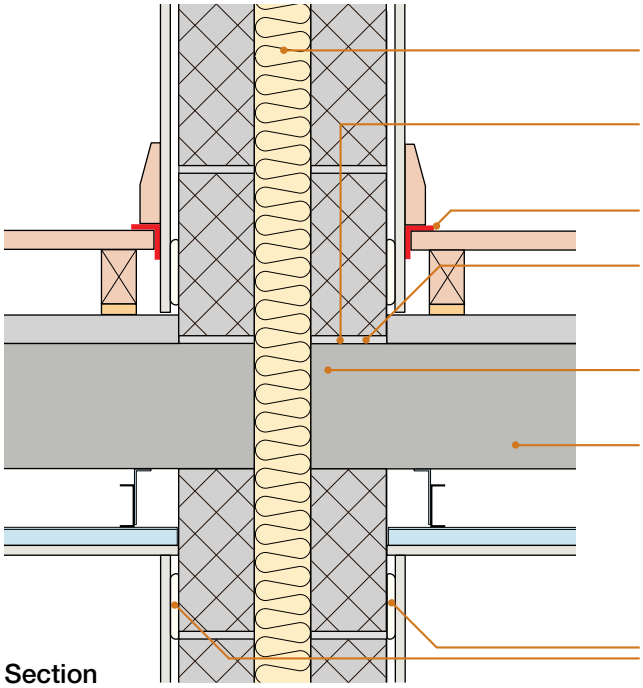
Floor construction:

- 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

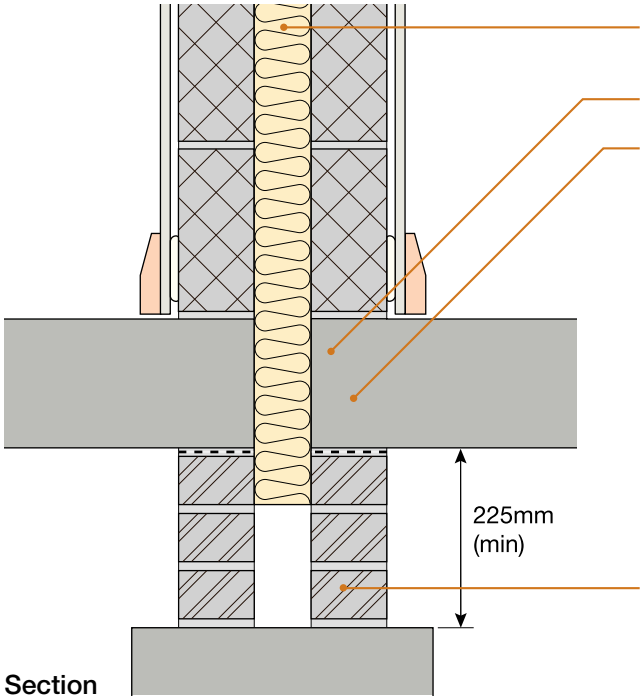


Section

- 75mm Knauf Earthwool 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

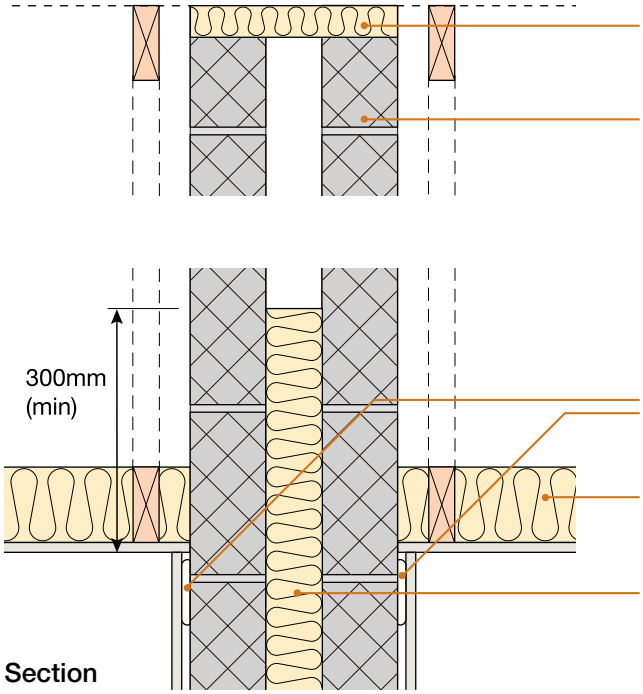


Section

- 75mm Knauf Earthwool 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



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

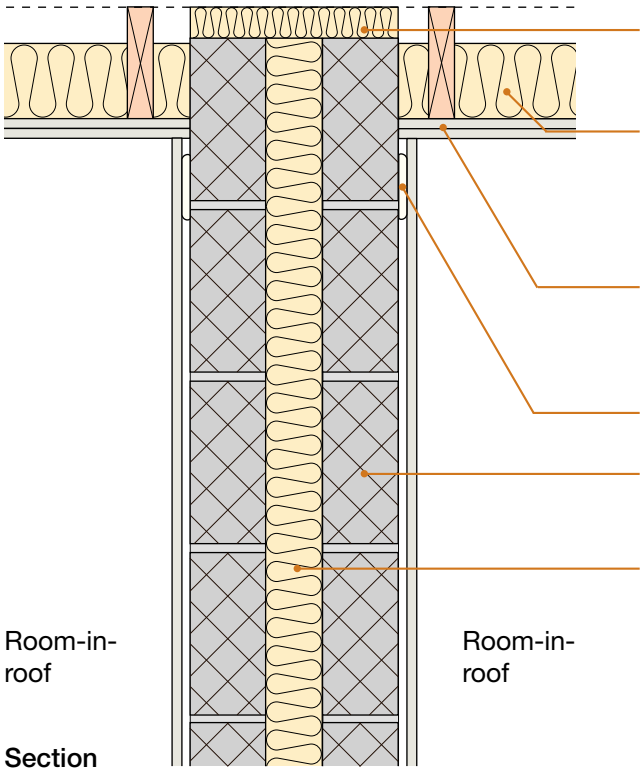
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

75mm Knauf Earthwool Masonry Party Wall Slab (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

75mm Knauf Earthwool 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 75mm Knauf Earthwool Masonry Party Wall Slab used?			
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 Earthwool Masonry Party Wall Slab:

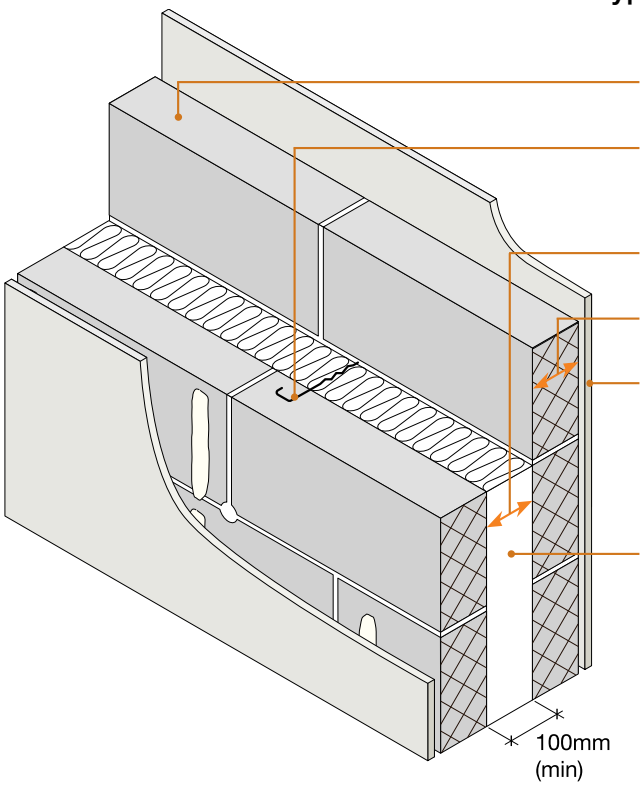
Telephone: 01744 766 666 **E-mail:** technical.uk@knaufinsulation.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry E-WM-33

Lightweight aggregate blocks ■
Superglass Superwhite 34 blown glass mineral wool insulation ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

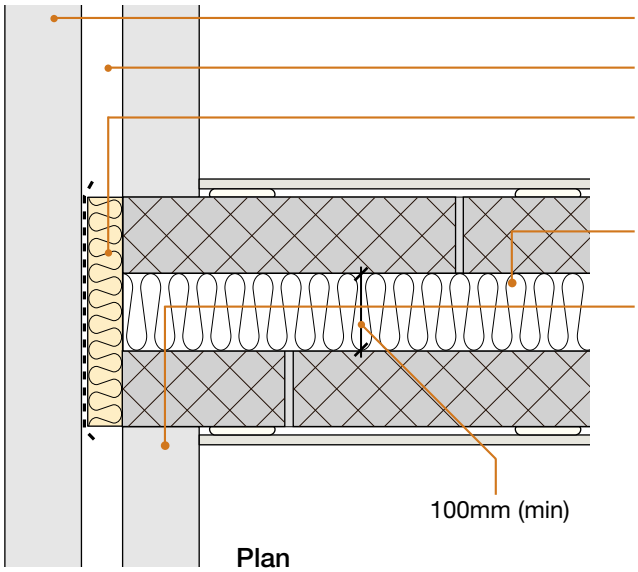


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	Superglass Superwhite 34 blown glass mineral wool insulation
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

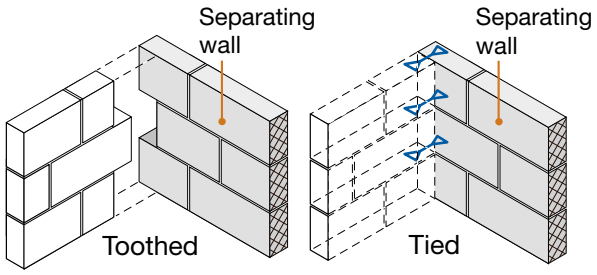
DO

- Keep cavity and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Superglass Superwhite 34 is only to be installed by contractors approved by Superglass Insulation; and must not exceed 28.75 kg/m³ density once installed
- Ensure all injection holes are drilled through mortar joints, and made good by fully filling with mortar
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

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

Superglass Superwhite 34

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

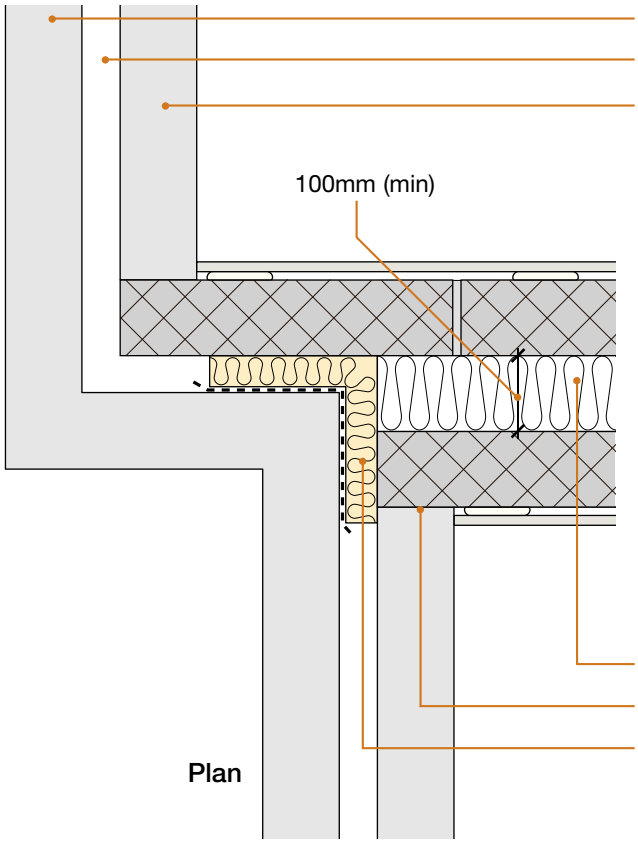
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Plasmor Aglite Ultima (1050 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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) or Plasmor Aglite Ultima (1050 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

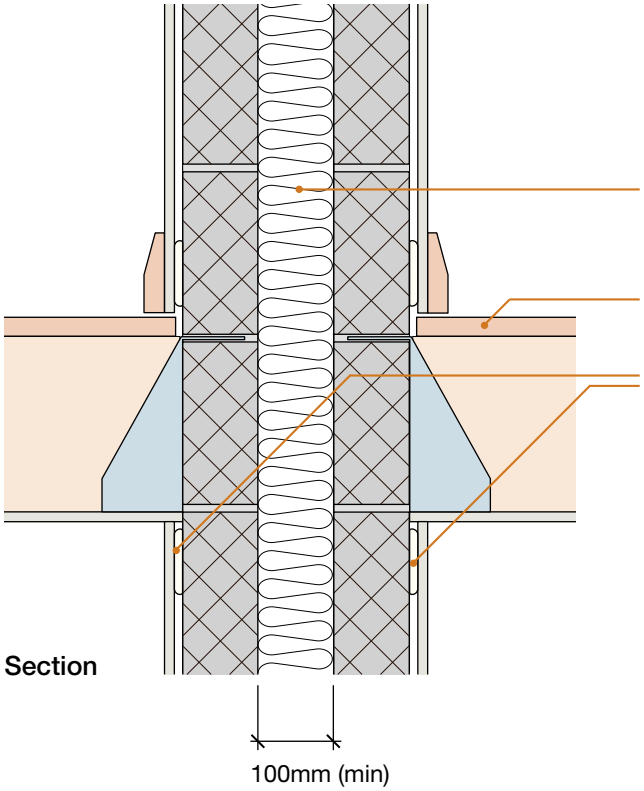
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Superglass Superwhite 34

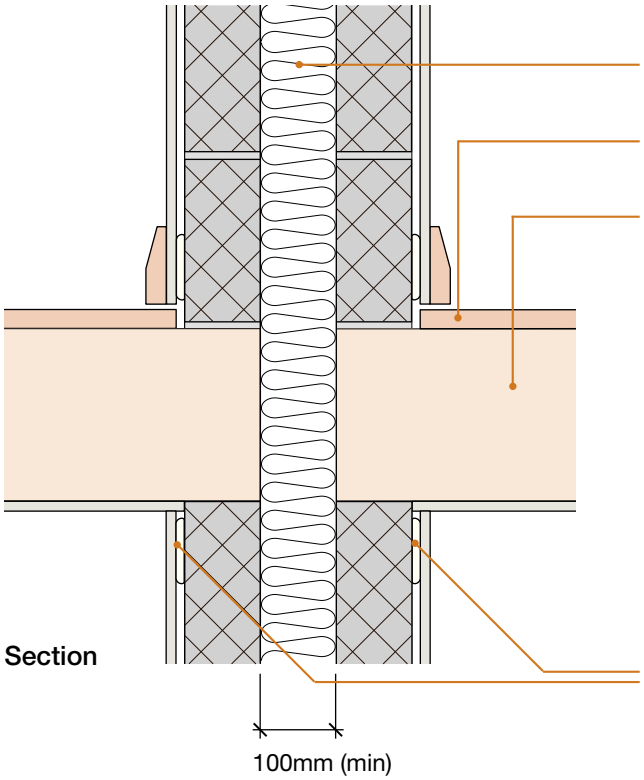
Tooth or tie walls together

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

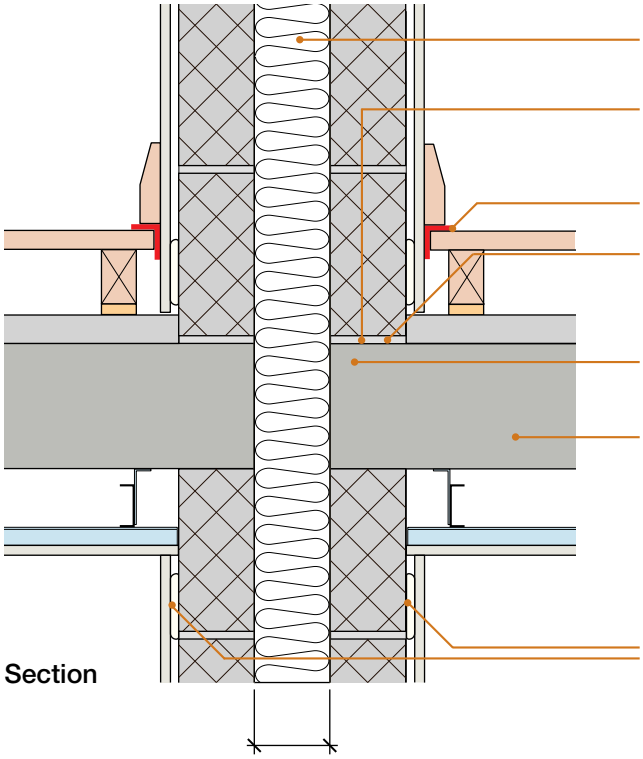


4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



Sketch shows timber joists built in

5. Separating floor junction

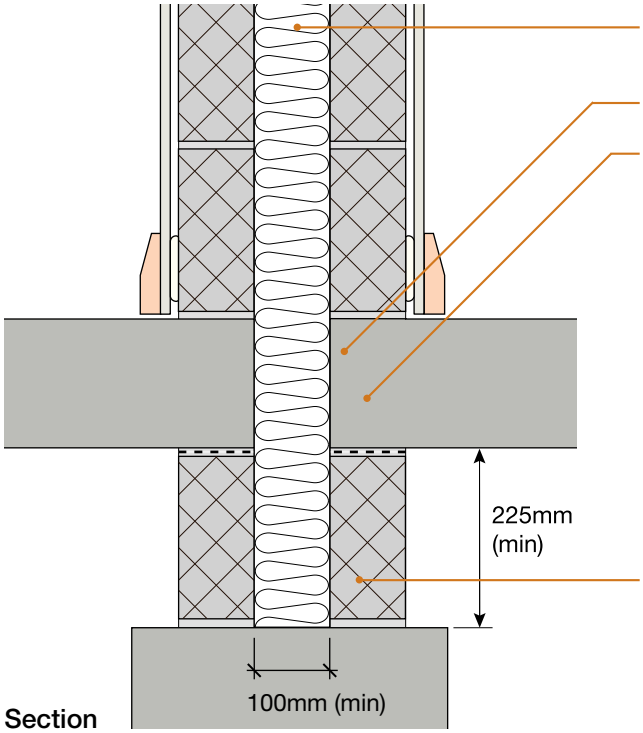


Section

- Superglass Superwhite 34
- 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

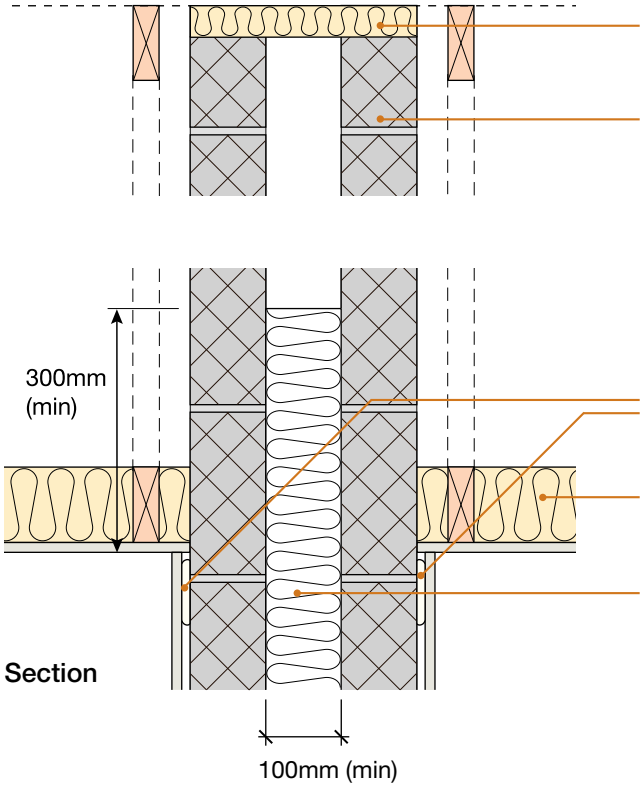


Section

- Superglass Superwhite 34
- Ground floor not continuous between dwellings
- Ground floor construction:
  - timber joists built in with:
    - all voids around the joists filled with mortar
    - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
  - beam and block floor with all voids filled with mortar, or
  - concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
  - ground bearing slab
- Cavity separating wall continuous to foundation, cavity fill may be provided below minimum clear cavity indicated. Continuous raft foundations between dwellings are not acceptable. Solid walls which support separating walls are only acceptable where each ground floor (not timber joists) is built into one side of the separating wall and breaks the vertical continuity of the wall and the minimum clear cavity indicated is maintained.

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

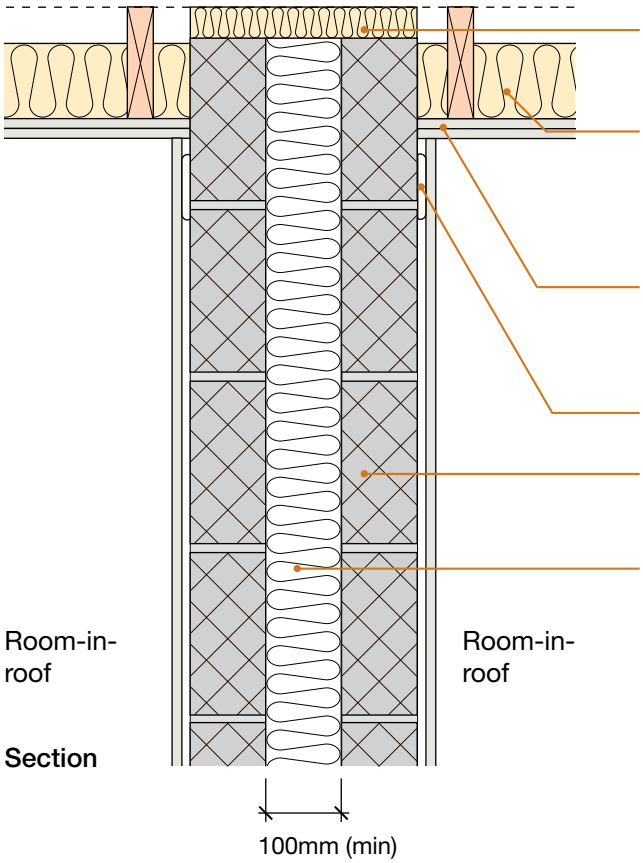
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

Superglass Superwhite 34

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

Superglass Superwhite 34

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 Superglass Superwhite 34 installed to a maximum density of 28.75 kg/m^3, and was it by an approved installer?			
9.	Are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
13.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from Superglass, manufacturer of Superglass Superwhite 34:

Telephone: 0844 3814022 **Fax:** 01786 451245 **E-mail:** technical@superglass.co.uk

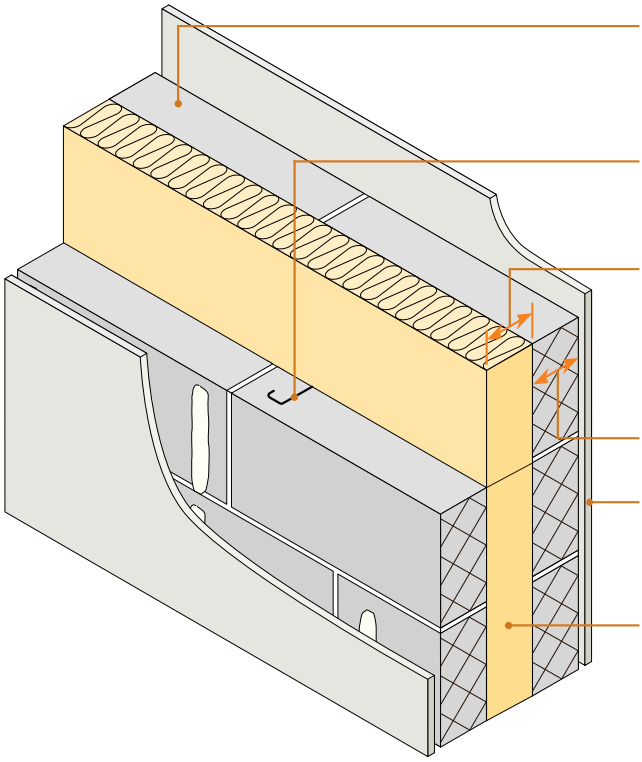
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

E-WM-34

Plasmor “Aglite Ultima’ lightweight aggregate blocks ■
Built-in or blown mineral wool insulation ■
Gypsum-based board (nominal 8 kg/m²) on dabs ■

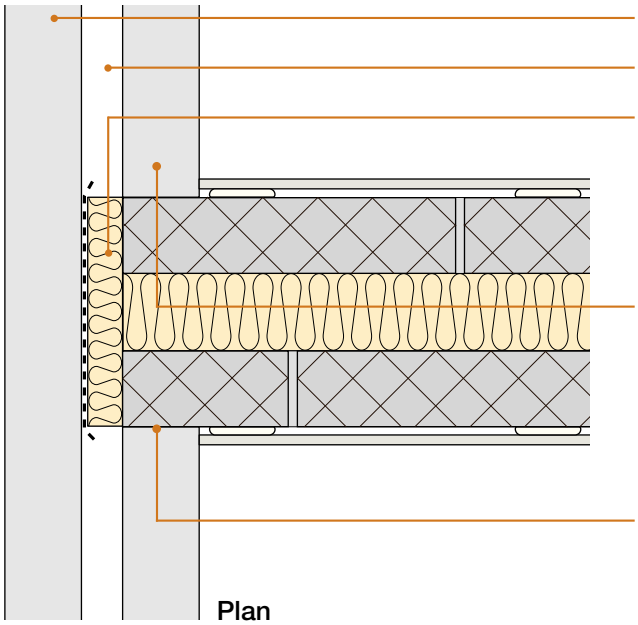


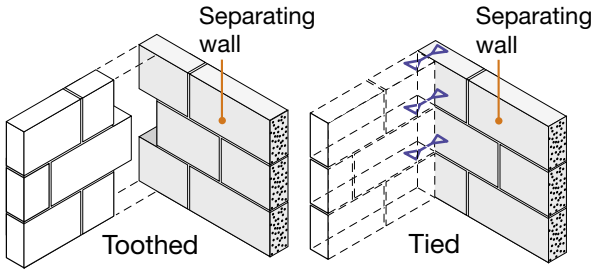
Block density	Only Plasmor “Aglite Ultima” block density 1050 kg/m³
Wall ties	Approved Document E ‘Tie type A’ (see Appendix A)
Cavity width	100mm (min) built-in insulation 125mm (min) blown insulation
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on 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

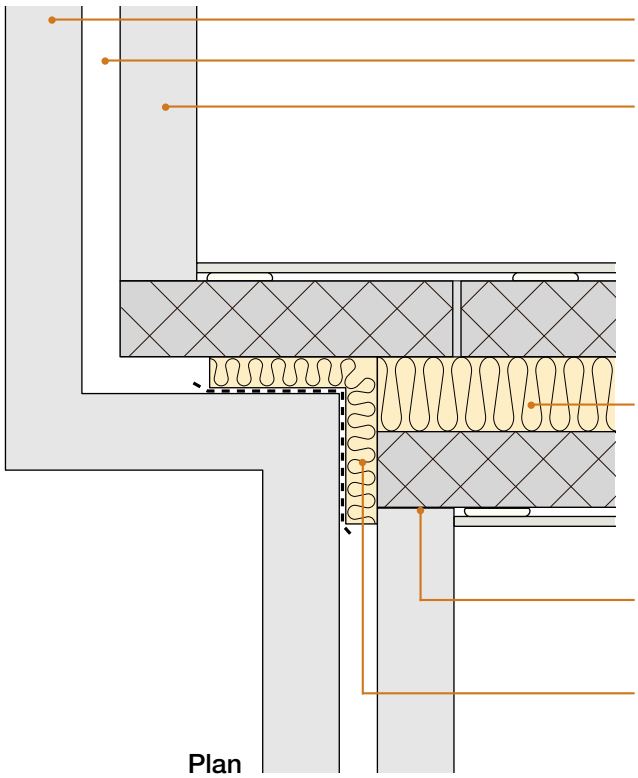
- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- If using blown fibres, ensure all injection holes are drilled through mortar joints, and made good by fully filling with mortar
- If using built-in 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
- 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

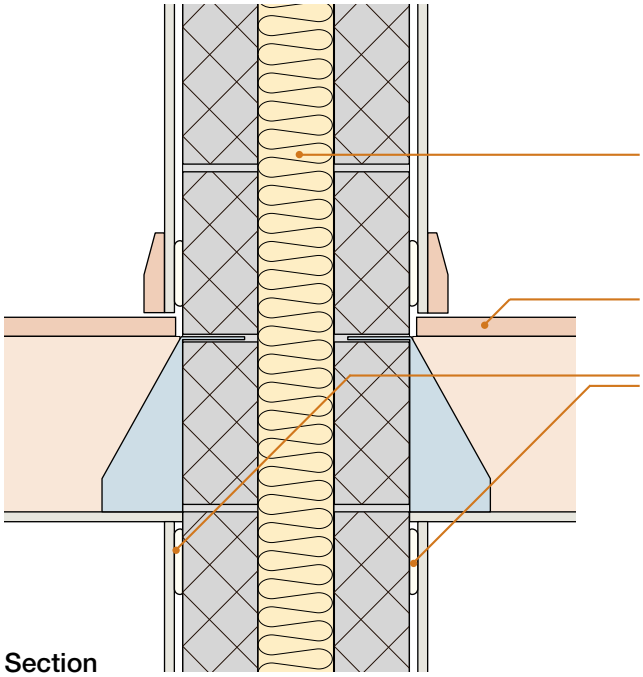




2. Staggered external (flanking) wall junction



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



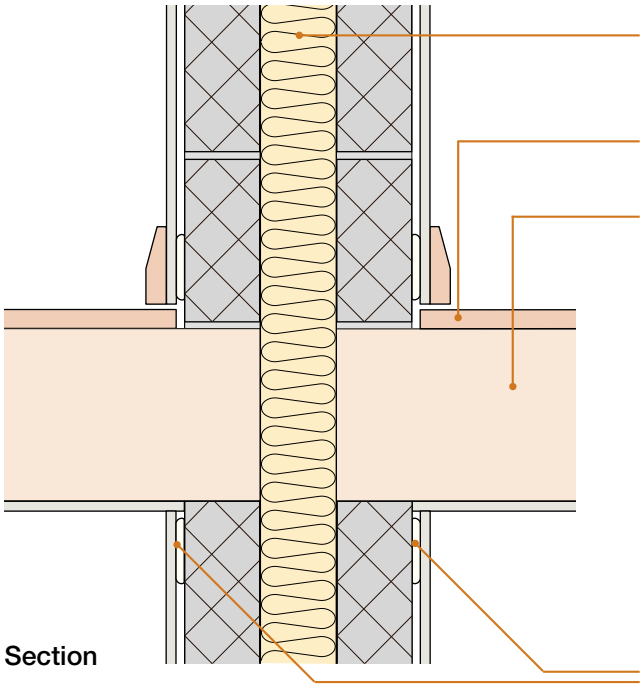
Section

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

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



Section

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

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

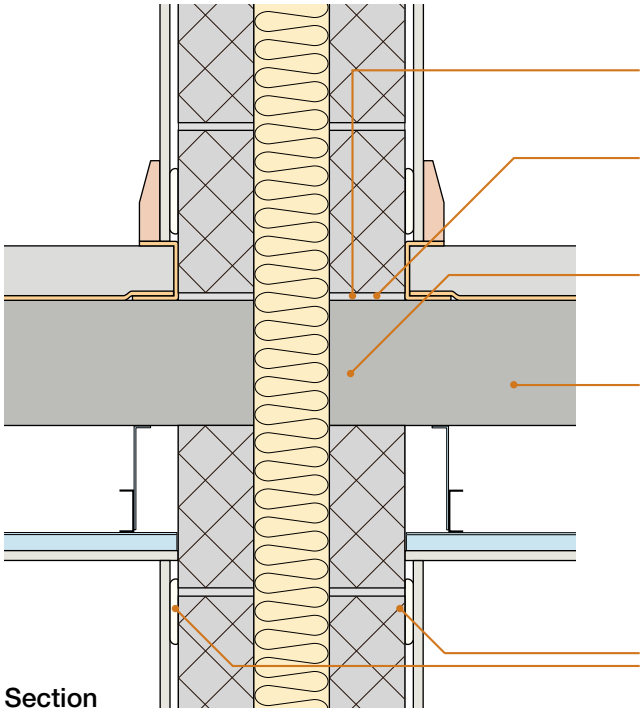
Floor construction:

- 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

Sketch shows E-FC-4 separating floor and CT0 type ceiling treatment

Separating wall must not be continuous between storeys

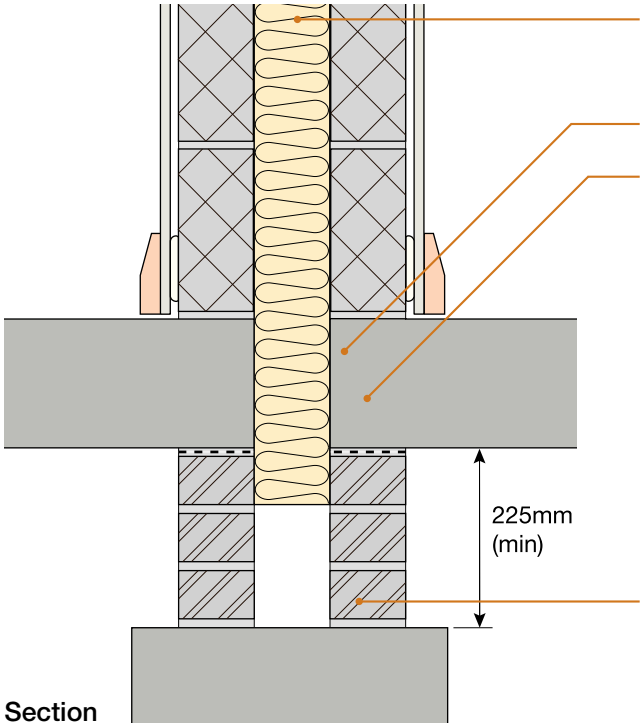
Concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant

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

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



Section

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

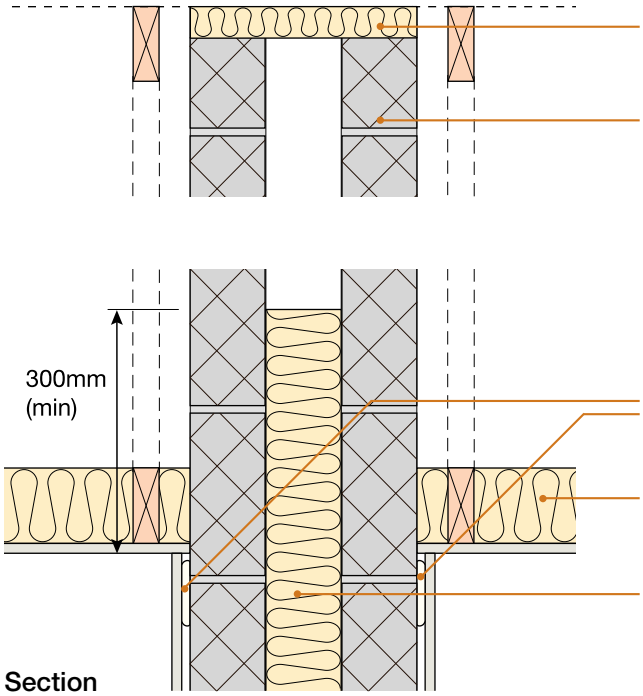
100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m^3 or blown mineral fibres with an installed density of max 25 kg/m^3

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.

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

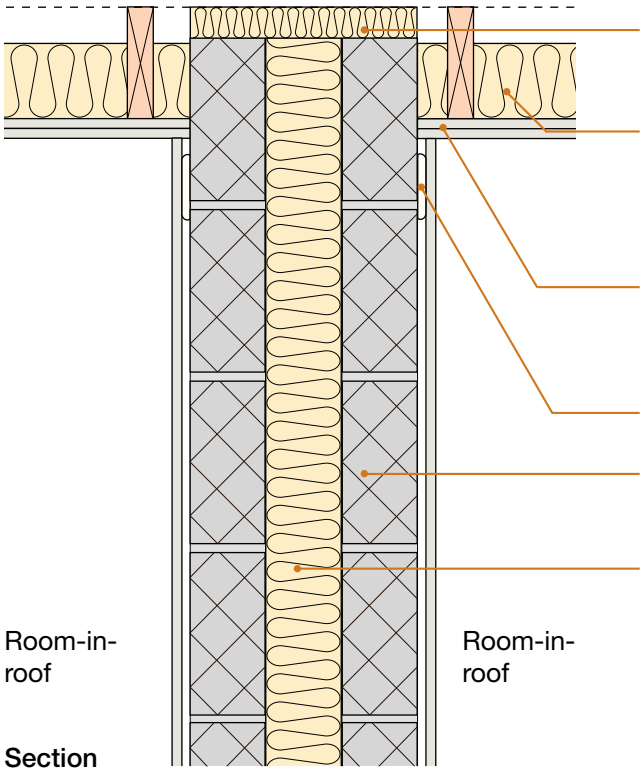
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

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

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/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

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 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:

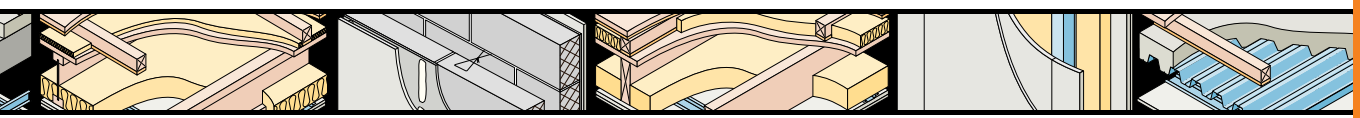
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity min 100mm (built-in insulation) or min 125mm (blown insulation)?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks and external (flanking) wall blocks Plasmor “Aglite Ultima” 1050 kg/m^3 blocks?			
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.	For blown insulation, are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
9.	For built-in insulation, are insulation rolls 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?			

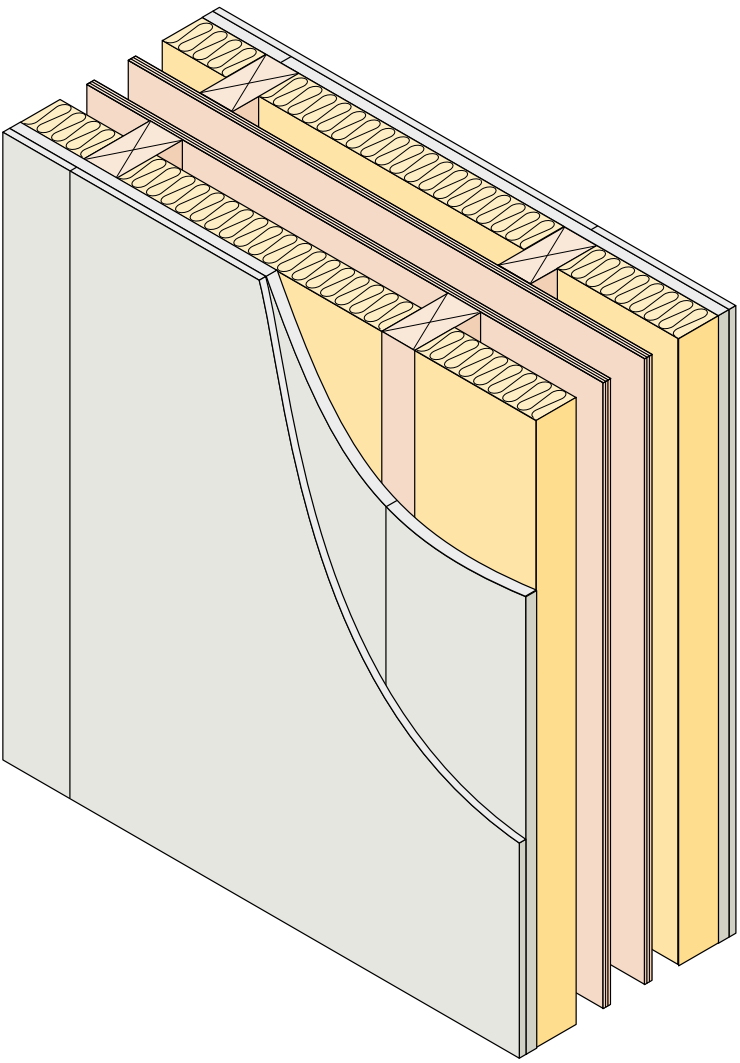
Contact details for technical assistance from Plasmor, manufacturer of “Aglite Ultima” lightweight aggregate blocks:

Telephone: 01977 673221 **Fax:** 01977 607071 **E-mail:** knott@plasmor.co.uk

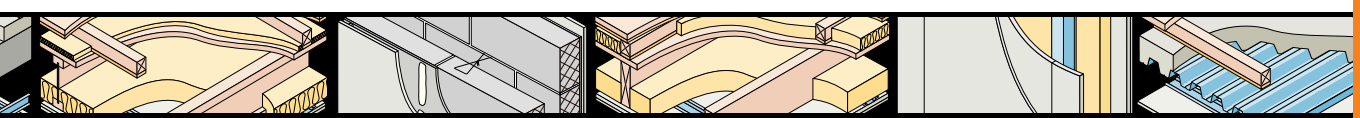
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .



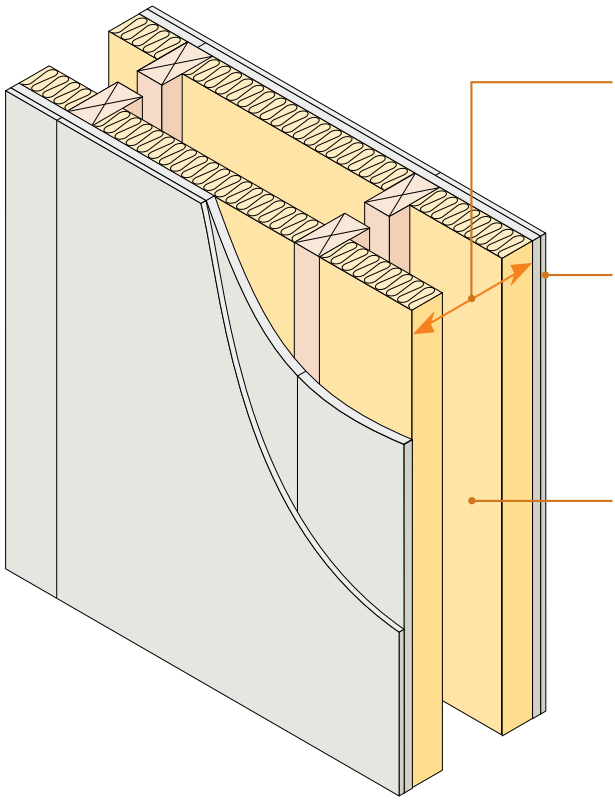


TIMBER



Separating Wall – Timber Frame

Partial or no sheathing board ■
Twin timber frames ■



Wall width	240mm (min) between inner faces of wall linings. 50mm (min) gap between studs (must not be bridged by any diagonal bracing)
Wall lining	- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2), both sides - all joints staggered
Absorbent material	60mm (min) mineral wool batts or quilt (density 10 – 60 kg/m^3) both sides. Material may be unfaced, paper faced or wire-reinforced
Ties	Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity

Separating wall cavity insulation (optional)

The cavity may be insulated with mineral wool rolls or batts with a density of 10 – 40 kg/m^3. Ensure insulation thickness is no greater than 20mm wider than cavity width to avoid excessive compression of the insulation.

Note: Partial sheathing of the cavity faces of the separating wall for structural reasons is permitted. This may be for:

- Up to 1800mm at each end of both leafs, provided this does not exceed 30% of the separating wall area that is common to the rooms on opposite sides of that wall; or
- To just the entire face of one leaf.

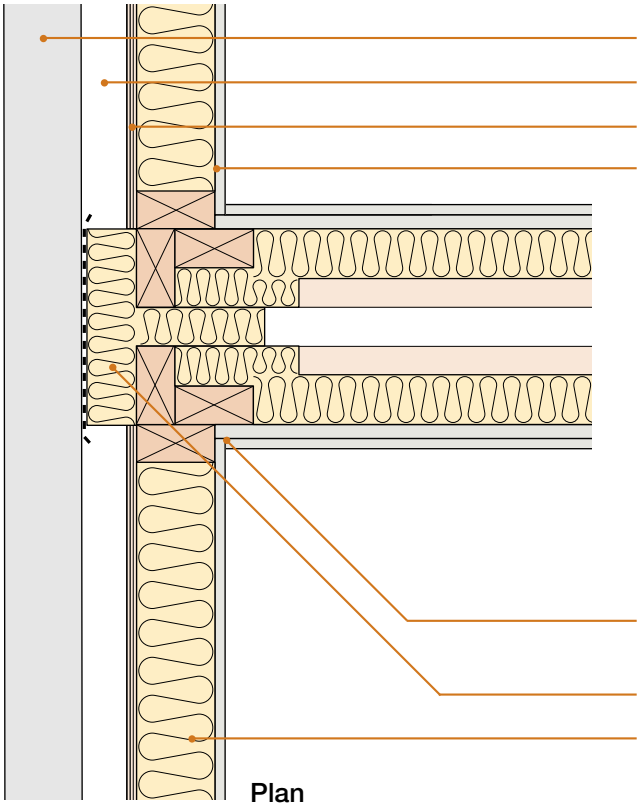
If a greater extent of sheathing is required to the cavity face, Robust Detail E-WT-2 must be used.

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.

DO

- Keep wall linings at least 240mm apart
- Ensure quilt or batts cover whole lining area, fitting tight between studs without sagging
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons (see above).
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Sheathing board

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

- one layer of gypsum-based board nominal 8 kg/m²

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

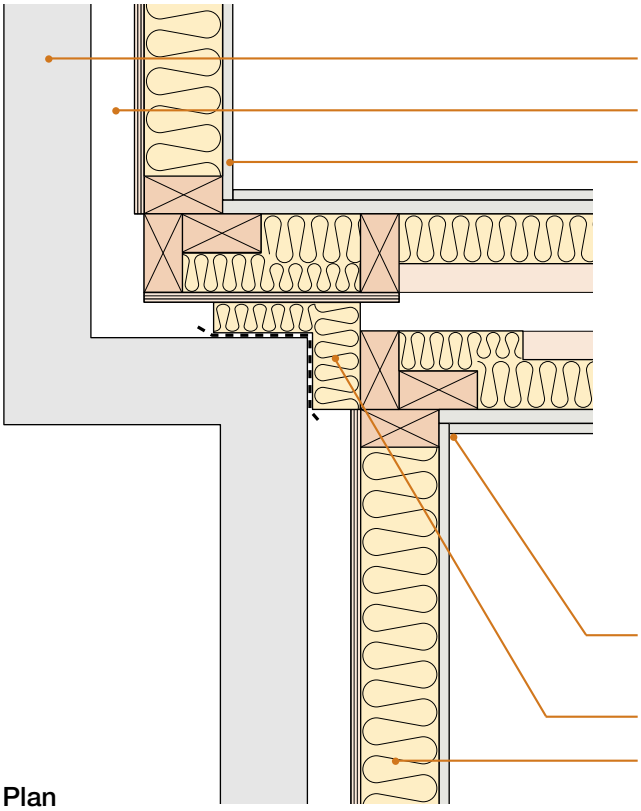
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Mineral wool insulation 10 kg/m³ (min)

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

- one layer of gypsum-based board nominal 8 kg/m²

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

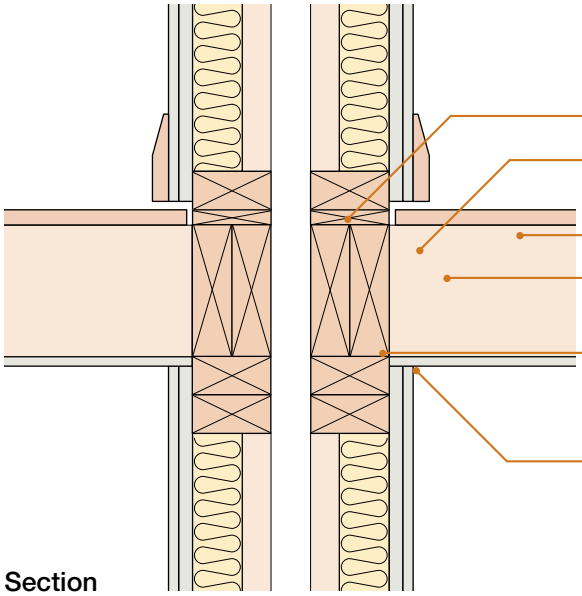
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Mineral wool insulation 10 kg/m³ (min)

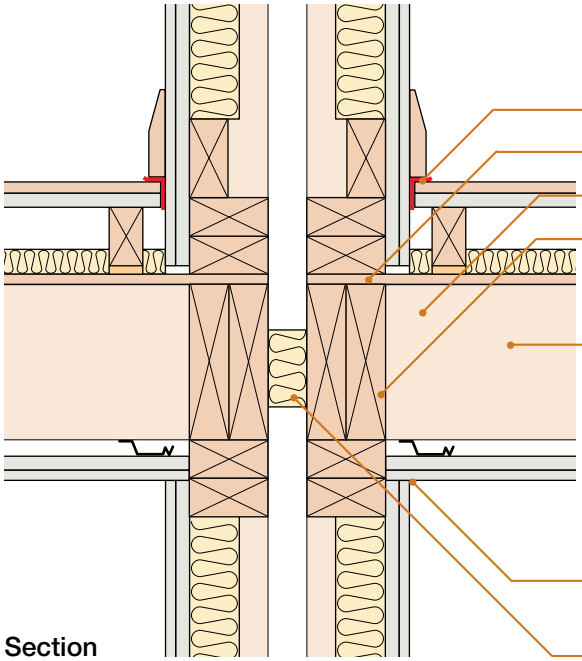
3. Internal floor junction



Section

- Floor decking may run under sole plates
- Internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists with full depth timber blocking where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant

4. Separating floor junction

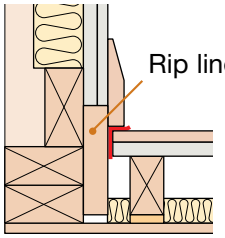


Section

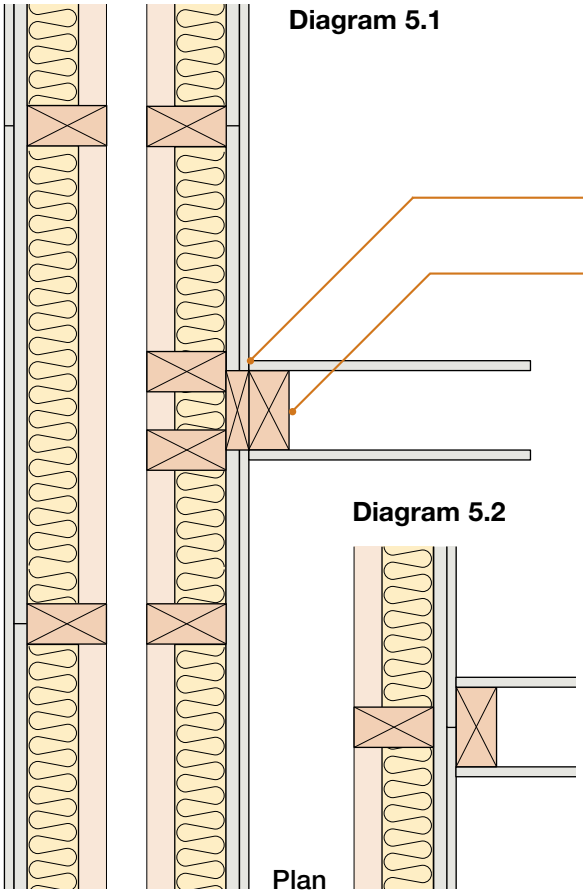
- 5mm (min) resilient flanking strip
- Floor decking may run under sole plates
- Floor joists may span in either direction
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to wall
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3b in introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)

Sketch shows E-FT-1 type separating floor

Alternative detail



5. Internal wall junction



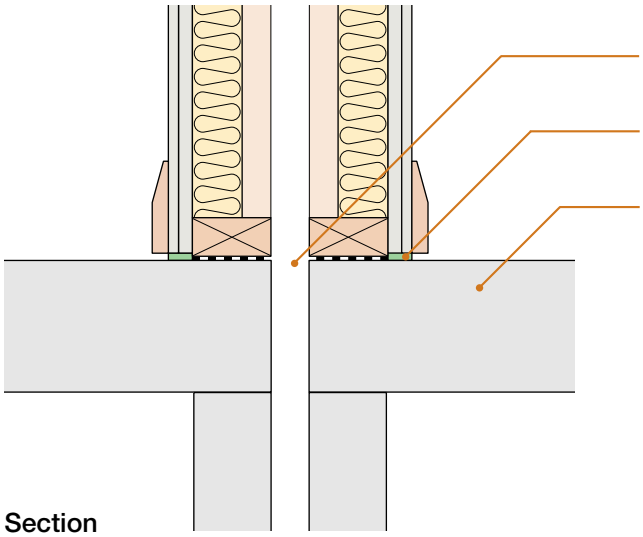
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

Diagram 5.1 shows junction detail where the internal wall is fixed through the separating wall lining; other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

Diagram 5.2 shows junction where the separating wall lining is continuous

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



Section

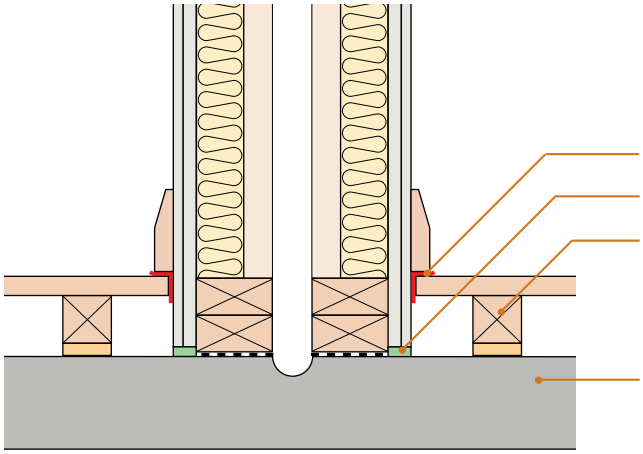
Ground floors not continuous between dwellings

Flexible or acoustic sealant (may be omitted when timber ground floor is used)

Ground floor construction:

- timber floor joists:
  - may span in either direction
  - floor decking may run under sole plates
  - close spaces between floor joists with full depth timber blocking where joists are at right angles to wall, or
- beam and block floor with all voids filled with mortar, or
- precast concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- cast in-situ concrete suspended slab, or
- ground bearing slab

7. Raft foundation



Section

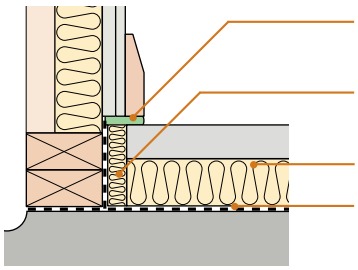
5mm (min) resilient flanking strip

Flexible or acoustic sealant

A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)

Concrete raft - mass per unit area of 365 kg/m^2 (min)

Alternative detail with screed finish



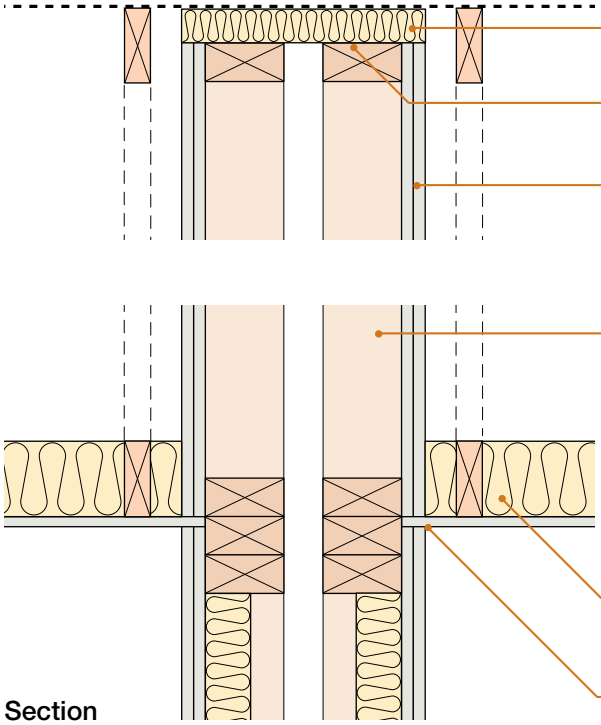
Mastic sealant, ensure skirting and wall lining are isolated from screed

Perimeter insulation, isolating screed from timber frame

Below screed insulation, isolating screed from raft

Polyethylene

8. Roof junction - pitched roof with no room-in-roof



Section

Junction between separating wall and roof filled with flexible closer

Cavity separating wall continuous to underside of roof

Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m^2), both sides, all joints staggered

Absorbent material not required in separating wall above ceiling

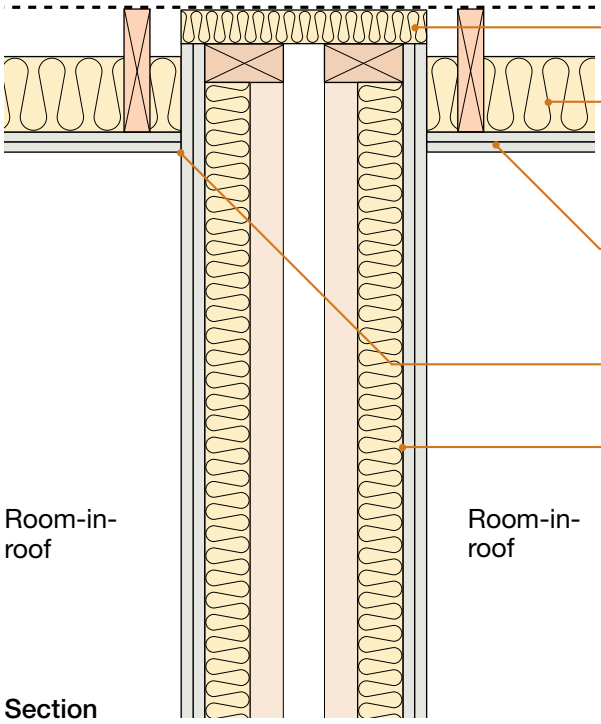
Alternatively use spandrel panel - see Appendix A

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

100mm (min) mineral wool insulation, 10 kg/m^3 (min), between ceiling joists

Seal all perimeter joints with tape or caulk with sealant

9. 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)

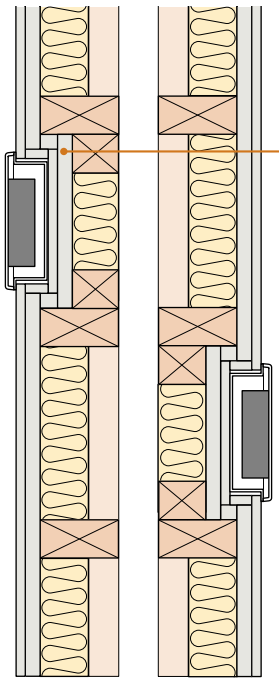
2 layers of nominal 8 kg/m^2 gypsum-based board. Where used, rigid insulation may be placed between and/or directly beneath rafters

Seal all perimeter joints with tape or caulk with sealant

Cavity timber 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

10. Services and sockets in the separating wall



Plan

10.1 – electrical sockets, switches, etc.

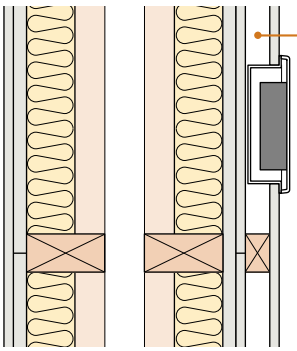
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

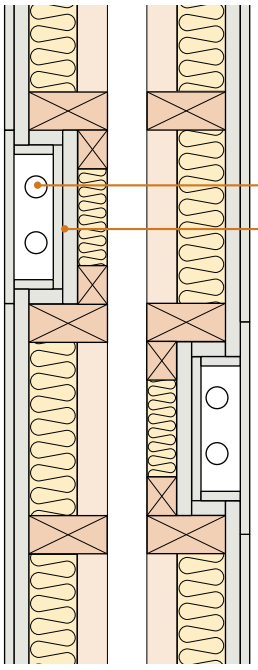
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

10.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

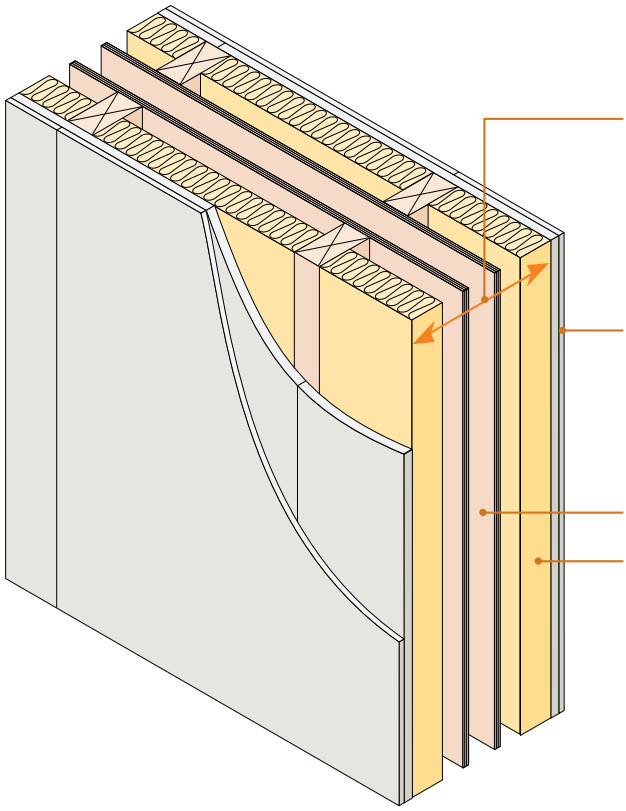
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 240mm apart?			
2.	Is absorbent material at least 60mm thick?			
3.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
4.	Are all joints in wall lining staggered?			
5.	Is separating wall lining correct mass per unit area on both sides?			
6.	Are all joints sealed with tape or caulked with sealant?			
7.	Are services installed in accordance with sketches 10.1 and 10.2?			
8.	If there is a separating floor (e.g. in flats/apartments) has the resilient flanking strip been provided?			
9.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Timber Frame

With full, partial or no sheathing ■
Twin timber frames ■



Wall width	240mm (min) between inner faces of wall linings. 50mm (min) cavity (gap between wall panels) 68mm (min) between stud frames
Wall lining	- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2), both sides - all joints staggered
Sheathing	9mm (min) thick board
Absorbent material	60mm (min) mineral wool batts or quilt (density 10 – 60 kg/m^3) both sides. Material may be unfaced, paper faced or wire-reinforced
Ties	Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity

Note: This specification is intended for use where the extent of sheathing required to the cavity face of the separating wall is greater than that permitted for E-WT-1

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.

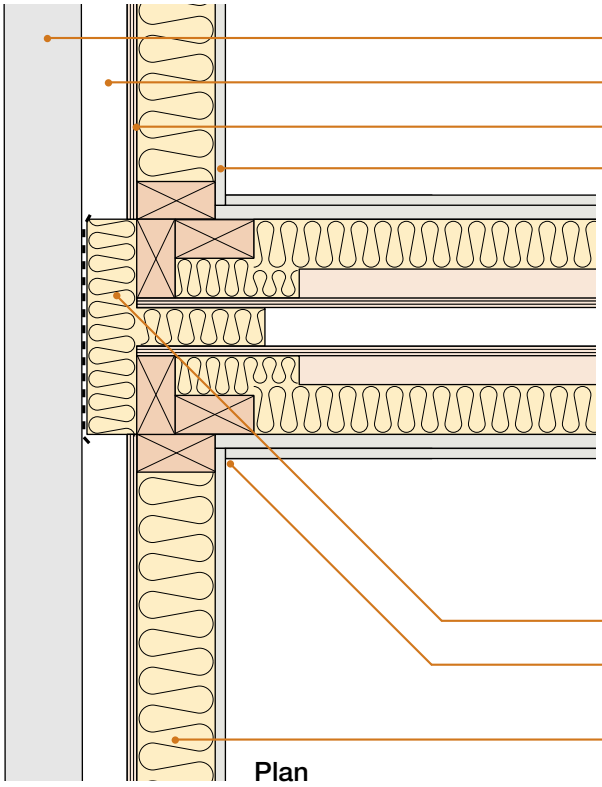
Separating wall cavity insulation (optional)

The cavity may be insulated with mineral wool rolls or batts with a density of 18 – 40 kg/m^3. Ensure insulation thickness is no greater than 10mm wider than cavity width to avoid excessive compression of the insulation.

DO

- Keep wall linings at least 240mm apart
- Ensure that the minimum gap between the wall panels is maintained
- Ensure quilt or batts cover whole lining area, fitting tight between studs without sagging
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons (see above)
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External (flanking) wall junction



Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Sheathing board

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

- one layer of gypsum-based board nominal 8 kg/m²

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

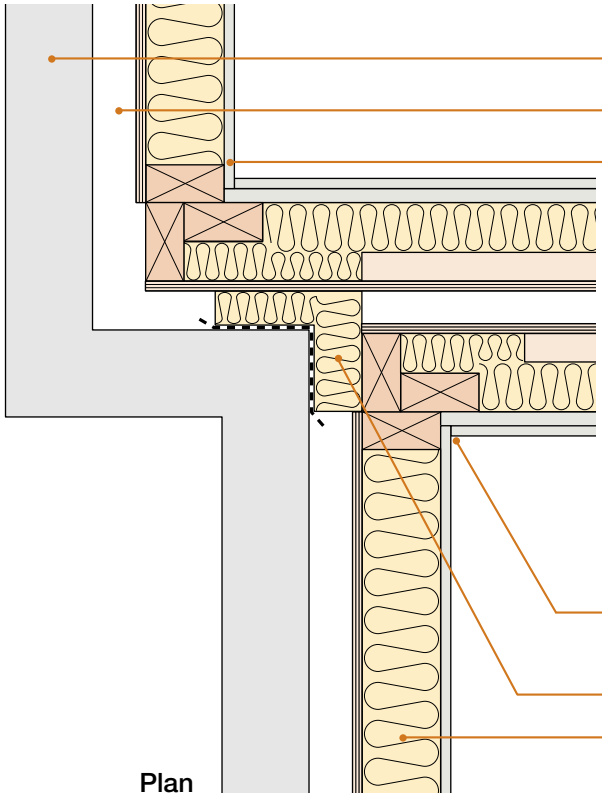
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Close cavity with a cavity stop (see Appendix A)

Seal all perimeter joints with tape or caulk with sealant

Mineral wool insulation 10 kg/m³ (min); 70mm (min) EPS or foil faced PIR with no gaps

2. Staggered external (flanking) wall junction



Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

- one layer of gypsum-based board nominal 8 kg/m²

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

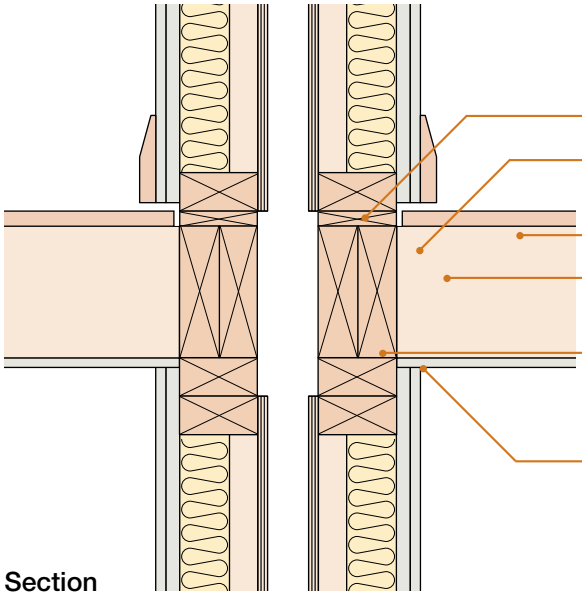
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Mineral wool insulation 10 kg/m³ (min); 70mm (min) EPS or foil faced PIR with no gaps

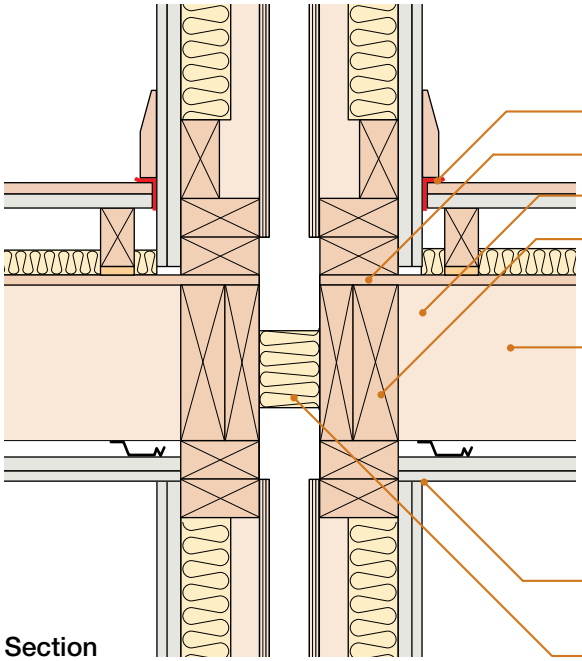
3. Internal floor junction



Section

- Floor decking may run under sole plates
- Internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists with full depth timber blocking where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant

4. Separating floor junction

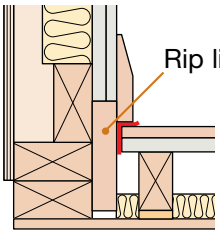


Section

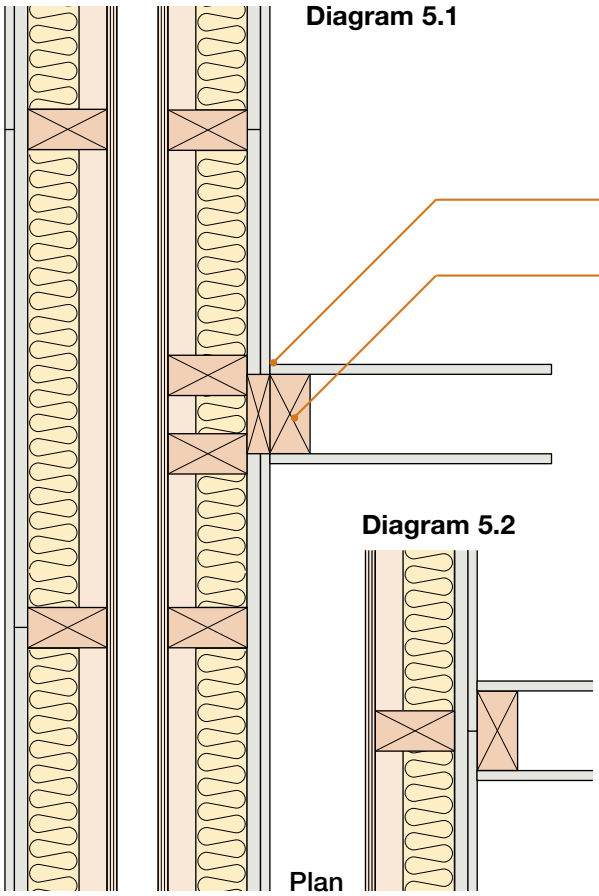
- 5mm (min) resilient flanking strip
- Floor decking may run under sole plates
- Floor joists may span in either direction
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to wall
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3b in introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)

Sketch shows E-FT-1 type separating floor

Alternative detail



5. Internal wall junction



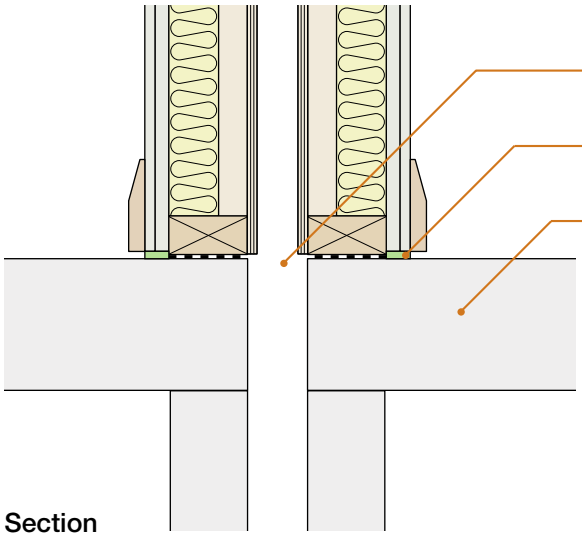
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

Diagram 5.1 shows junction detail where the internal wall is fixed through the separating wall lining; other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

Diagram 5.2 shows junction where the separating wall lining is continuous

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



Section

*Note – Ensure substructure masonry is correctly set out to enable timber frame to achieve the required gap between wall panels

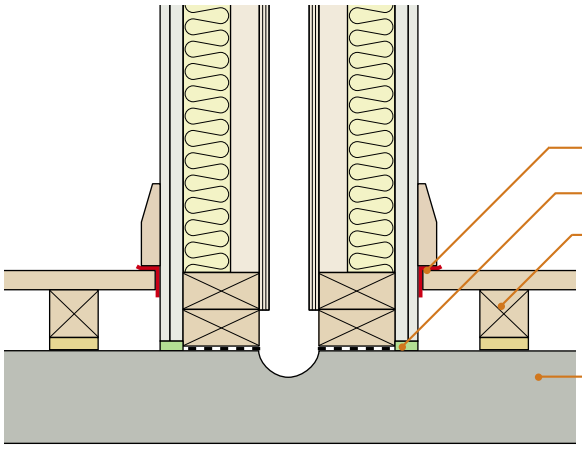
Ground floors not continuous between dwellings

Flexible or acoustic sealant (may be omitted when timber ground floor is used)

Ground floor construction:

- timber floor joists:
  - may span in either direction
  - floor decking may run under sole plates
  - close spaces between floor joists with full depth timber blocking where joists are at right angles to wall, or
- beam and block floor with all voids filled with mortar, or
- precast concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- cast in-situ concrete suspended slab, or
- ground bearing slab

7. Raft foundation



Section

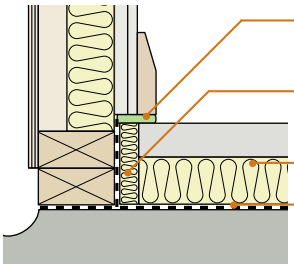
5mm (min) resilient flanking strip

Flexible or acoustic sealant

A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)

Concrete raft - mass per unit area of 365 kg/m^2 (min)

Alternative detail with screed finish



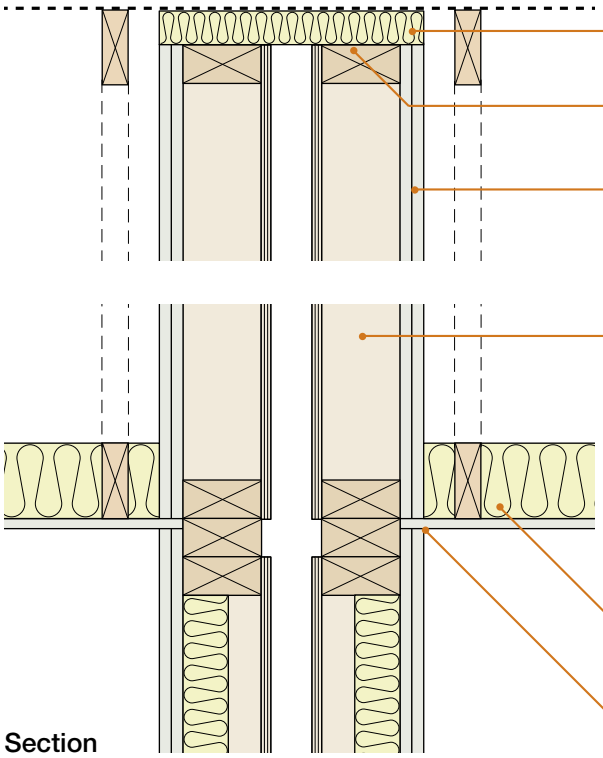
Mastic sealant, ensure skirting and wall lining are isolated from screed

Perimeter insulation, isolating screed from timber frame

Below screed insulation, isolating screed from raft

Polyethylene

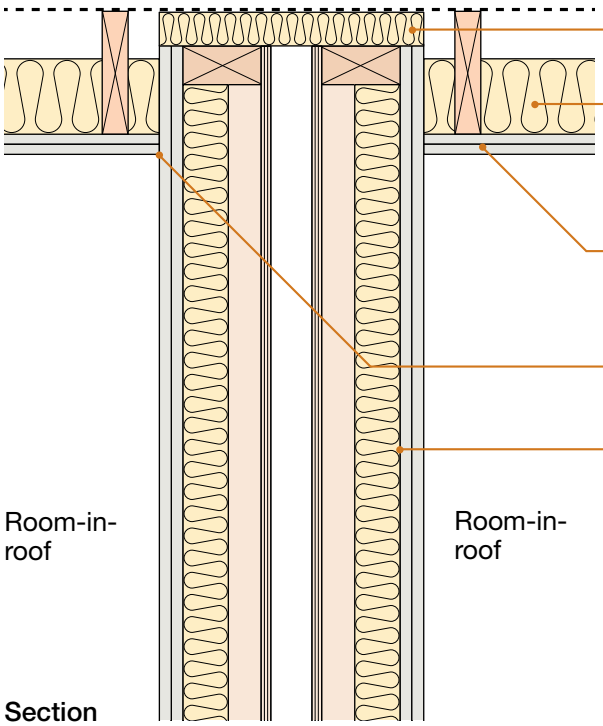
8. Roof junction - pitched roof with no room-in-roof



Section

- Junction between separating wall and roof filled with flexible closer
- Cavity separating wall continuous to underside of roof
- Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered
- Absorbent material not required in separating wall above ceiling
  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
- 100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists
- Seal all perimeter joints with tape or caulk with sealant

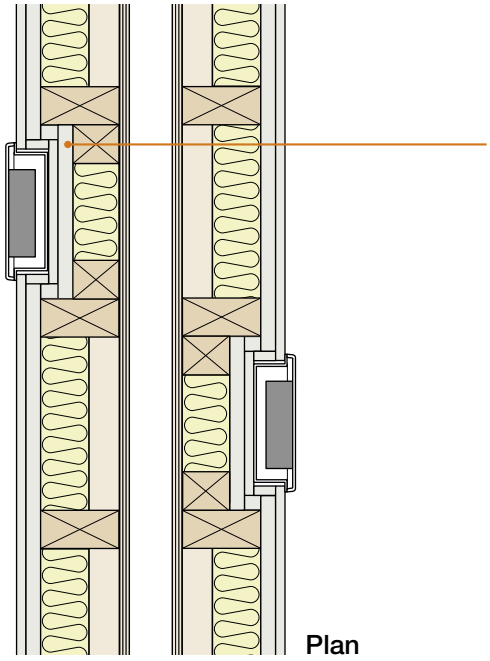
9. Roof junction - pitched roof with room-in-roof



Section

- Junction between separating wall and roof filled with flexible closer
- 100mm (min) mineral wool insulation minimum density 10 kg/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
- Seal all perimeter joints with tape or caulk with sealant
- Cavity timber 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

10. Services and sockets in the separating wall



Plan

9.1 – electrical sockets, switches, etc.

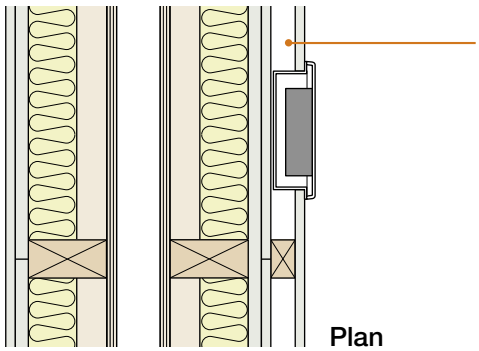
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

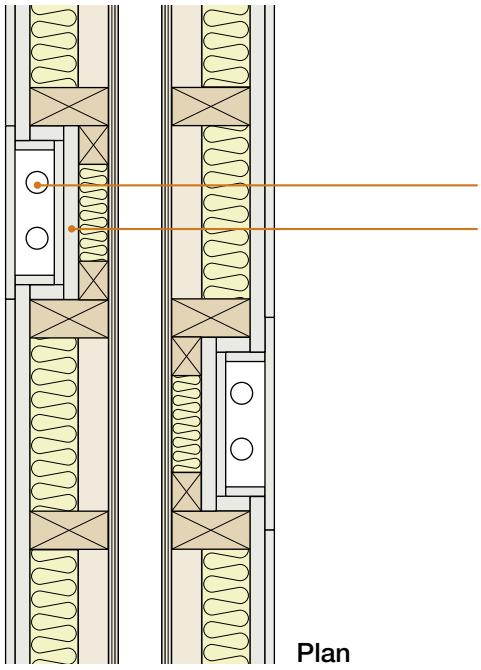
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

9.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 240mm apart?			
2.	Are sheathing boards at least 50mm apart?			
3.	Are stud frames at least 68mm apart?			
4.	Is absorbent material at least 60mm thick?			
5.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
6.	Are all joints in wall lining staggered?			
7.	Is separating wall lining correct mass per unit area on both sides?			
8.	Are all joints sealed with tape or caulked with sealant?			
9.	Are services installed in accordance with sketches 9.1 and 9.2?			
10.	If there is a separating floor (e.g. in flats/apartments) has the resilient flanking strip been provided?			
11.	Is separating wall satisfactorily complete?			

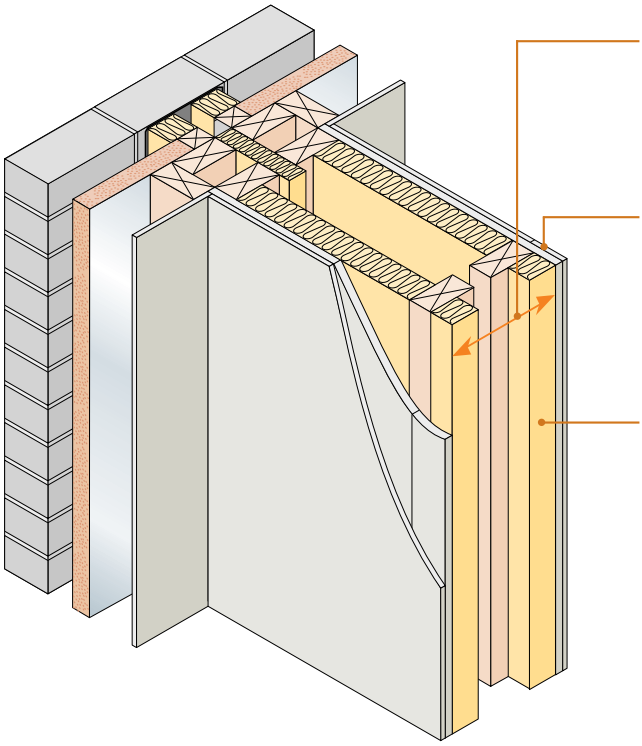
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Timber Frame

E-WT-3

Openwall prefabricated panels ■
Twin timber frames ■
For use in timber frame houses and flats/apartments ■

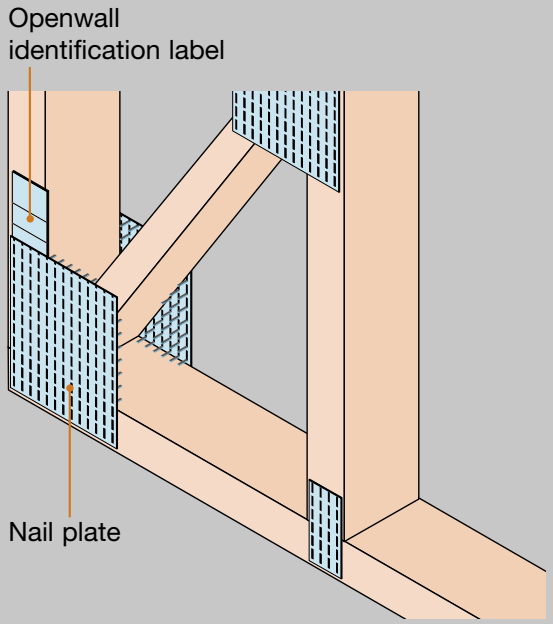


Wall width	240mm (min) between inner faces of wall linings. 50mm (min) gap between studs (must not be bridged by any diagonal bracing)
Wall lining	- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2), both sides - all joints staggered
Absorbent material	60mm (min) mineral wool batts or quilt (density 10 – 60 kg/m^3) both sides. Material may be unfaced, paper faced or wire-reinforced
Ties	Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity. Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

Note: When using this robustdetails® in flats/apartments, please refer to Tables 3b and 4 of the Introduction

Note: Partial sheathing of the cavity faces of the separating wall is permitted for structural reasons. This may be for a length of 1800mm (max) to each end of both leaves or to the entire face of one leaf.

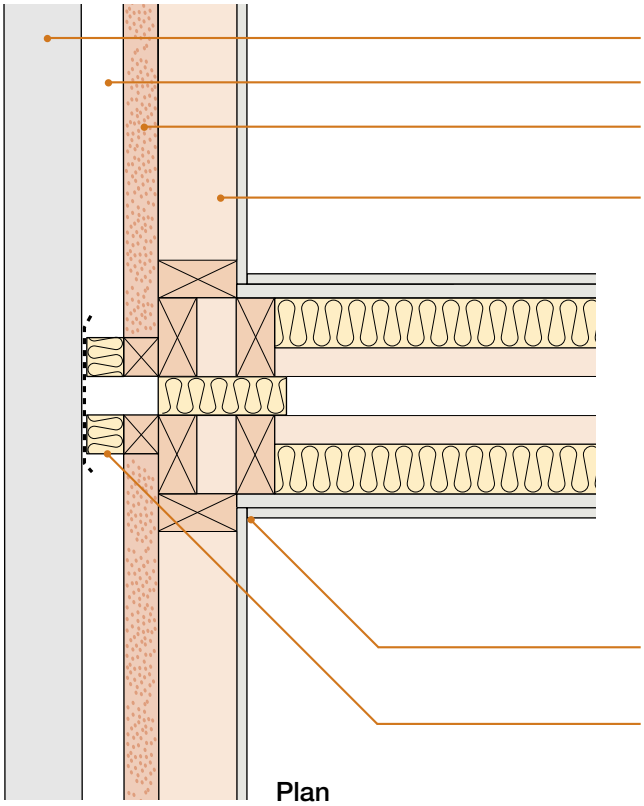
FRAME CONSTRUCTION



DO

- Keep wall linings at least 240mm apart
- Ensure quilt or batts cover whole lining area, fitting tight between studs without sagging
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons (see above).
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

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

- one layer of gypsum-based board nominal 8 kg/m^2

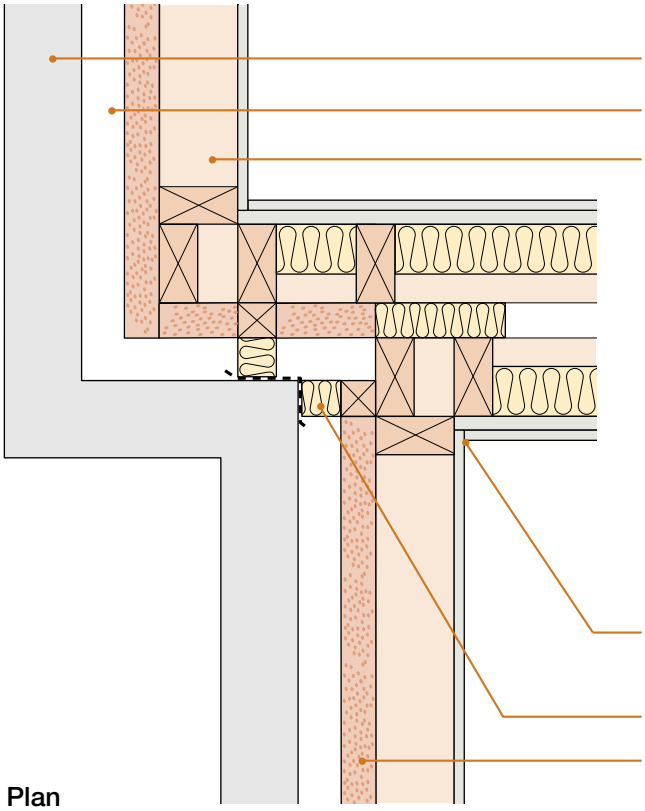
Inner leaf where there is a separating floor, e.g. for flats/apartments

- use two layers of gypsum-based board nominal 8kg/m^2 each layer, and refer to Tables 3b and 4 in Introduction
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with cavity stops (see Appendix A)

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

- one layer of gypsum-based board nominal 8 kg/m^2

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

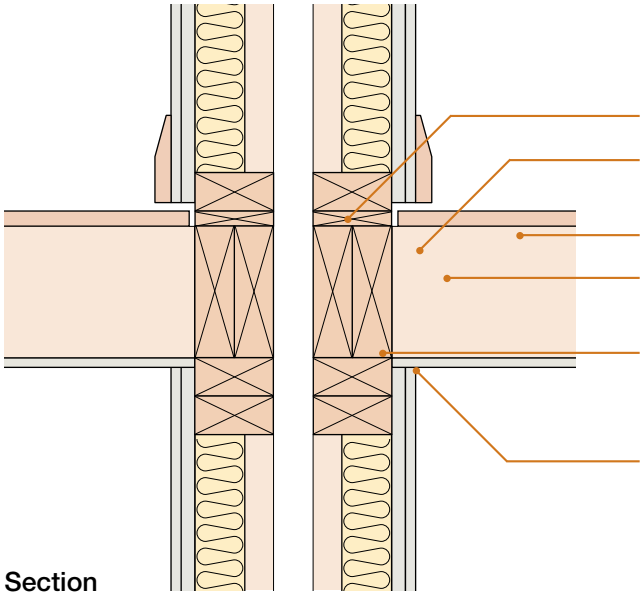
- use two layers of gypsum-based board nominal 8kg/m^2 each layer, and refer to Tables 3b and 4 in Introduction
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

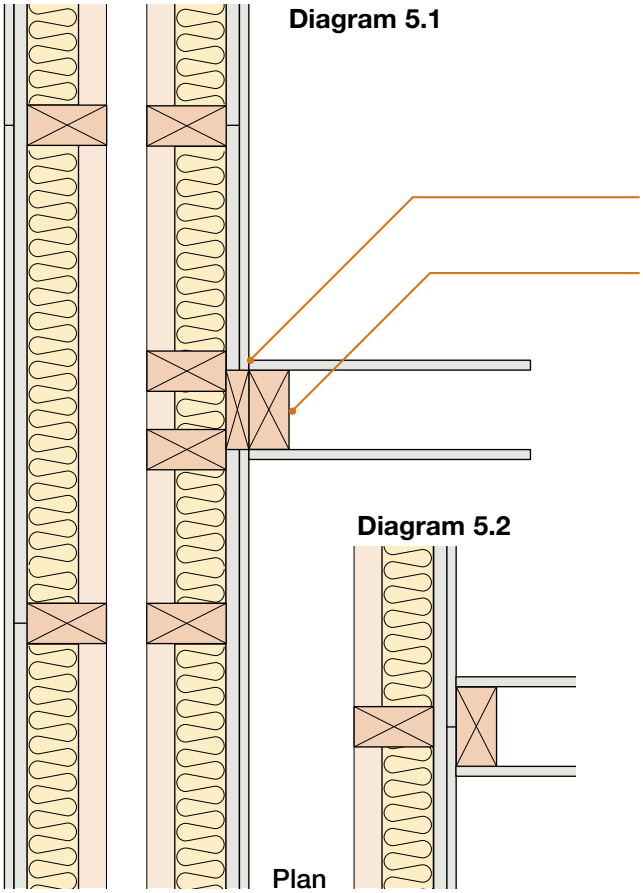
3. Internal floor junction



Section

- Floor decking may run under sole plates
- Internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists with full depth timber blocking where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant

4. Internal wall junction



Plan

Diagram 5.1

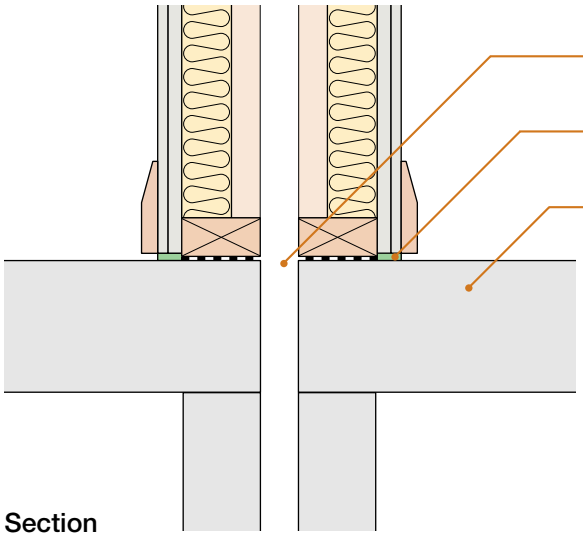
Diagram 5.2

- Seal all perimeter joints with tape or caulk with sealant
- Where required internal wall to comply with Building Regulations Requirement E2

Diagram 5.1 shows junction detail where the internal wall is fixed through the separating wall lining; other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

Diagram 5.2 shows junction where the separating wall lining is continuous

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



Section

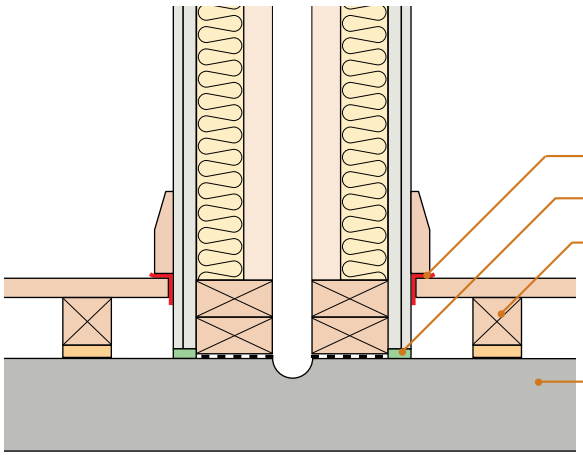
Ground floors not continuous between dwellings

Flexible or acoustic sealant (may be omitted when timber ground floor is used)

Ground floor construction:

- timber floor joists:
  - may span in either direction
  - floor decking may run under sole plates
  - close spaces between floor joists with full depth timber blocking where joists are at right angles to wall, or
- beam and block floor with all voids filled with mortar, or
- precast concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- cast in-situ concrete suspended slab, or
- ground bearing slab

6. Raft foundation



Section

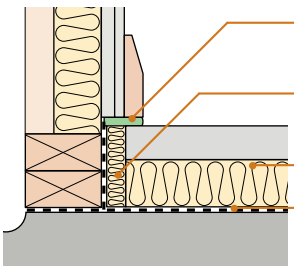
5mm (min) resilient flanking strip

Flexible or acoustic sealant

A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)

Concrete raft - mass per unit area of 365 kg/m^2 (min)

Alternative detail with screed finish



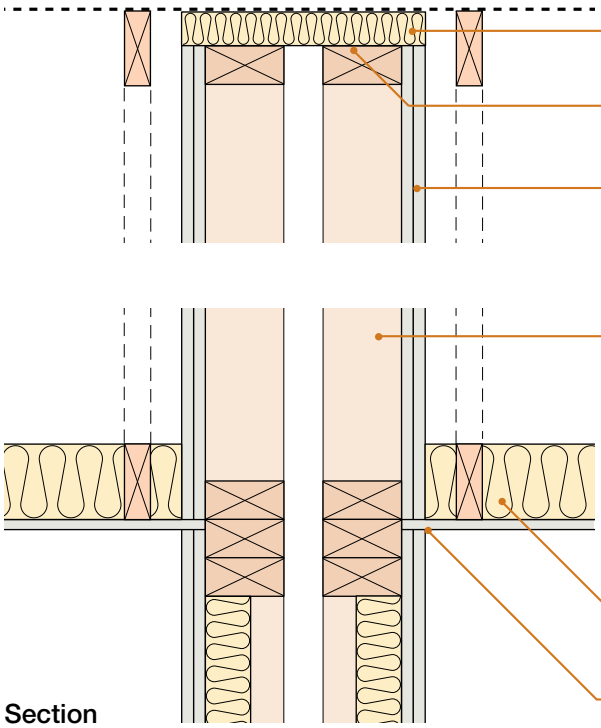
Mastic sealant, ensure skirting and wall lining are isolated from screed

Perimeter insulation, isolating screed from timber frame

Below screed insulation, isolating screed from raft

Polyethylene

7. Roof junction - pitched roof with no room-in-roof



Section

Junction between separating wall and roof filled with flexible closer

Cavity separating wall continuous to underside of roof

Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m^2), both sides, all joints staggered

Absorbent material not required in separating wall above ceiling

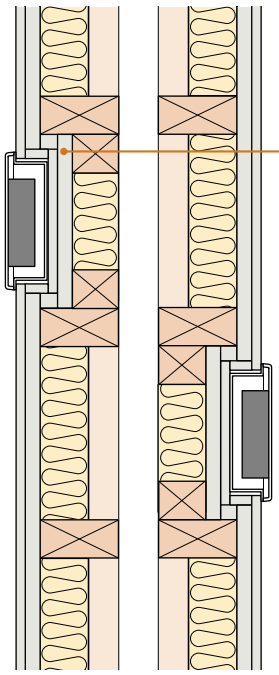
Alternatively use spandrel panel - see Appendix A

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

100mm (min) mineral wool insulation, 10 kg/m^3 (min), between ceiling joists

Seal all perimeter joints with tape or caulk with sealant

8. Services and sockets in the separating wall



Plan

8.1 – electrical sockets, switches, etc.

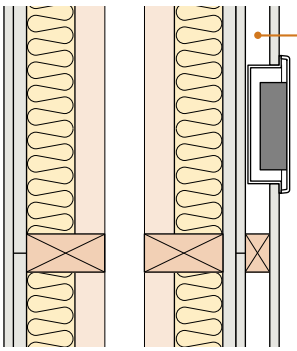
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

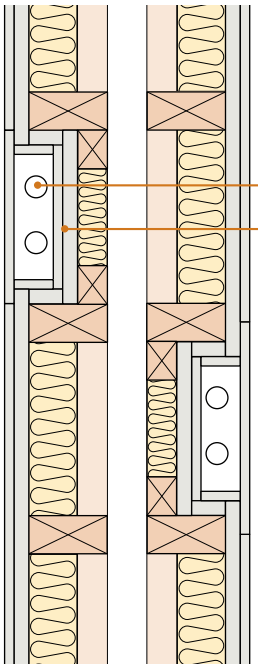
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

8.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are Openwall panels being used?			
2.	Are wall linings at least 240mm apart?			
3.	Is absorbent material at least 60mm thick in both leaves of the separating wall?			
4.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
5.	Are all joints in wall lining staggered?			
6.	Is separating wall lining correct mass per unit area on both sides?			
7.	Are all joints sealed with tape or caulked with sealant?			
8.	Are services installed in accordance with sketches 8.1 and 8.2?			
9.	Is inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3?			
10.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from Openwall Limited, manufacturer of Openwall prefabricated panels:

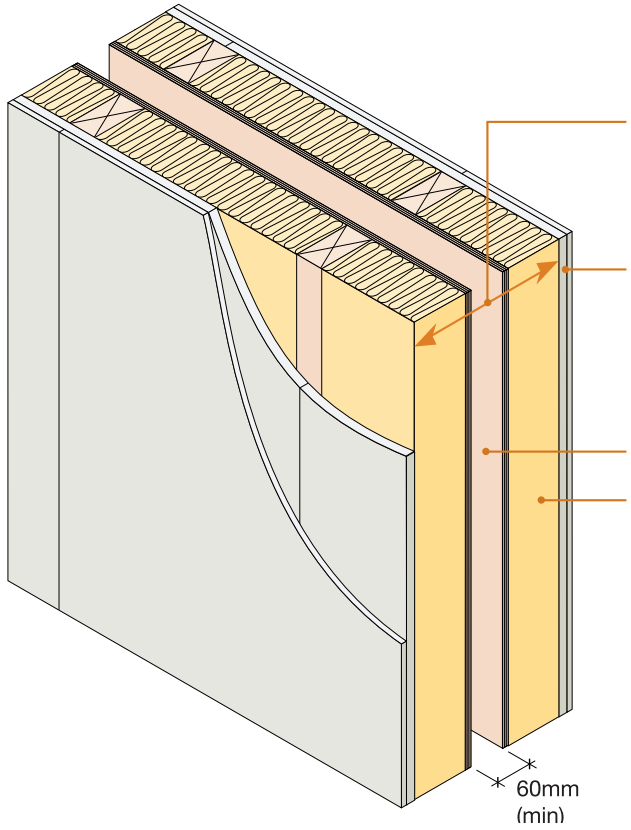
Telephone: 0151 832 4272 **E-mail:** technical@openwalloffsite.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Timber Frame

With sheathing board ■
Twin timber frames ■
Excel Industries Warmcel 500 insulation ■



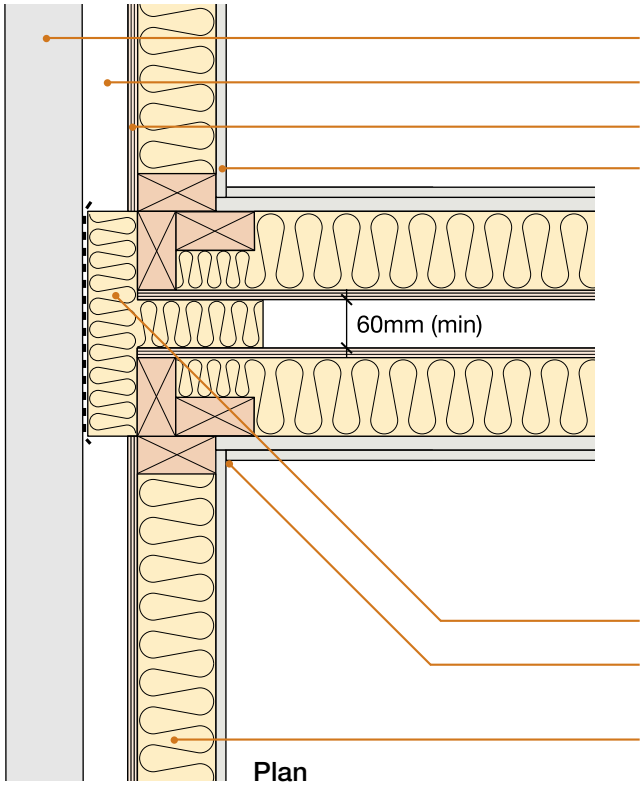
Wall width	240mm (min) between inner faces of wall linings. 60mm (min) gap between wall panels
Wall lining	- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2), both sides - all joints staggered
Sheathing	9mm (min) thick board
Absorbent material	89mm (min) Warmcel 500 insulation (blown or injected by Excel Industries-approved installer) fully filling stud voids
Ties	Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity

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.

DO

- Keep wall linings at least 240mm apart
- Ensure that the 60mm (min) gap between the wall panels is maintained
- Ensure Warmcel 500 is installed behind the whole lining area, without slumping
- Ensure stud voids are fully filled
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons (see above)
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External (flanking) wall junction



Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Sheathing board

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

- one layer of gypsum-based board nominal 8 kg/m²

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

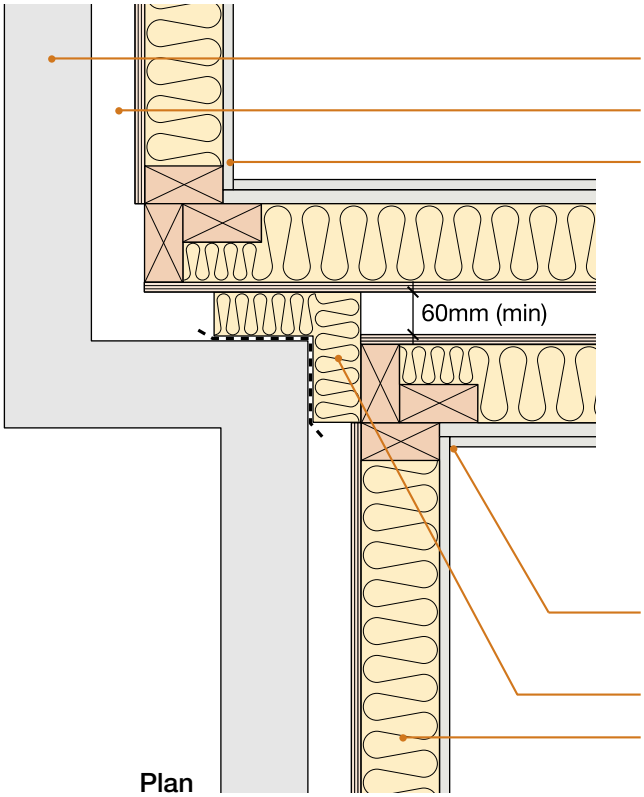
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Close cavity with a cavity stop (see Appendix A)

Seal all perimeter joints with tape or caulk with sealant

Full fill with Warmcel 500

2. Staggered external (flanking) wall junction



Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

- one layer of gypsum-based board nominal 8 kg/m²

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

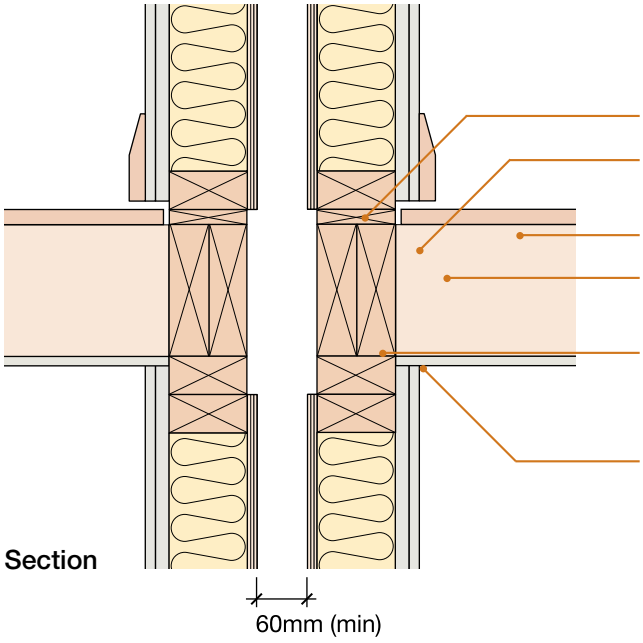
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

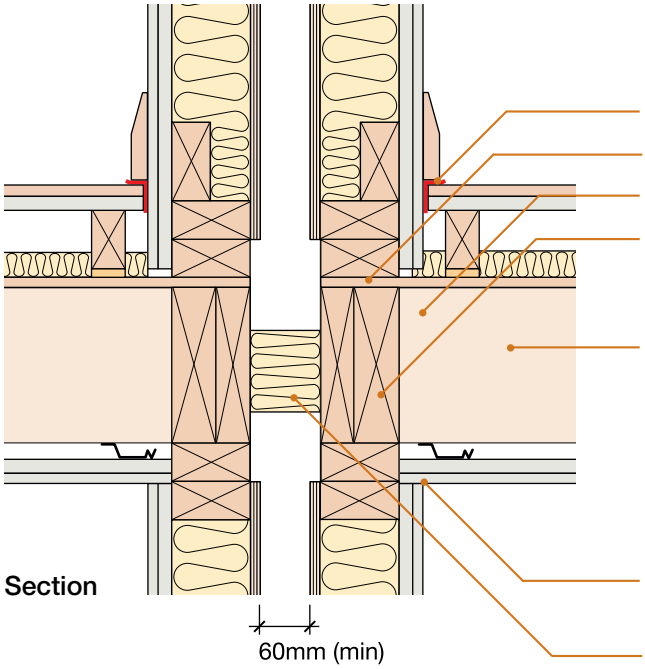
Full fill with Warmcel 500

3. Internal floor junction



- Floor decking may run under sole plates
- Internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists with full depth timber blocking where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant

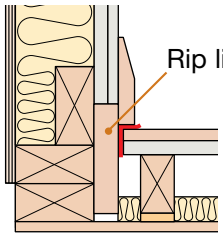
4. Separating floor junction



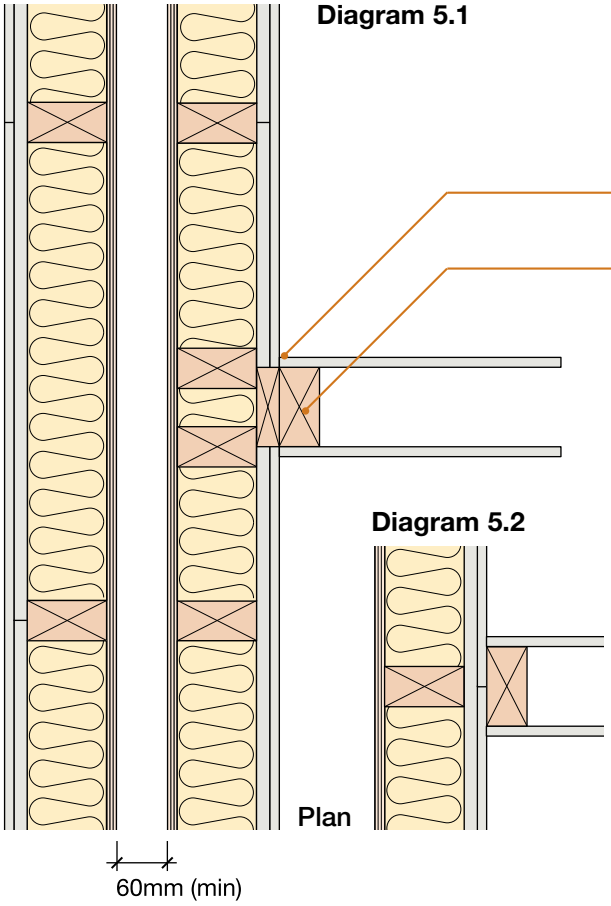
- 5mm (min) resilient flanking strip
- Floor decking may run under sole plates
- Floor joists may span in either direction
- Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to wall
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3b in introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)

Sketch shows E-FT-1 type separating floor

Alternative detail



5. Internal wall junction



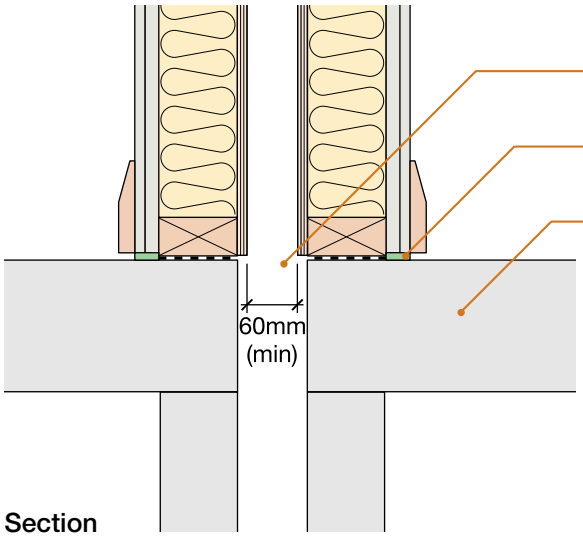
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

Diagram 5.1 shows junction detail where the internal wall is fixed through the separating wall lining; other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

Diagram 5.2 shows junction where the separating wall lining is continuous

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



*Note – Ensure substructure masonry is correctly set out to enable timber frame to achieve the required gap between wall panels

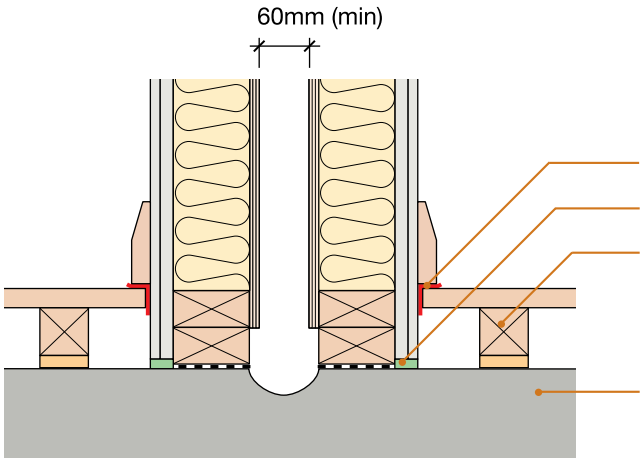
Ground floors not continuous between dwellings

Flexible or acoustic sealant (may be omitted when timber ground floor is used)

Ground floor construction:

- timber floor joists:
  - may span in either direction
  - floor decking may run under sole plates
  - close spaces between floor joists with full depth timber blocking where joists are at right angles to wall, or
- beam and block floor with all voids filled with mortar, or
- precast concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- cast in-situ concrete suspended slab, or
- ground bearing slab

7. Raft foundation



5mm (min) resilient flanking strip

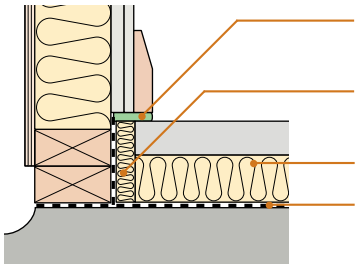
Flexible or acoustic sealant

A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)

Concrete raft - mass per unit area of 365 kg/m² (min)

Section

Alternative detail with screed finish



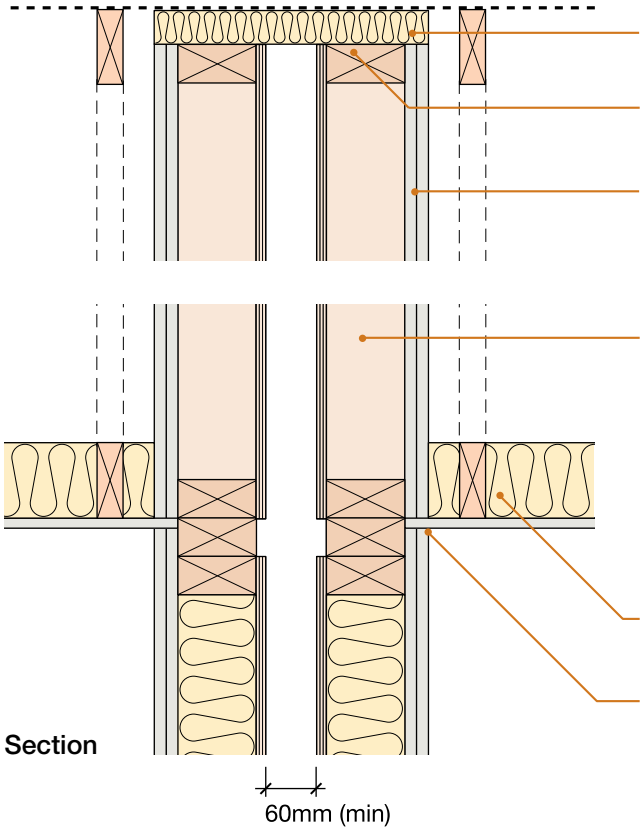
Mastic sealant, ensure skirting and wall lining are isolated from screed

Perimeter insulation, isolating screed from timber frame

Below screed insulation, isolating screed from raft

Polyethylene

8. Roof junction - pitched roof with no room-in-roof



Junction between separating wall and roof filled with flexible closer

Cavity separating wall continuous to underside of roof

Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered

Absorbent material not required in separating wall above ceiling

Alternatively use spandrel panel - see Appendix A

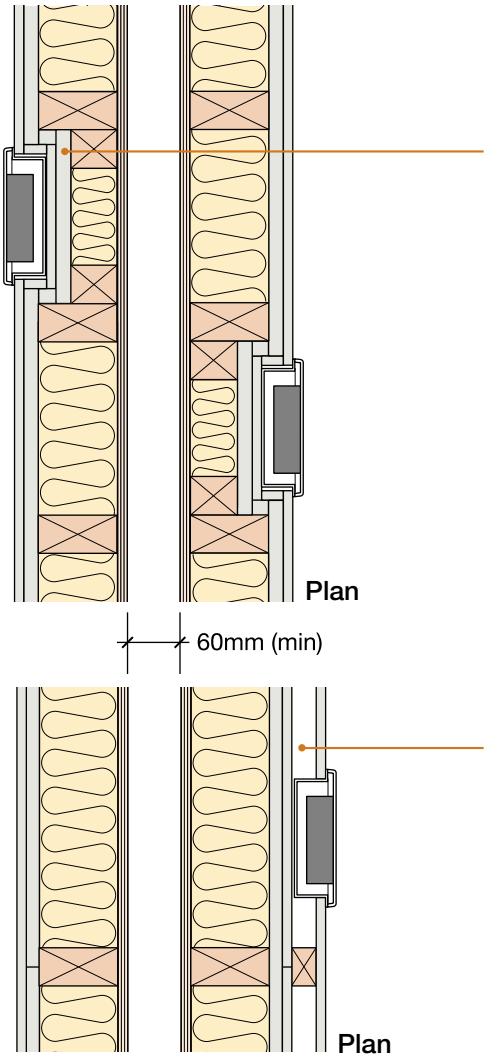
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists

Seal all perimeter joints with tape or caulk with sealant

Section

9. Services and sockets in the separating wall



9.1 – electrical sockets, switches, etc.

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

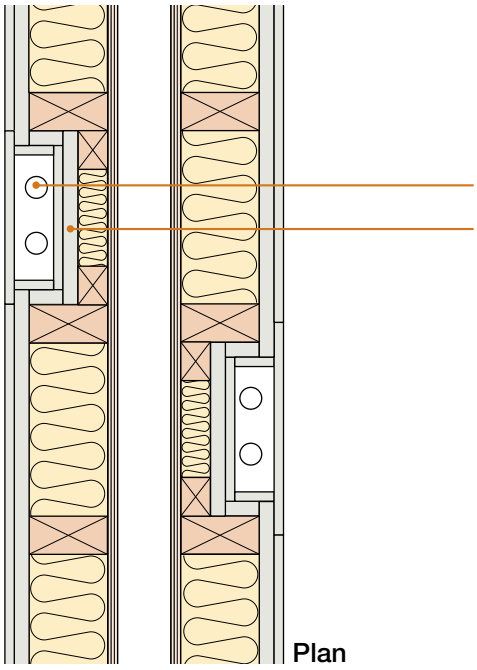
a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



9.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

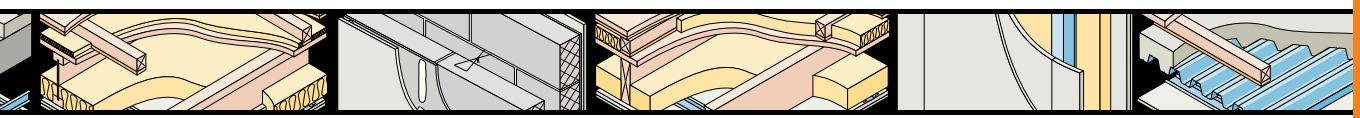
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 240mm apart?			
2.	Are sheathing boards at least 60mm apart?			
3.	Is absorbent material at least 89mm thick?			
4.	Are stud voids fully filled with Warmcel 500 except above ceiling line in roof void zone?			
5.	Are all joints in wall lining staggered?			
6.	Is separating wall lining correct mass per unit area on both sides?			
7.	Are all joints sealed with tape or caulked with sealant?			
8.	Are services installed in accordance with sketches 9.1 and 9.2?			
9.	If there is a separating floor (e.g. in flats/apartments) has the resilient flanking strip been provided?			
10.	Is separating wall satisfactorily complete?			

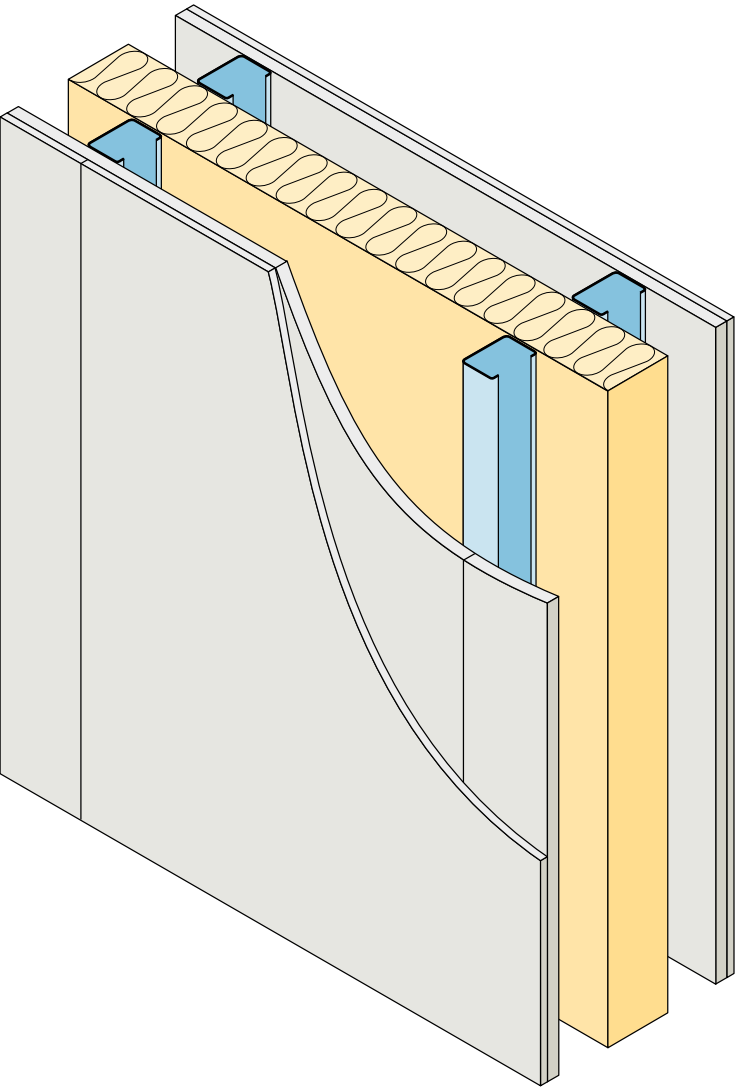
Contact details for technical assistance from Excel Industries, providers of Warmcel 500:

Telephone: 01685 845 200 **Fax:** 01685 844 106 **E-mail:** sales@excelfibre.com

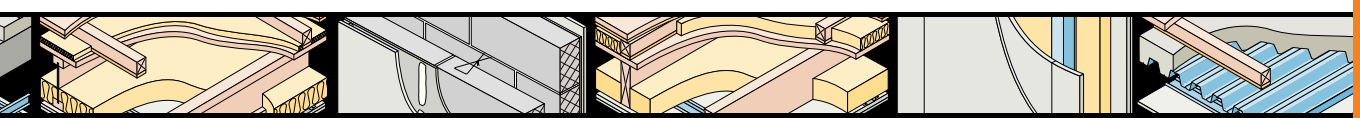
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .



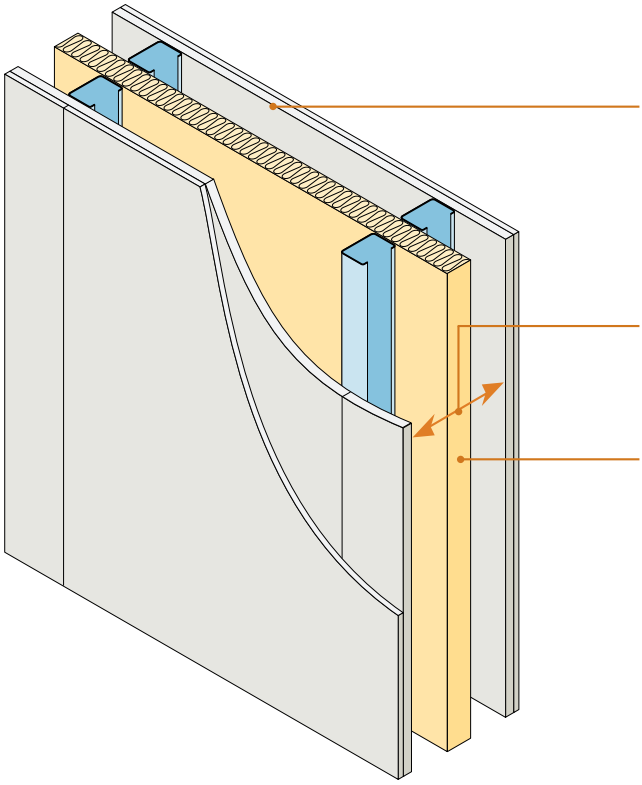


STEEL



Separating Wall – Steel Frame

Twin metal frames ■
For use in lightweight steel frame houses and flats/apartments ■



Wall lining	- 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 22 kg/m^2) both sides - all joints staggered
Wall width	200mm (min) between inner faces of wall linings.
Absorbent material	- one layer 50mm (min) unfaced mineral wool batts (density 33-60 kg/m^3), or - two layers 25mm (min) unfaced mineral wool batts (density 33-60 kg/m^3), or - two layers 25mm (min) unfaced mineral wool quilt (density min 10 kg/m^3)
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity

Notes: The steel frame profiles shown are indicative only. Other profiles are acceptable.

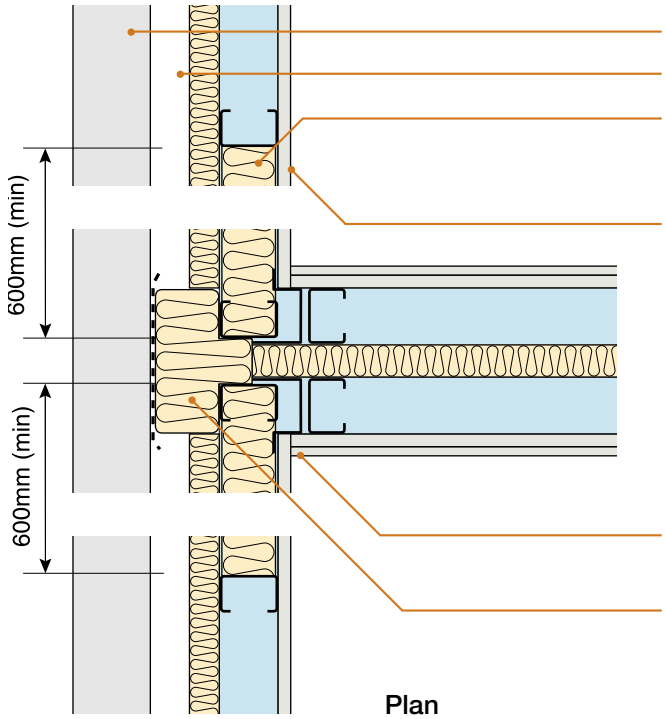
This Robust Detail is only suitable for use in lightweight steel frame houses and flats/apartments. When using this Robust Detail in flats/apartments please refer to Tables 3 and 4 of the Introduction. In relation to separating floors the inner leaf of external (flanking) walls may require further treatments – seek specialist advice.

All sketches show one layer of mineral wool batts placed between the studs. It is also acceptable to place a layer of mineral wool batts or quilt on both sides of the wall.

DO

- Keep wall linings at least 200mm apart
- Ensure the batts or quilt cover whole wall area and are fitted together tightly
- Make sure batts or quilt are not tightly compressed by the twin frames
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

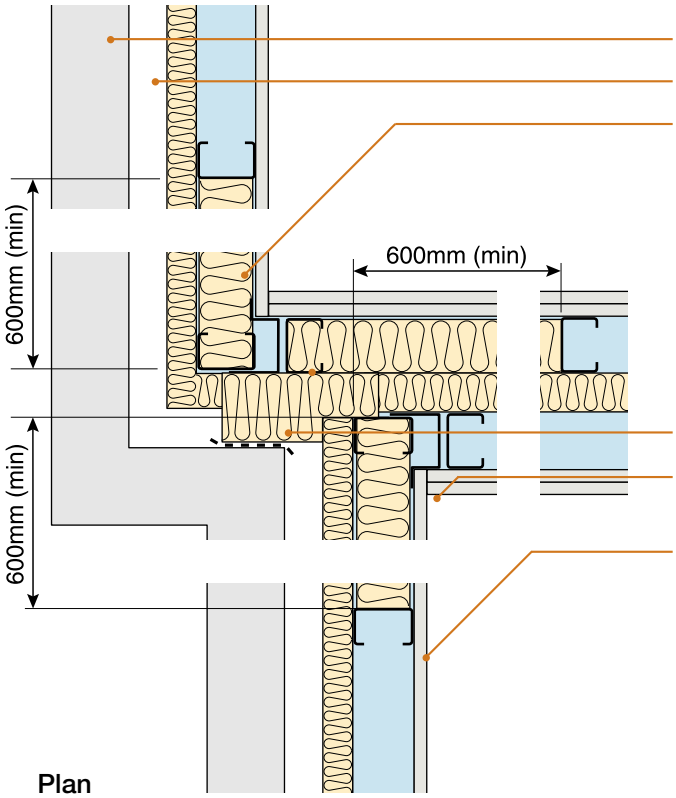
1. External (flanking) wall junction



Plan

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Fill the void between between studs with mineral wool batt, 10 kg/m³ (min), for 600mm (min) from separating wall or use Fusion Thermashield
- Inner leaf – one layer of gypsum-based board nominal 8 kg/m² or if using Fusion Thermashield, nominal 9.8 kg/m² spaced off by min 38mm battens or 25mm resilient bars
- If using robustdetails® for floor, refer to Table 3c in Introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop

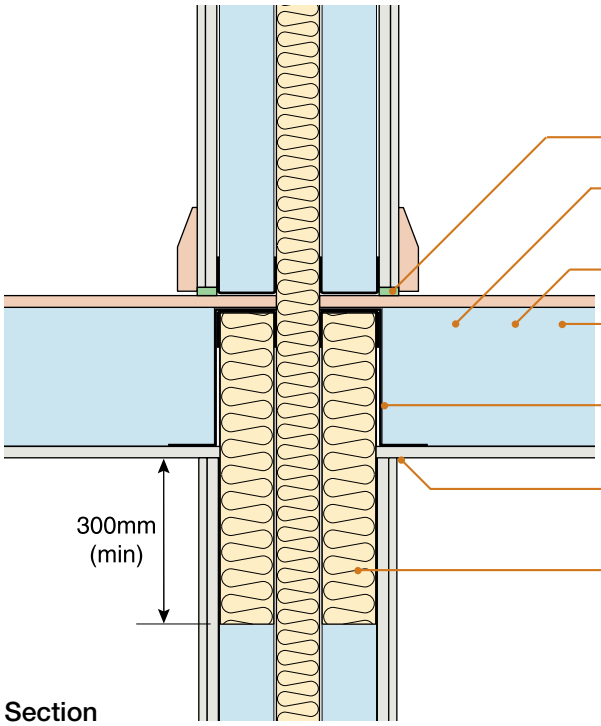
2. Staggered external (flanking) wall junction



Plan

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Fill the void between between studs with mineral wool batt, 10 kg/m³ (min), for 600mm (min) from separating wall or use Fusion Thermashield
- Close cavity with a flexible cavity stop
- Seal all perimeter joints with tape or caulk with sealant
- Inner leaf – one layer of gypsum-based board nominal 8 kg/m² or if using Fusion Thermashield, nominal 9.8 kg/m² spaced off by min 38mm battens or 25mm resilient bars
- If using robustdetails® for floor, refer to Table 3c in Introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction

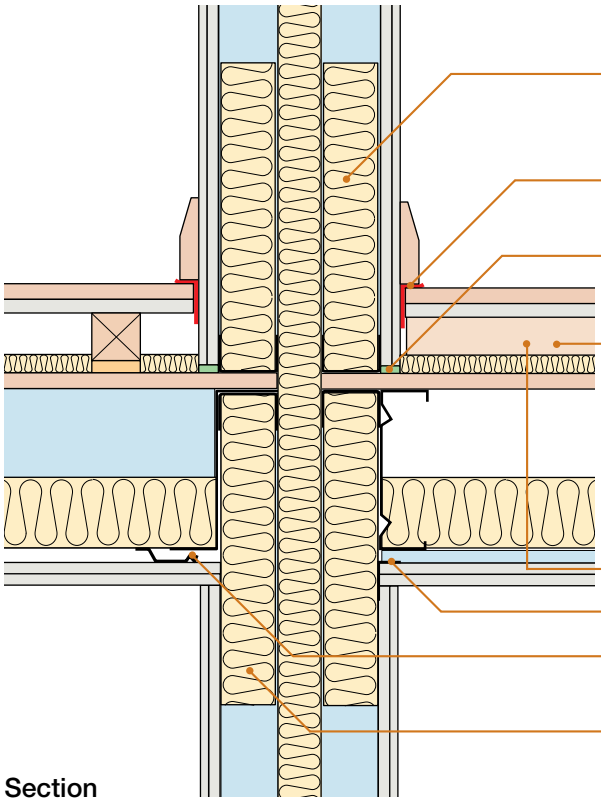
3. Internal floor junction



Section

- Flexible or acoustic sealant
- Lightweight steel internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant
- Fill the void between between studs with mineral wool batt for 300mm (min) down from ceiling

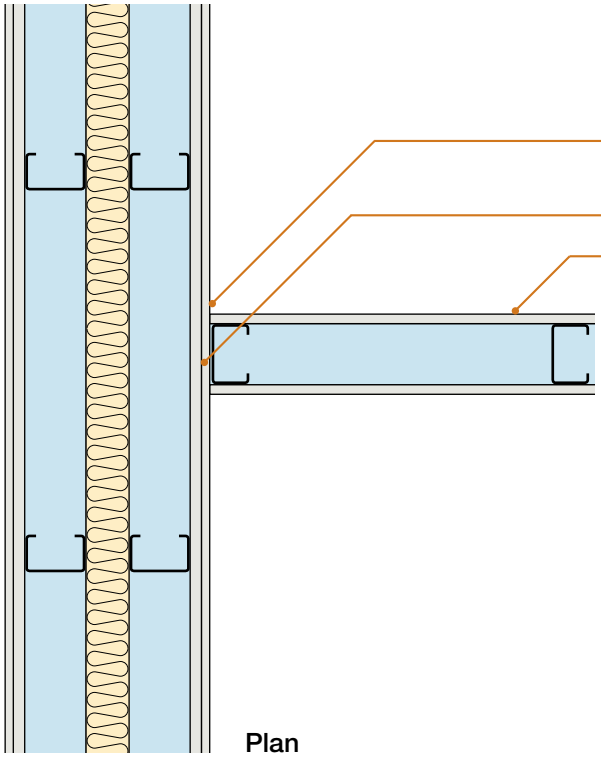
4. Separating floor junction



Section

- Mineral wool insulation batts, 33-60kg/m^3, between studs to 600mm (min) above bottom rail of steel frame
- 5mm (min) flanking strips installed at perimeter and turned beneath skirting board
- Flexible acoustic sealant below wall lining
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3c in Introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Floors should not be continuous between dwellings
- Fixing angle
- Resilient bar below joists at 450mm centres fixed through joist flange to manufacturer's detail
- Mineral wool insulation batts, 33-60kg/m^3, between studs to 600mm (min) below decking level

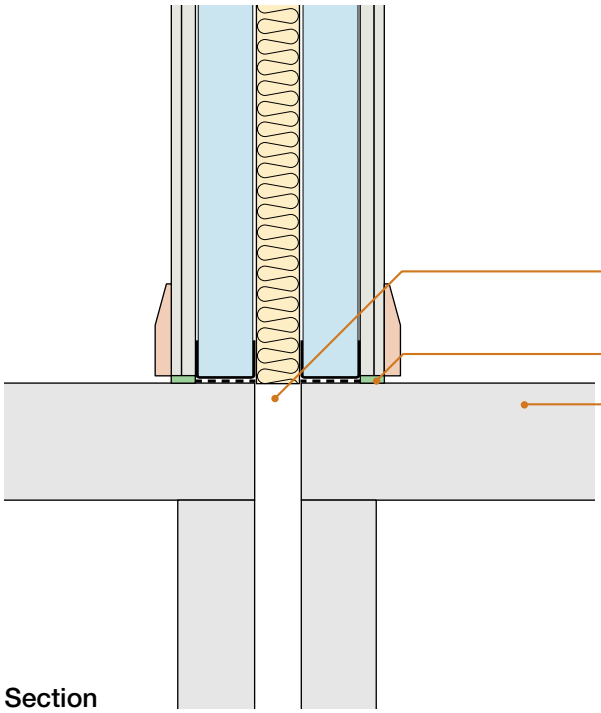
5. Internal wall junction



Plan

- Seal all perimeter joints with tape or caulk with sealant
- Separating wall lining continuous
- Where required internal wall to comply with Building Regulations Requirement E2
- Other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

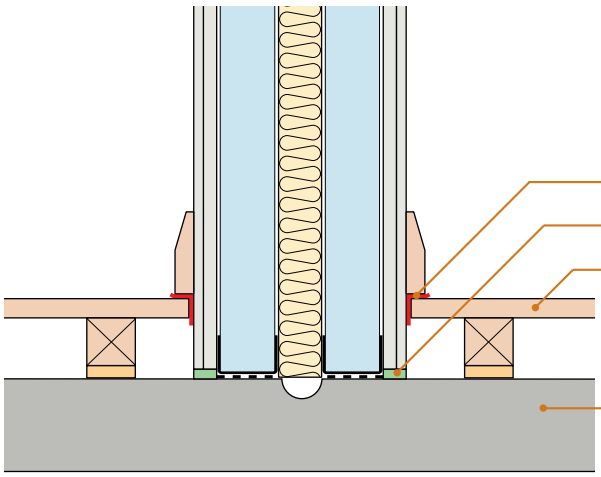
6. Ground floor junction: beam and block, precast concrete plank, cast-in situ concrete suspended slab or ground bearing slab



Section

- Ground floors not continuous between dwellings
- Flexible or acoustic sealant
- Ground floor construction:
  - 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
  - cast-in situ concrete suspended slab, or
  - ground bearing slab

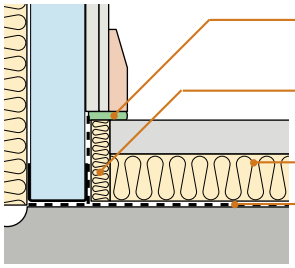
7. Raft foundation



- 5mm (min) resilient flanking strip
- Flexible or acoustic sealant
- A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)
- Concrete raft - mass per unit area of 365 kg/m² (min)

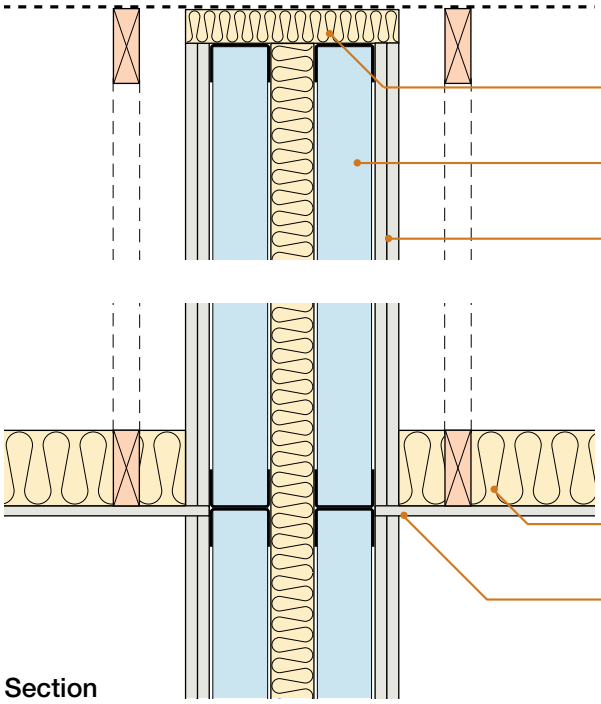
Section

Alternative detail with screed finish



- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from metal frame
- Below screed insulation, isolating screed from raft
- Polyethylene

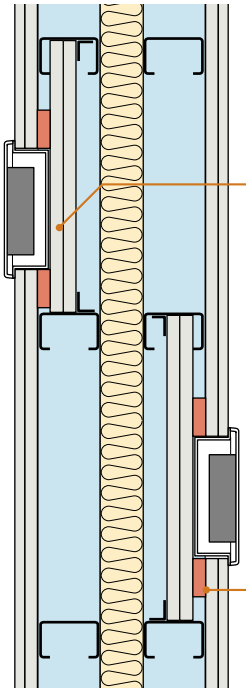
8. Roof junction - pitched roof with no room-in-roof



- Junction between separating wall and roof filled with flexible closer.
- Cavity separating wall continuous to underside of roof
- Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered
- 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
- 100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists
- Seal all perimeter joints with tape or caulk with sealant

Section

9. Services and sockets in the separating wall



Plan

9.1 – electrical sockets, switches, etc.

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

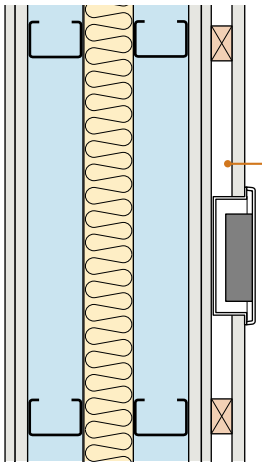
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

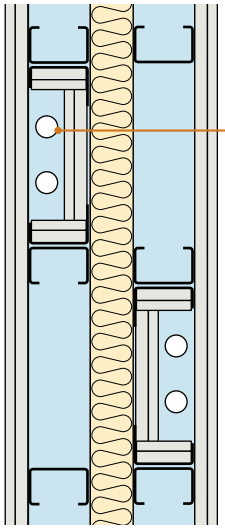
Fire resistant seal where required by Part B of the Building Regulations



Plan

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure.



Plan

9.2 – piped services

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes

blank page

See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

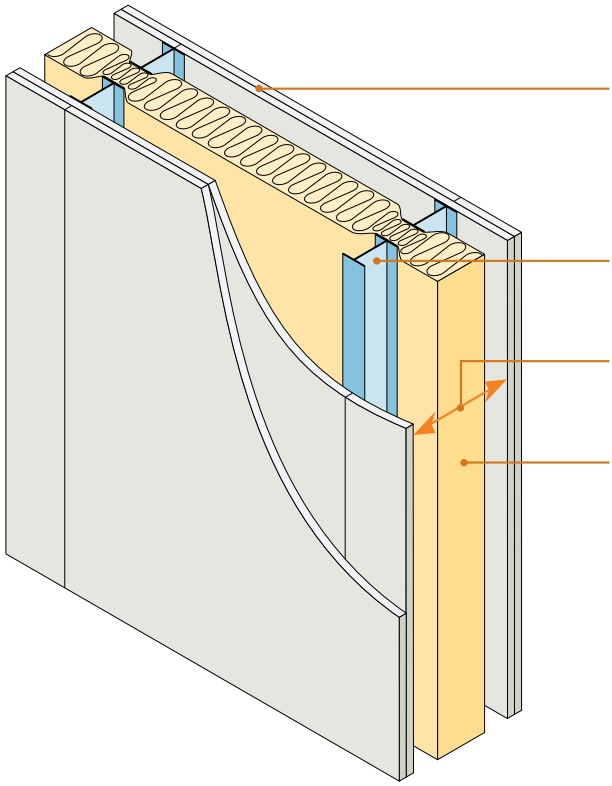
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 200mm apart?			
2.	Is the absorbent material unfaced mineral wool batts or quilt of appropriate density and thickness?			
3.	Are batts or quilt fitted together tightly ?			
4.	Are all joints in the wall lining staggered?			
5.	Is separating wall lining correct mass per unit area on both sides?			
6.	Where Fusion Thermashield is used, is the inner leaf gypsum board 9.8 kg/m^2 and spaced off by min 38mm battens or 25mm resilent bars?			
7.	Are all joints sealed with tape or caulked with sealant?			
8.	Are services installed in accordance with sketches 8.1 & 8.2?			
9.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Steel Frame E-WS-2

British Gypsum GypWall QUIET IWL ■
Use with reinforced concrete frame construction only ■



Wall lining	- 2 layers of 15mm Gyproc SoundBloc plasterboard both sides - all joints staggered
Steel frame	Gypframe studs 60mm deep (min)
Wall width	190mm (min) between inner faces of wall linings
Absorbent material	100mm (min) Isover mineral wool quilt (density 10 kg/m^3 min)
External (flanking) wall	Outer leaf masonry or precast panels with minimum 50mm cavity

Note: the steel frame profiles shown are indicative only.

Alternative external (flanking) wall construction

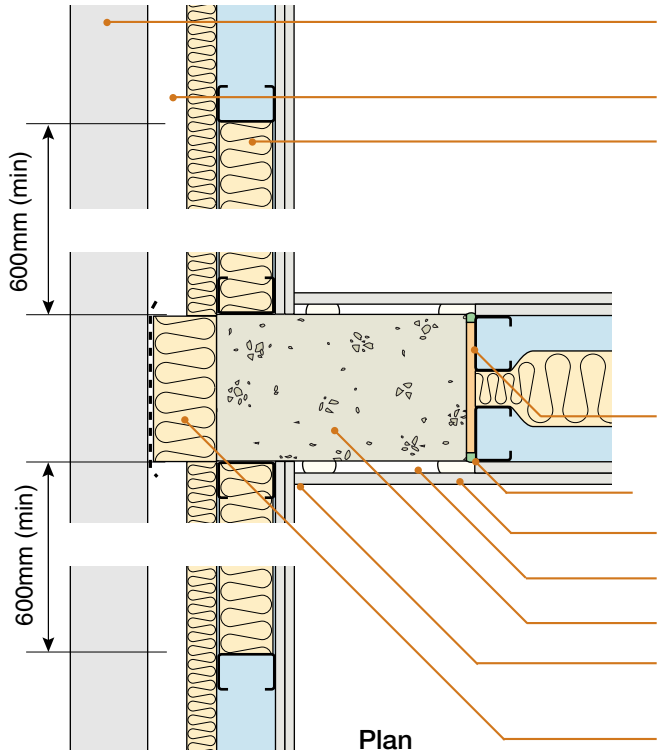
Storey height glazing units are an acceptable alternative to the cavity walls illustrated:

- glazing units should not be continuous between storeys
- mullion or transom supports/framing should not be continuous between dwellings
- the junction between the separating wall and the external (flanking) wall must only occur at the position of concrete columns

DO

- Keep wall linings at least 190mm apart
- Ensure that the quilt covers the whole wall area without gaps
- Make sure the quilt is compressed by the twin frames
- Make sure there is no connection between the two leaves
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Follow the manufacturer's instructions
- Refer to Appendix A

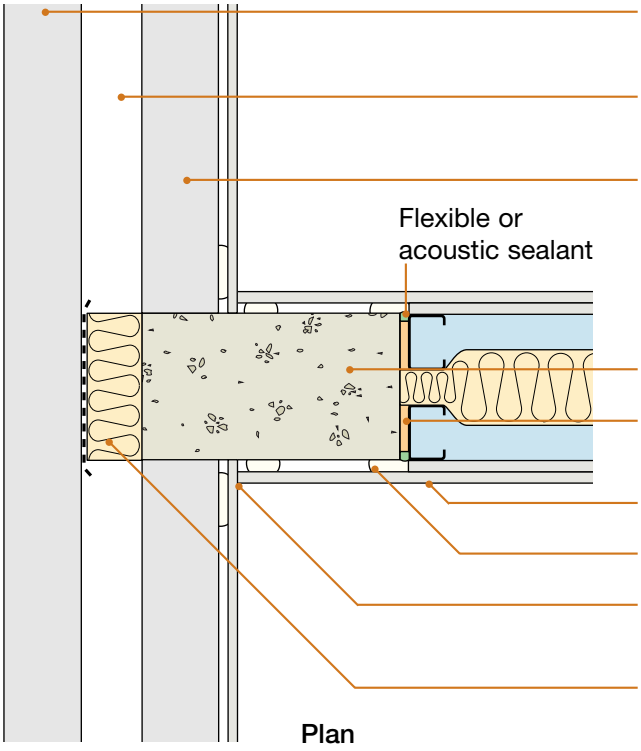
1. External (flanking) wall junction – steel or timber frame inner leaf (at concrete column position)



- Masonry outer leaf or precast panels (min 100mm thick)
- External wall cavity (min 50mm)
- Inner leaf
  - two layers of gypsum-based board nominal 8 kg/m² each layer and 50mm (min) mineral wool, 10 kg/m³ (min), placed between studs for first 600mm, or
  - one layer of gypsum-based board nominal 10 kg/m² and 50mm (min) mineral wool, 10 kg/m³ (min), placed between all studs
- Frames fixed through 20mm mineral fibre or 5mm (min) foamed polyethylene resilient strip
- Flexible or acoustic sealant
- Avoid joints in outer layer at edge of column
- Continuous vertical ribbon of adhesive
- Concrete column
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop

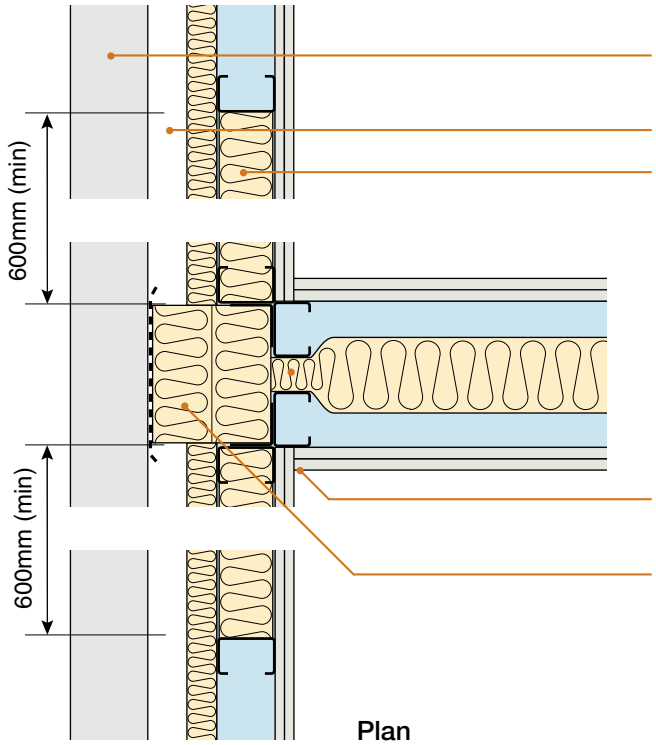
2. External (flanking) wall junction – masonry inner leaf (at concrete column position)

Note: Masonry inner leaf is only permitted provided junction with the separating wall occurs at position of concrete column



- Masonry outer leaf or precast panels (min 100mm thick)
- External wall cavity (min 50mm) – clear, fully filled or partially filled with insulation
- **Inner leaf**
  - 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³ or 1850 kg/m³ to 2300 kg/m³)
  - internal finish - 13mm plaster or nominal 8 kg/m² gypsum-based board
- Concrete column
- Frames fixed to 20mm mineral wool or 5mm foamed polyethylene resilient strip
- Avoid joints in outer layer at edge of column
- Continuous vertical ribbon of adhesive
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation or expanded polystyrene beads

3. External (flanking) wall junction – steel or timber frame inner leaf (not at concrete column position) – option 1



Masonry outer leaf or precast panels (min 100mm thick)

External wall cavity (min 50mm)

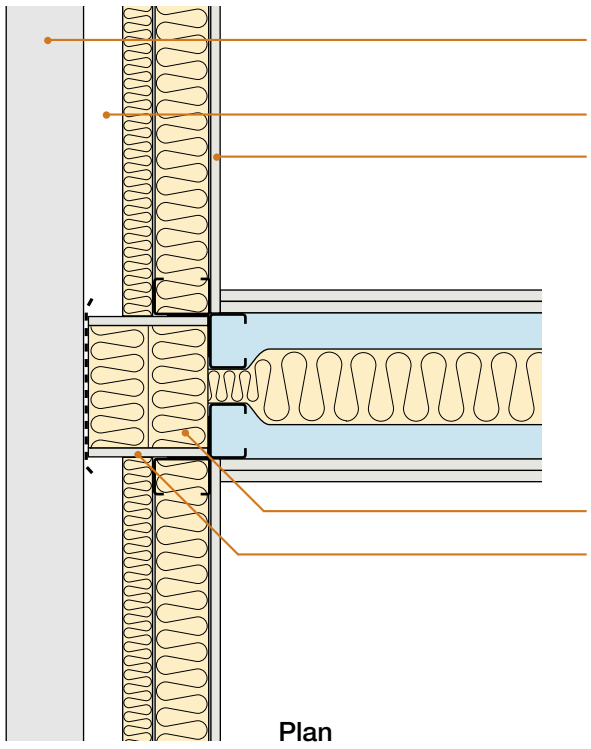
Inner leaf - two layers of gypsum-based board nominal 8 kg/m^2 each layer and 50mm (min) mineral wool, 10 kg/m^3 (min), placed between studs for first 600mm

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a flexible cavity stop

Plan

4. External (flanking) wall junction – steel or timber frame inner leaf (not at concrete column position) – option 2



Masonry outer leaf or precast panels (min 100mm thick)

External wall cavity (min 50mm)

Inner leaf - one layer of gypsum-based board nominal 10 kg/m^2 and 50mm (min) mineral wool, 10 kg/m^3 (min), placed between studs

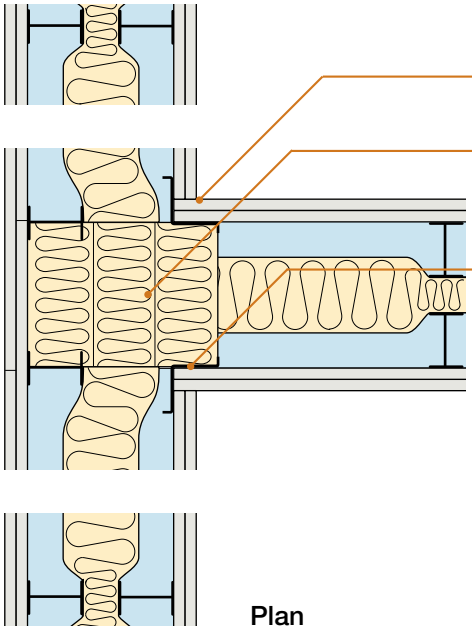
Flexible cavity stop

Gypsum-based board nominal 10 kg/m^2

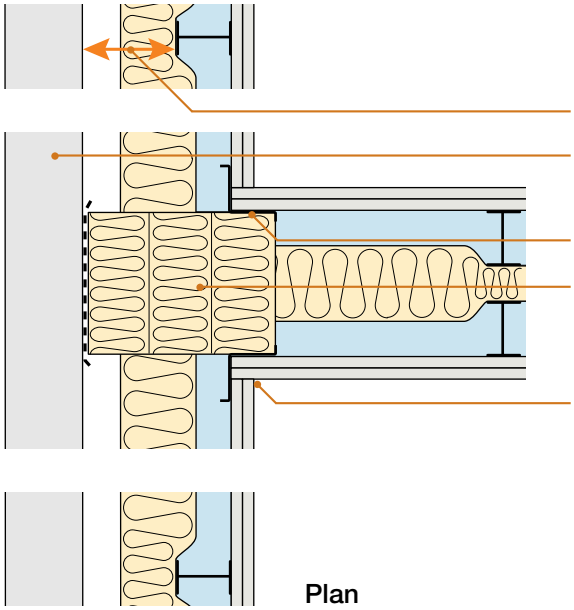
Plan

5. Separating wall to separating wall junction

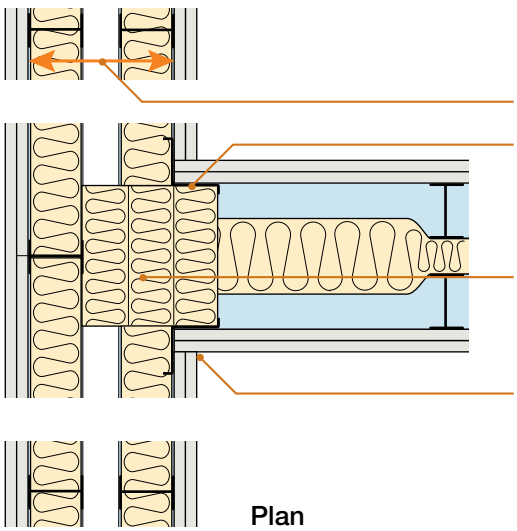
5.1



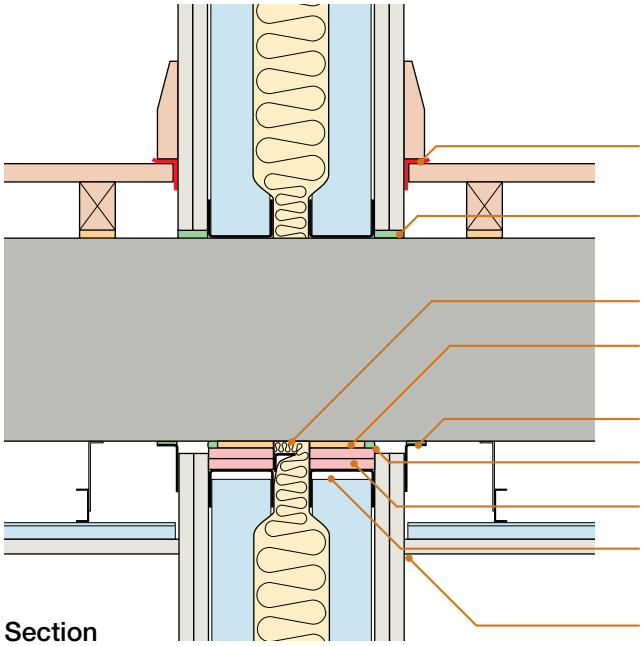
5.2



5.3



6. Separating floor junction – in-situ concrete floor E-FC-2



5mm (min) resilient flanking strip

Flexible or acoustic sealant

Steel angle to suspend quilt

20mm mineral fibre or 5mm foamed polyethylene resilient strip

Steel angle to seal void

Flexible or acoustic sealant

Gyproc Core board

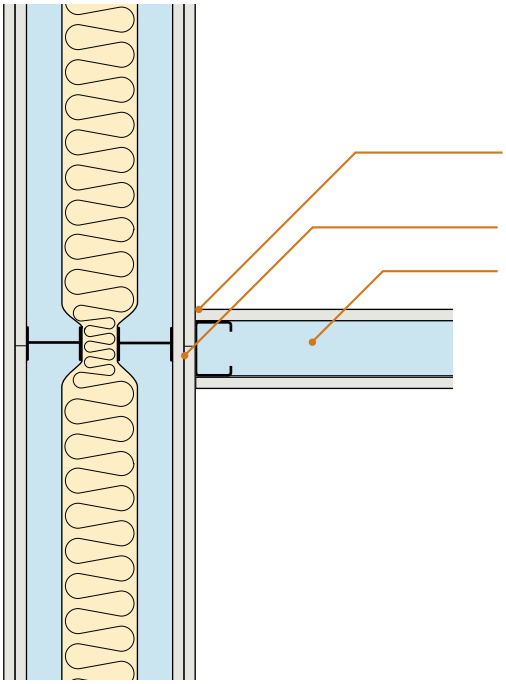
Junction to allow for deflection of slab where required

Seal all perimeter joints with tape or caulk with sealant

Section

Sketch shows 250mm concrete slab, FFT1 type floating floor treatment and metal ceiling treatment

7. Internal wall junction



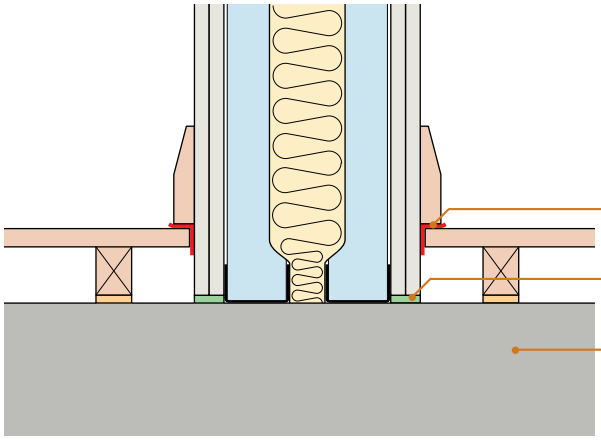
Seal all perimeter joints with tape or caulk with sealant

Separating wall lining continuous

Where required internal wall to comply with Building Regulations Requirement E2

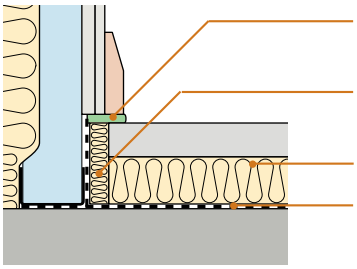
Plan

8. Ground floor junction

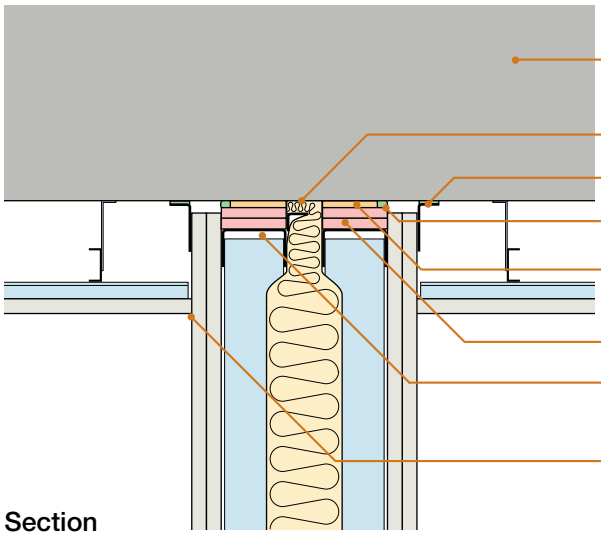


Section

Alternative detail with screed finish

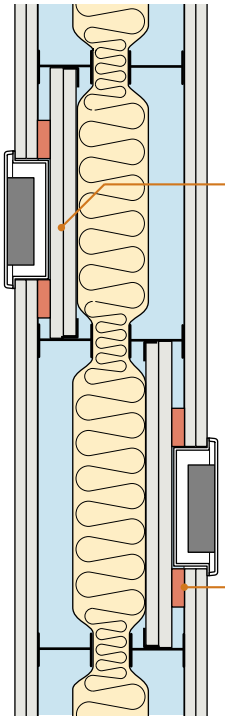


9. Roof junction



Section

10. Services and sockets in the separating wall



Plan

10.1 electrical sockets, switches etc

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

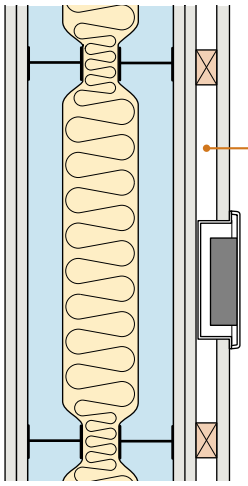
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

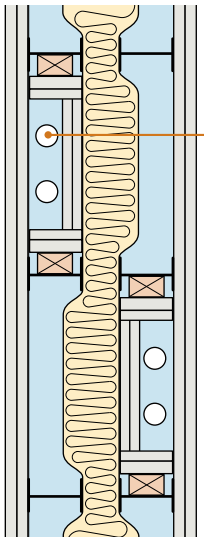
Fire resistant seal where required by Part B of the Building Regulations



Plan

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

10.2 piped services

Stagger services on each side of the wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 190mm apart?			
2.	Is absorbent material 100mm (min) Isover mineral wool quilt (min density 10 kg/m^3)?			
3.	Is quilt compressed between studs?			
4.	Is separating wall lining two layers of 15mm Gyproc SoundBloc plasterboard on both sides?			
5.	Are all joints in wall lining staggered?			
6.	Are all joints sealed with tape or caulked with sealant?			
7.	Are services and sockets installed in accordance with sketches 10.1 and 10.2?			
8.	Is separating wall satisfactorily complete?			

Contact details for technical assistance from British Gypsum, manufacturer of Gypwall QUIET IWL steel frames:

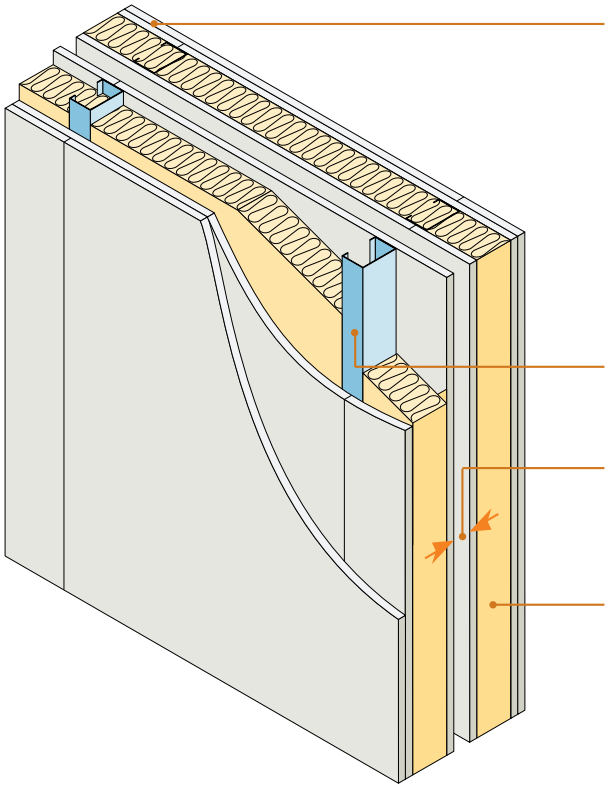
Telephone: 0844 800 1991 **Fax:** 0844 561 8816 **E-mail:** bgtechnical.enquiries@bpb.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Modular Build Steel Frame E-WS-3

Modular build twin metal frames ■
Only for use in lightweight steel frame modular houses and flats/apartments ■



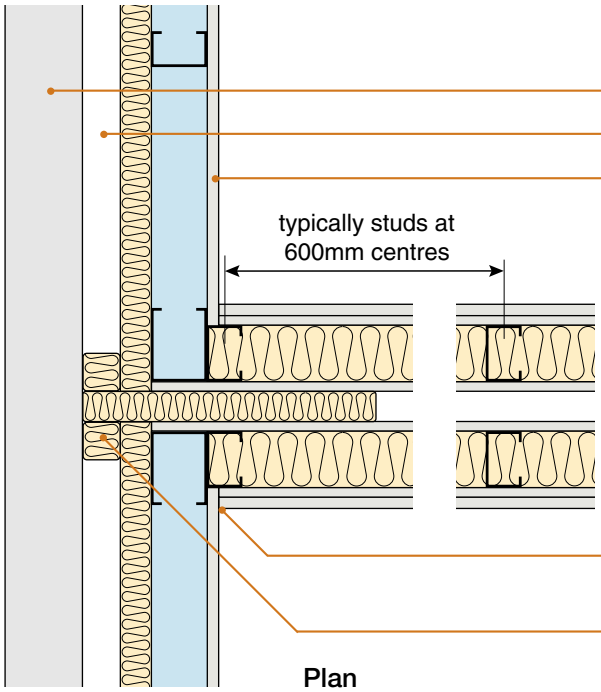
Wall lining	- 2 layers of gypsum-based board, total mass per unit area 32 kg/m² (min) for 72mm studs, both sides, or - total mass per unit area 24 kg/m² (min) for minimum 100mm studs, both sides - all joints staggered
Metal frame	Metal frame 'C' or 'I' studs minimum 72mm
Sheathing board	Minimum mass per unit area 7.5 kg/m² with 40mm (min) cavity between boards
Absorbent material	75mm (min) mineral wool batts 45 kg/m³
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity

Note: When using this Robust Detail in flats/apartments please refer to Tables 3 and 4 of the Introduction. In relation to separating floors the inner leaf of external (flanking) walls may require further treatments – seek specialist advice

DO

- Keep wall sheathing boards at least 40mm apart
- Ensure that batts cover the whole wall area and are fitted together tightly
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External wall junction – no stagger



Plan

Masonry outer leaf (min 100mm thick)

External cavity wall (min 50mm)

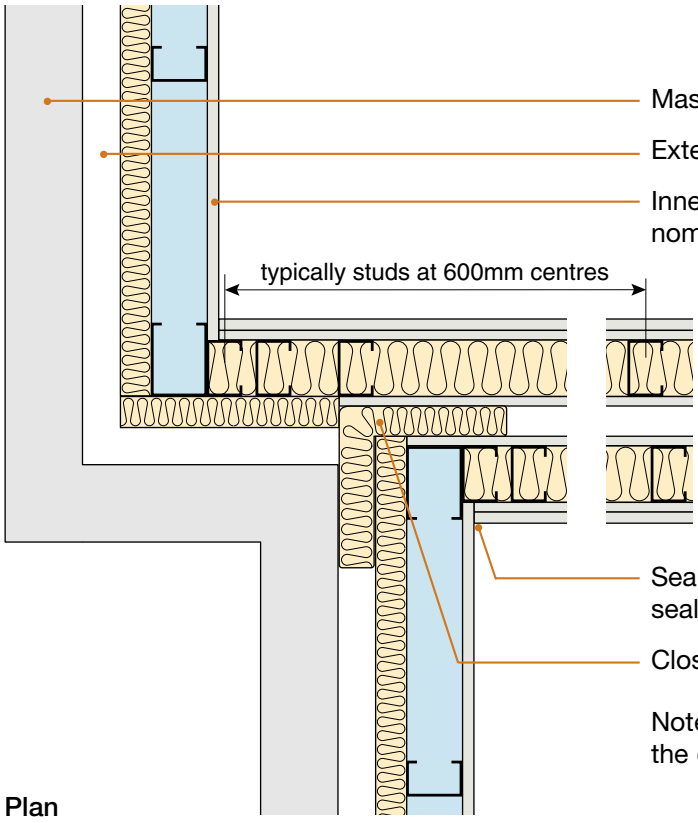
Inner leaf – one layer of gypsum-based board nominal 8 kg/m²

Seal all perimeter joints with tape or caulk with sealant

Close cavity with flexible cavity stops

Note: it is permissible to use sheathing board on the cavity side of the inner leaf of the external wall

2. External wall junction – with stagger



Plan

Masonry outer leaf (min 100mm thick)

External cavity wall (min 50mm)

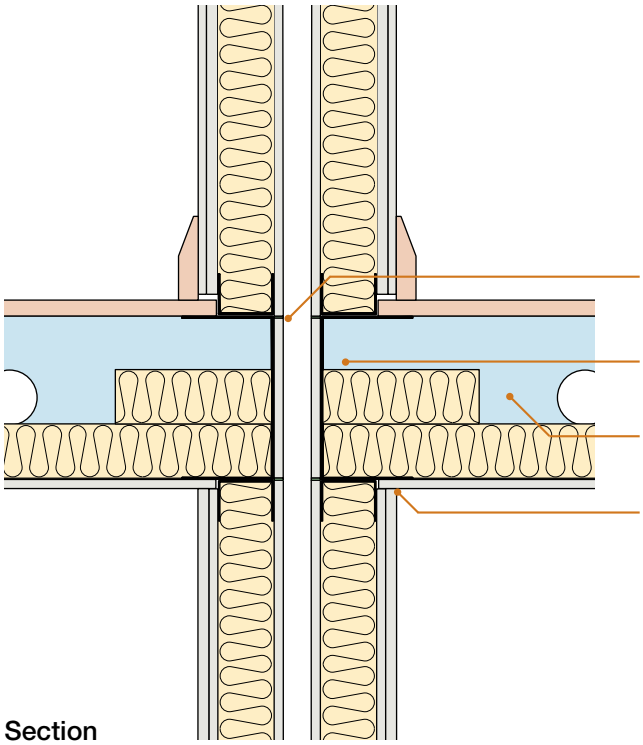
Inner leaf – one layer of gypsum-based board nominal 8 kg/m²

Seal all perimeter joints with tape or caulk with sealant

Close cavity with flexible cavity stop

Note: it is permissible to use sheathing board on the cavity side of the inner leaf of the external wall

3. Internal floor junction



Intumescent seal

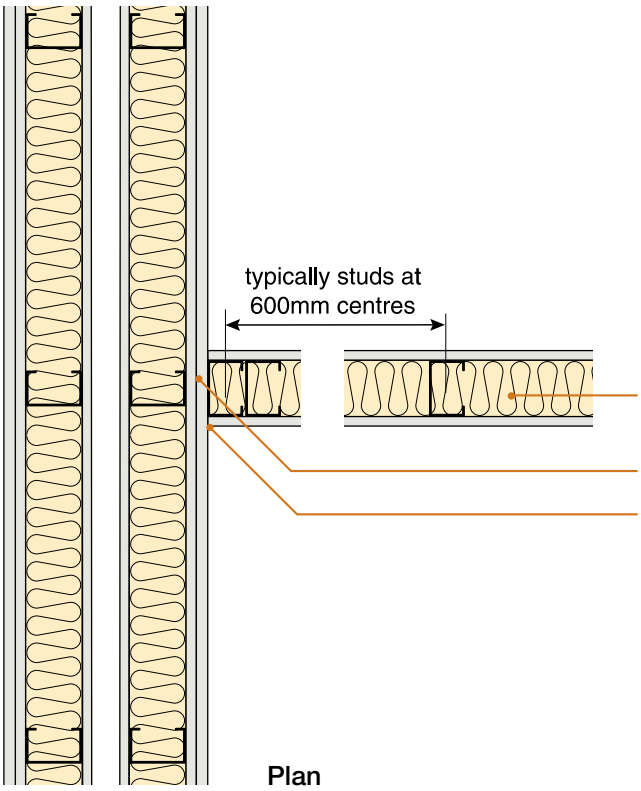
Internal floors should not be continuous between dwellings

Lightweight steel internal floor to comply with Building Regulations Requirement E2

Seal all perimeter joints with tape or caulk with sealant

Section

4. Internal wall junction



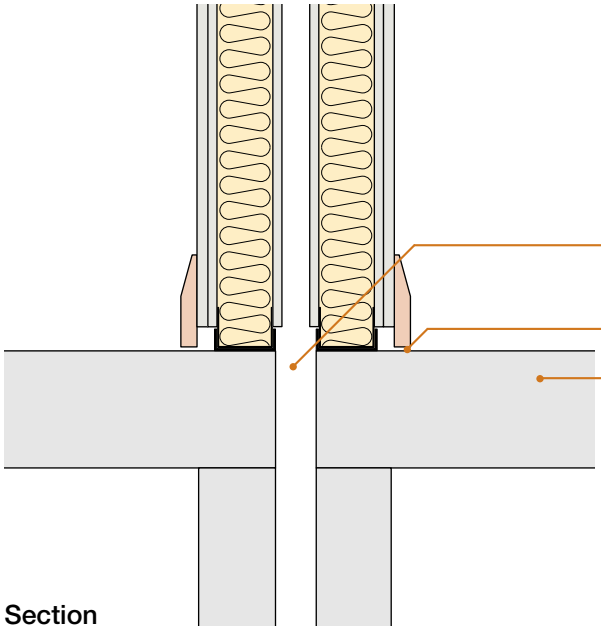
Where required internal wall to comply with Building Regulations Requirement E2

Separating wall lining continuous

Seal all perimeter joints with tape or caulk with sealant

Plan

5. Ground floor junction



Section

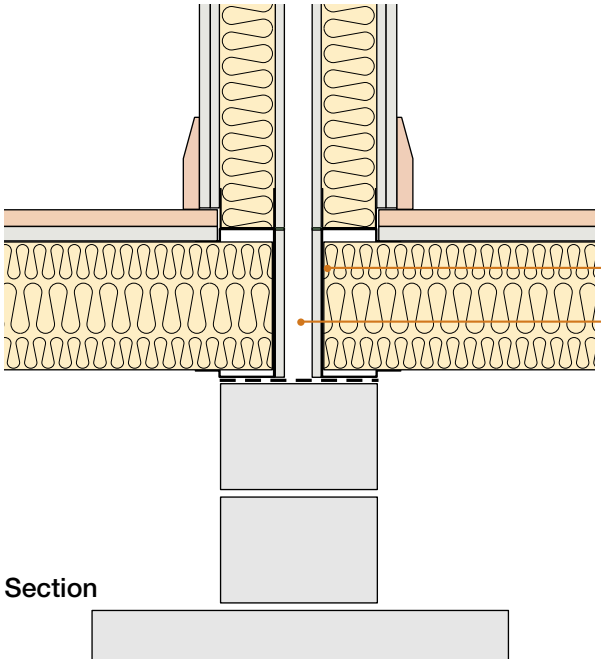
Ground floors not continuous between dwellings

5mm gap below skirting

Ground floor construction:

- 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
- cast-in situ concrete suspended slab, or
- ground bearing slab

6. Ground floor junction – lightweight steel frame ground floor

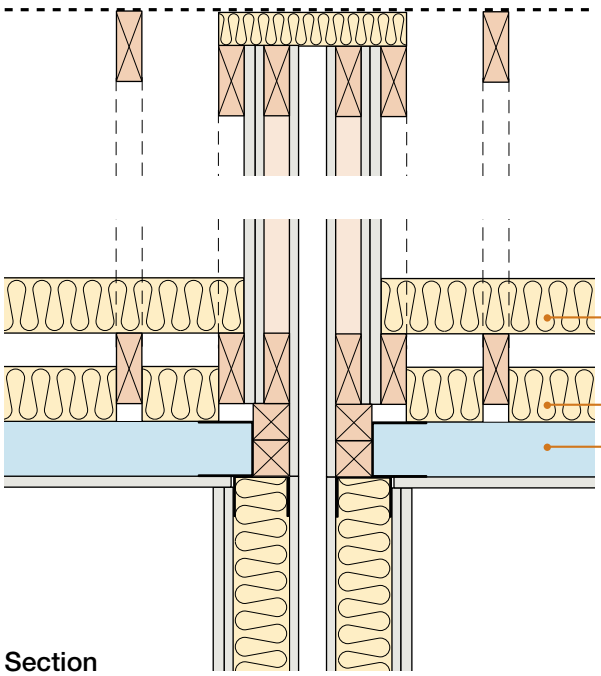


Section

Lightweight steel frame ground floor

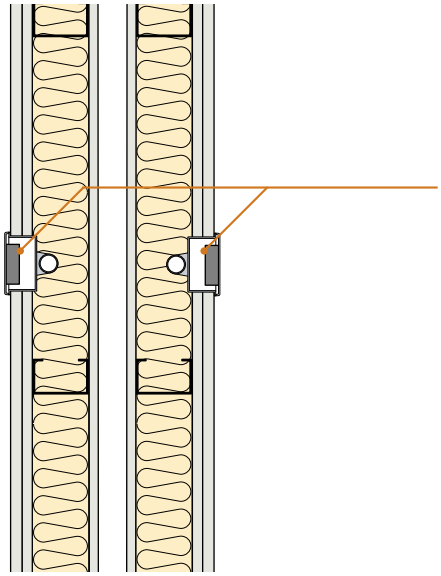
Ground floors not continuous between dwellings

7. Roof junction



Section

8. Sockets in the separating wall



Plan

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

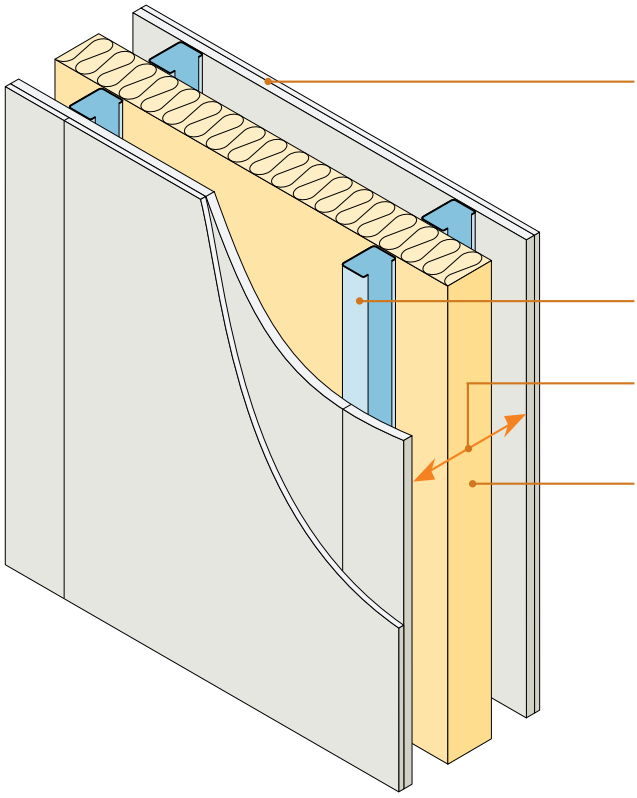
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall leaves at least 40mm apart?			
2.	Are the metal frames a minimum of 72mm or greater?			
3.	Is the mineral wool placed in the cavities of both leaves?			
4.	Are all joints in the wall lining staggered?			
5.	Are all joints sealed with tape or caulked with sealant?			
6.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Steel Frame E-WS-4

Twin metal frames (min. 250mm between linings) ■
For use in lightweight steel frame houses and flats/apartments ■



Wall lining	- 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 22 kg/m^2) both sides - all joints staggered
Wall frame	75mm (min) 'C' shape studs both sides
Wall width	**250mm (min)** between inner faces of wall linings.
Absorbent material	One layer 80mm (min) unfaced mineral wool batts (density 33-60 kg/m^3)
External (flanking) wall	See Sections 1 and 2

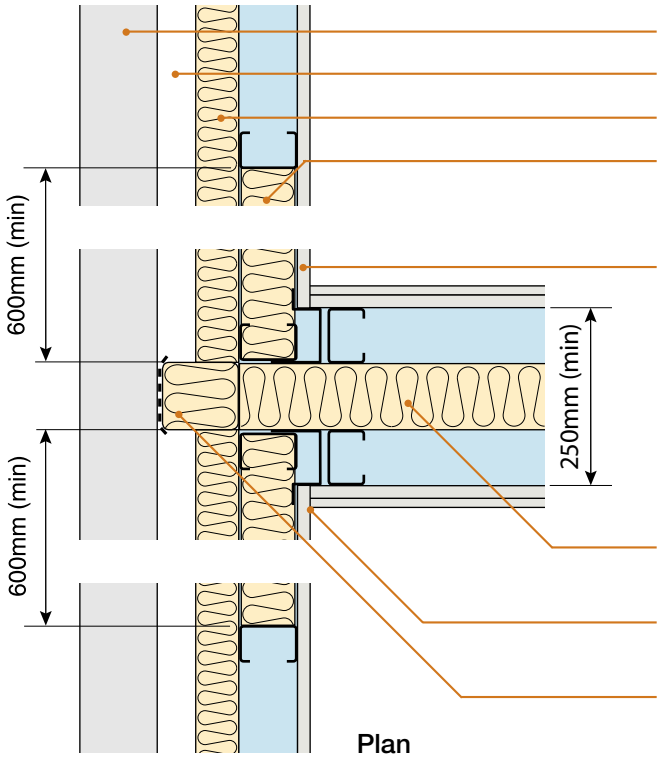
Notes:

This Robust Detail is only suitable for use in lightweight steel frame houses and flats/apartments. When using this Robust Detail in flats/apartments please refer to Tables 3c and 5 of the Introduction.

DO

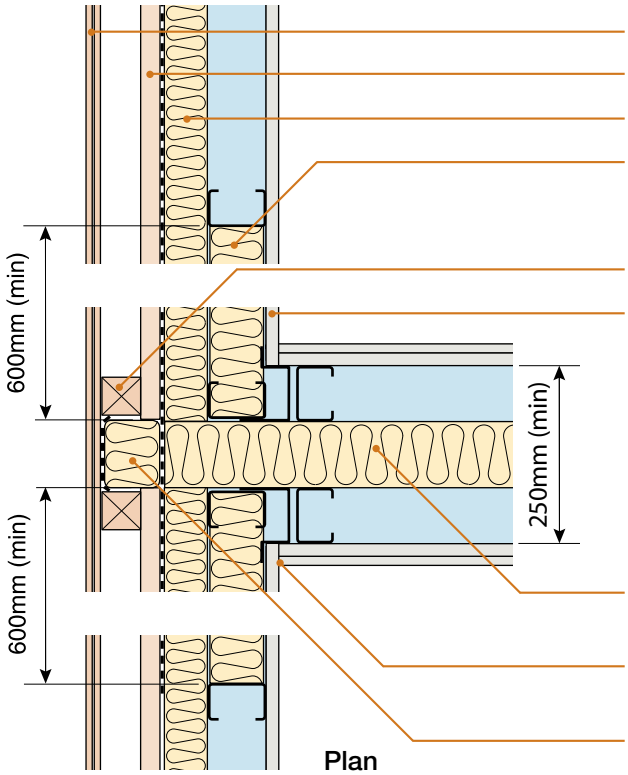
- Keep wall linings at least 250mm apart
- Ensure the batts cover whole wall area and are fitted together correctly between 75mm twin frames
- Make sure batts are not tightly compressed by the twin frames
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two leaves except where ties are necessary for structural reasons
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External (flanking) wall junction – masonry outer leaf



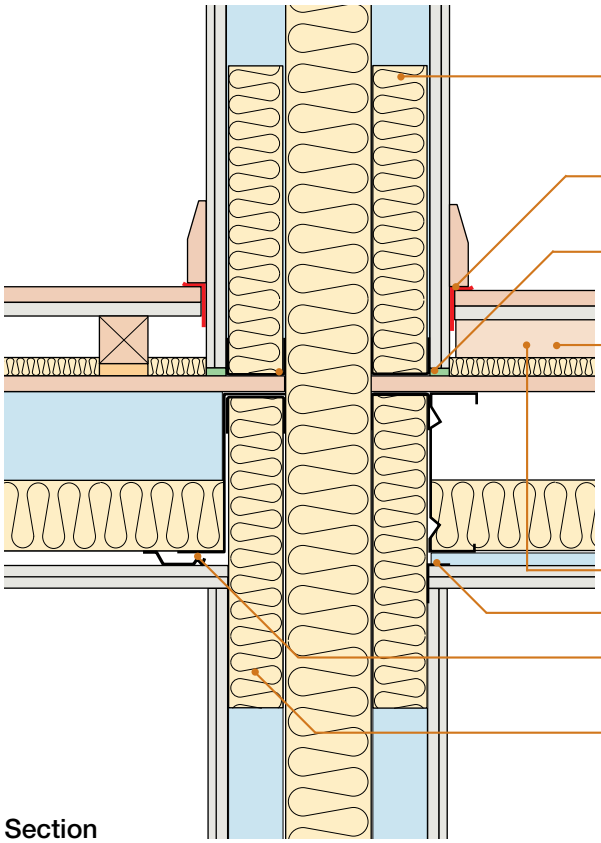
- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 55mm)
- 55mm (min) rigid insulation board
- Fill the void between between studs with mineral wool batt, 33-60 kg/m^3, for 600mm (min) from separating wall
- Inner leaf:
  - Attached houses – one layer of gypsum-based board nominal 10 kg/m^2
  - Flats/apartments – two layers of gypsum-based board nominal 20kg/m^2 combined
- 80mm (min) unfaced mineral wool batts (density 33-60 kg/m^3) suspended between the twin frames
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop

2. External (flanking) wall junction – timber cladding outer leaf



- 8mm (min) weatherboarding
- 25x50 timber counterbattens
- 55mm (min) rigid insulation board
- Fill the void between studs with mineral wool batt, 33-60 kg/m^3, for 600mm (min) from separating wall
- 50x50mm timber battens
- Inner leaf:
  - Attached houses – one layer of gypsum-based board nominal 10 kg/m^2
  - Flats/apartments – two layers of gypsum-based board nominal 20kg/m^2 (min) combined
- 80mm (min) unfaced mineral wool batts (density 33-60 kg/m^3) suspended between the twin frames
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop

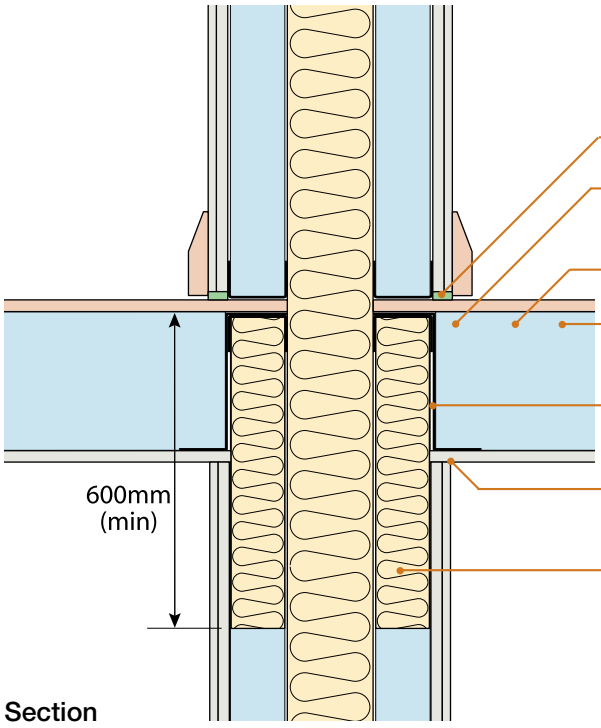
3. Separating floor junction



Section

- Mineral wool insulation batts, 33-60kg/m³, between studs to 600mm (min) above bottom rail of steel frame
- 5mm (min) flanking strips installed at perimeter and turned beneath skirting board
- Flexible acoustic sealant below wall lining
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3c in Introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Floors should not be continuous between dwellings
- Fixing angle
- Resilient bar below joists at 450mm centres fixed through joist flange to manufacturer's detail
- Mineral wool insulation batts, 33-60kg/m³, between studs to 600mm (min) below decking level

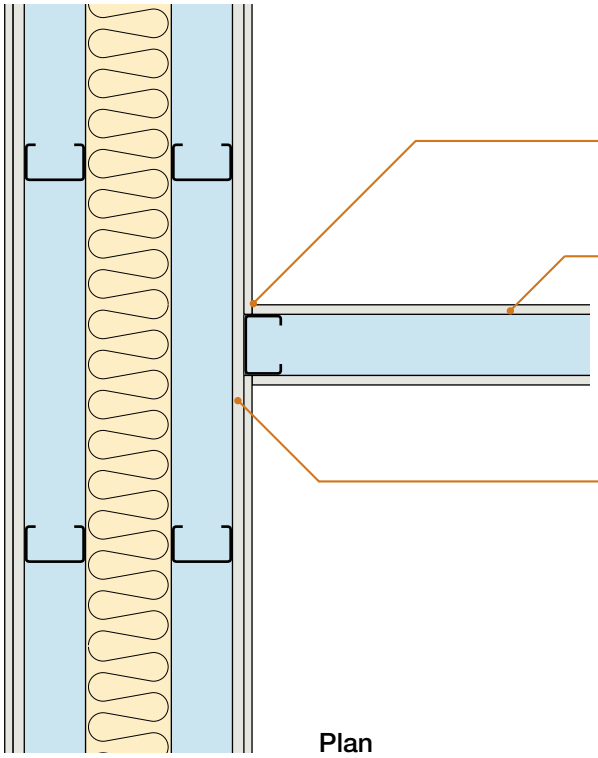
4. Internal floor junction



Section

- Flexible or acoustic sealant
- Lightweight steel internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant
- Fill the void between between studs with mineral wool batts, 33-60kg/m³, for 600mm (min) below floor decking level

5. Internal wall junction



Plan

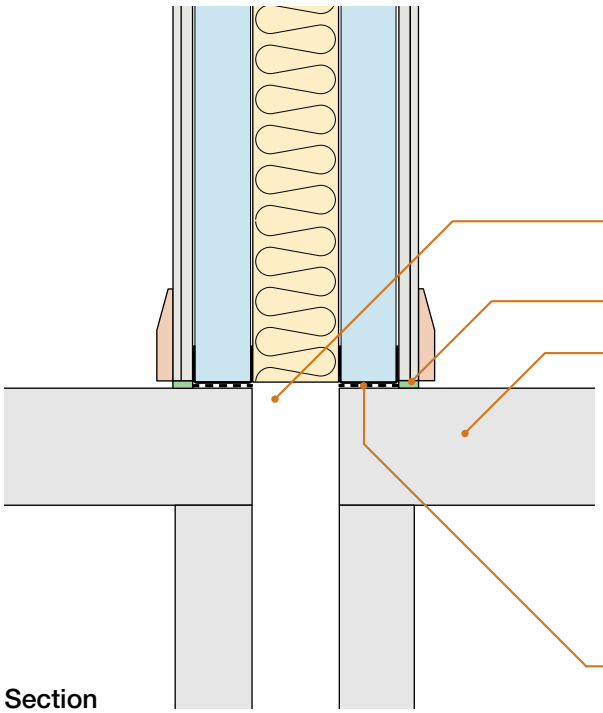
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

Other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

First layer to be continuous and second layer to stop either side of internal wall

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



Section

Ground floors not continuous between dwellings

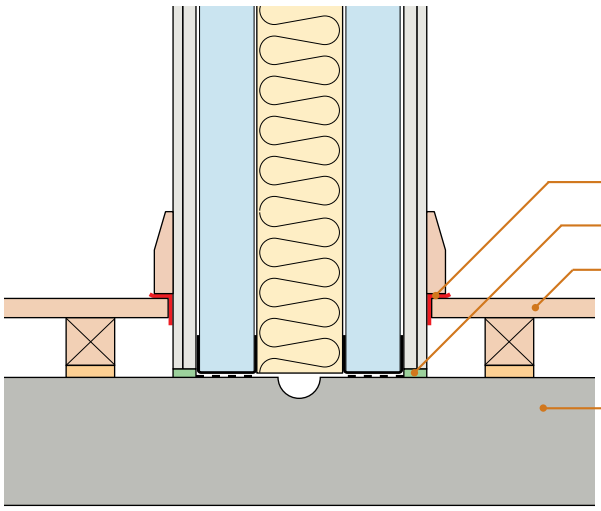
Flexible or acoustic sealant

Ground floor construction:

- 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
- cast-in situ concrete suspended slab, or
- ground bearing slab

Note: DPM (if flexible) may be continuous between dwellings

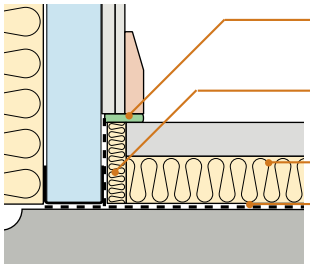
7. Raft foundation



- 5mm (min) resilient flanking strip
- Flexible or acoustic sealant
- A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)
- Concrete raft - mass per unit area of 365 kg/m² (min)

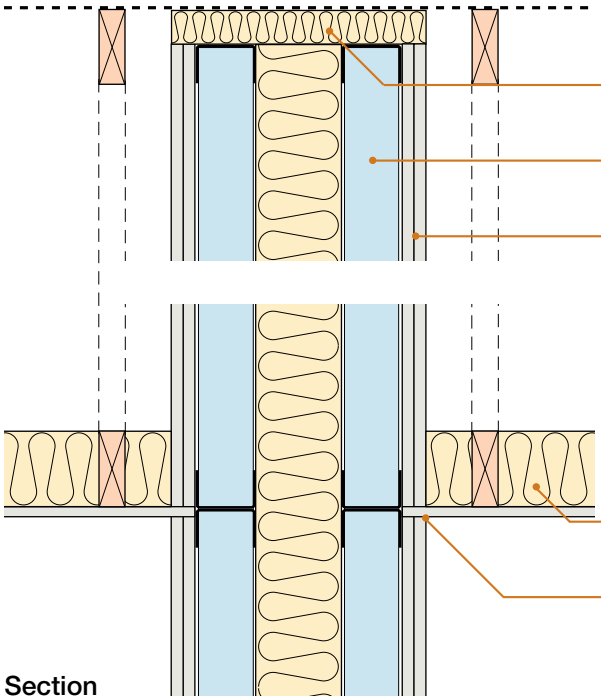
Section

Alternative detail with screed finish



- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from metal frame
- Below screed insulation, isolating screed from raft
- Polyethylene

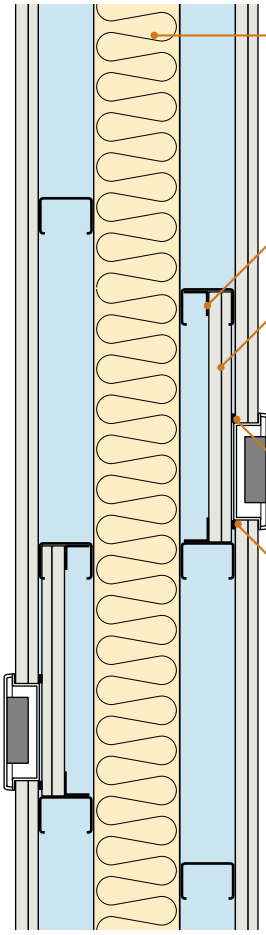
8. Roof junction - pitched roof with no room-in-roof



- Junction between separating wall and roof filled with flexible closer.
- Cavity separating wall continuous to underside of roof
- Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered
- 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
- 100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists
- Seal all perimeter joints with tape or caulk with sealant

Section

9. Services and sockets in the separating wall



Plan

80mm mineral wool insulation batts to cavity

25mm galvanised steel angle screw fixed to frame on site

2 layers nominal mass per unit area 22 kg/m^2 to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than **rd** $\Delta R_w + C_{tr}$ = –1dB - see Appendix H

b) They are installed in accordance with the manufacturer's instructions

Intumescent seal

Stagger sockets and switches on each side of party wall

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

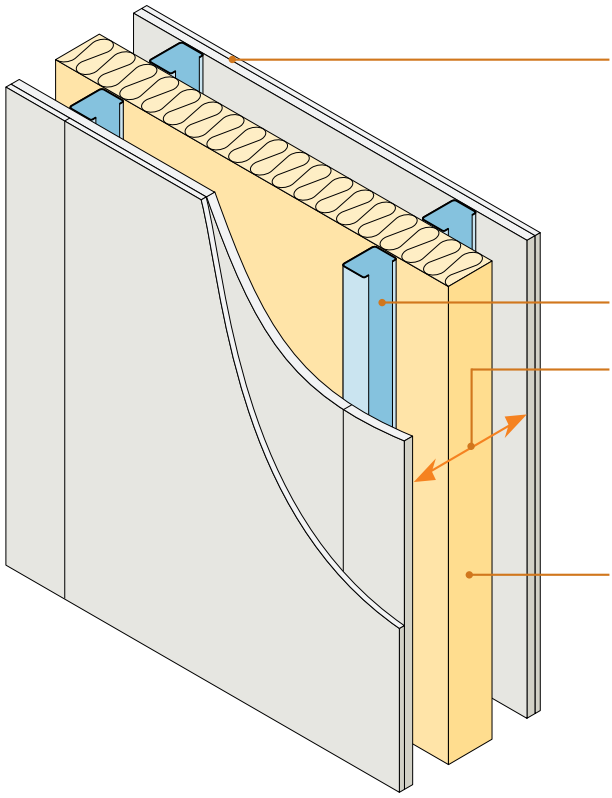
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 250mm apart?			
2.	Is the absorbent material unfaced mineral wool batts of appropriate density and thickness?			
3.	Are batts fitted together tightly ?			
4.	Are all joints in the wall lining staggered?			
5.	Is separating wall lining correct mass per unit area on both sides?			
6.	Are all joints sealed with tape or caulked with sealant?			
7.	Are services installed in accordance with section 9?			
8.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

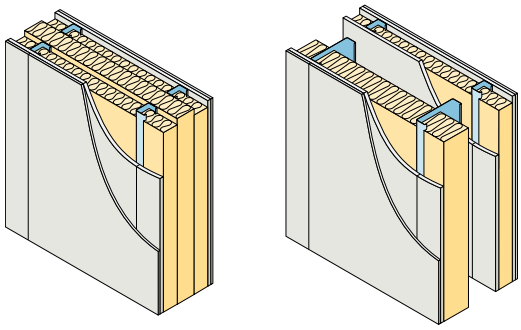
Separating Wall – Steel Frame

- Twin metal frames
- Use with reinforced concrete frame construction only
- Concrete slabs with flat soffits only - no profiled decking



Wall lining	- 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 20 kg/m^2) both sides - all joints staggered
Steel frame	60mm (min) studs both sides
Wall width	230mm (min) between inner faces of wall linings, or190mm (min) where service zones are used (see Section 6)
Absorbent material	One layer 75mm (min) unfaced mineral wool batts (density 10-40 kg/m^3)
External (flanking) wall	See Sections 1 to 3

Alternative higher-performance wall constructions (see Section 12)



Alternative external (flanking) wall construction

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

- glazing units should not be continuous between storeys
- mullion or transom supports/framing should not be continuous between dwellings
- the sound insulation performance is improved where the junction between the separating wall and external (flanking) wall occurs at a concrete column position

DO

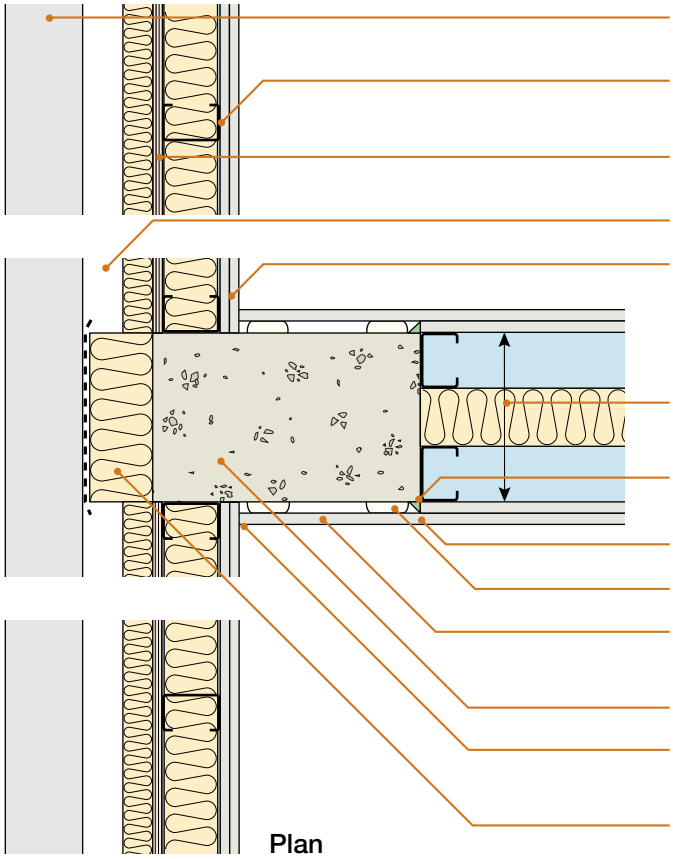
- Keep wall linings at least 230mm apart, or 190mm (min) where service zones are used (see Section 6)
- Ensure the batts cover whole wall area and are fitted together correctly and not tightly compressed between twin frames
- Ensure that all cavity stops/closers are flexible or are fixed to one frame only
- Make sure there is no connection between the two frames except where ties are necessary for structural reasons
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

Sheathing

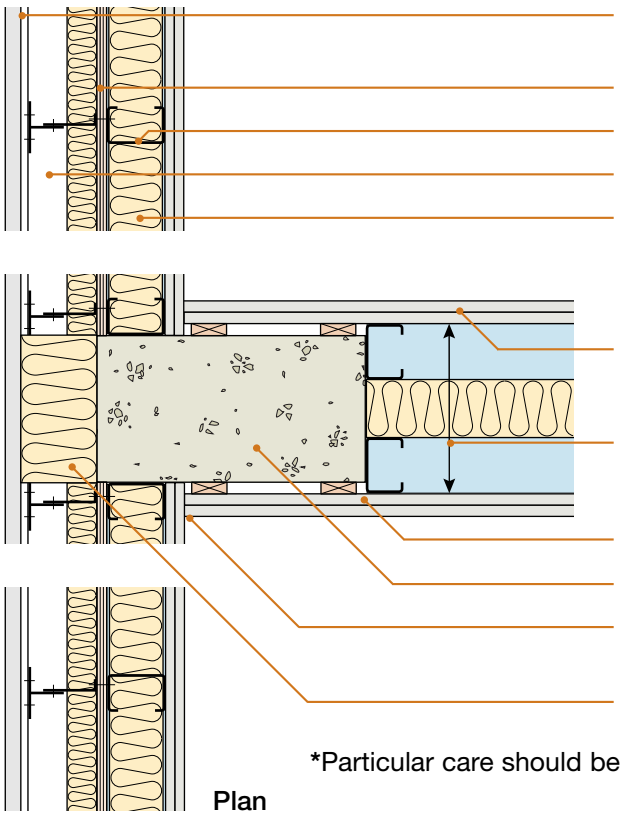
Where required for structural or security reasons, it is permissible to apply sheathing board to one frame of the separating wall (see Section 6)

1. External (flanking) wall junction – at concrete column position

1.1 Masonry or precast external treatment



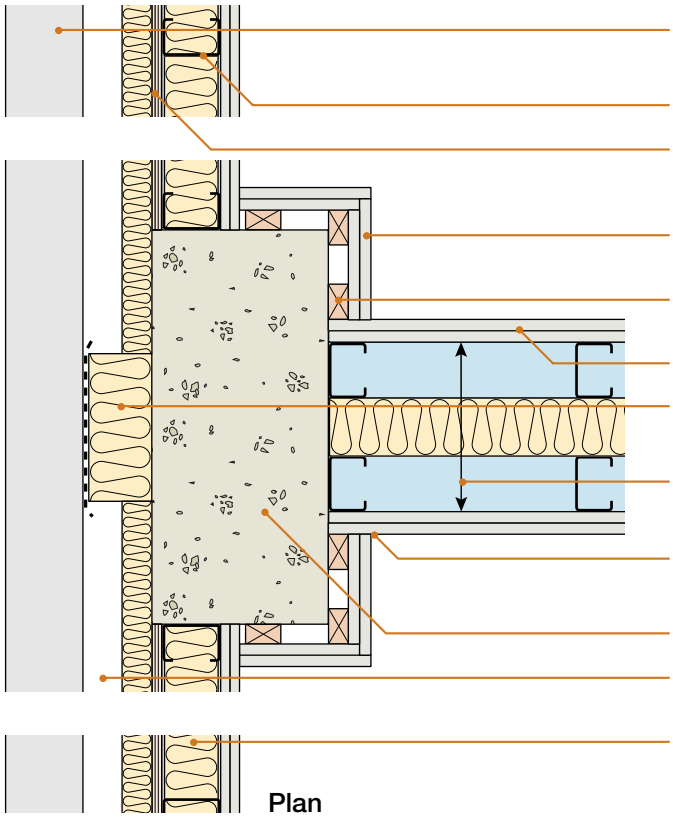
1.2 Lightweight cladding external treatment



*Particular care should be taken in respect of Buiding Regulations Part B Fire

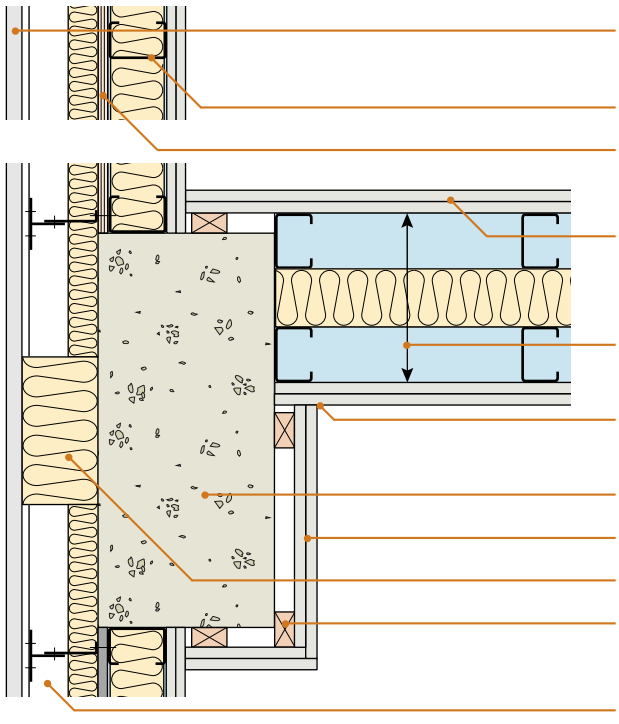
2. External (flanking) wall junction – at large concrete column (aligned to wall or offset) or at shear wall

2.1 Masonry or precast external treatment



Plan

2.2 Lightweight cladding external treatment

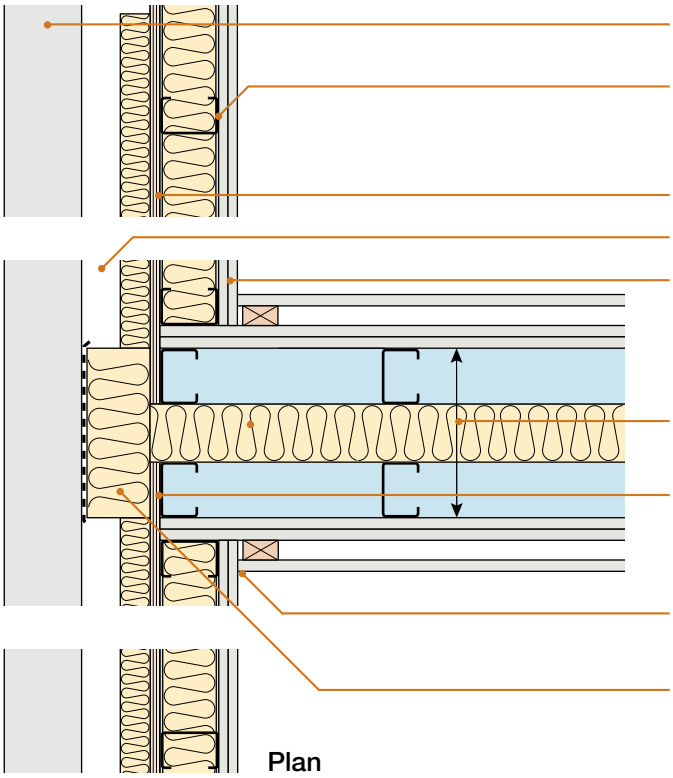


Plan

*Particular care should be taken in respect of Buiding Regulations Part B Fire

3. External (flanking) wall junction – without concrete column

3.1 Masonry or precast external treatment



Masonry outer leaf or precast panels

75mm (min) metal stud. Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

Cavity sheathing board

External wall cavity (min 50mm)

Inner leaf - two layers of gypsum-based board total min 20 kg/m² and 50mm (min) mineral wool (min 10 kg/m³), placed between all studs

190mm (min) or 230mm (min) where no service zone is used (see Section 6)

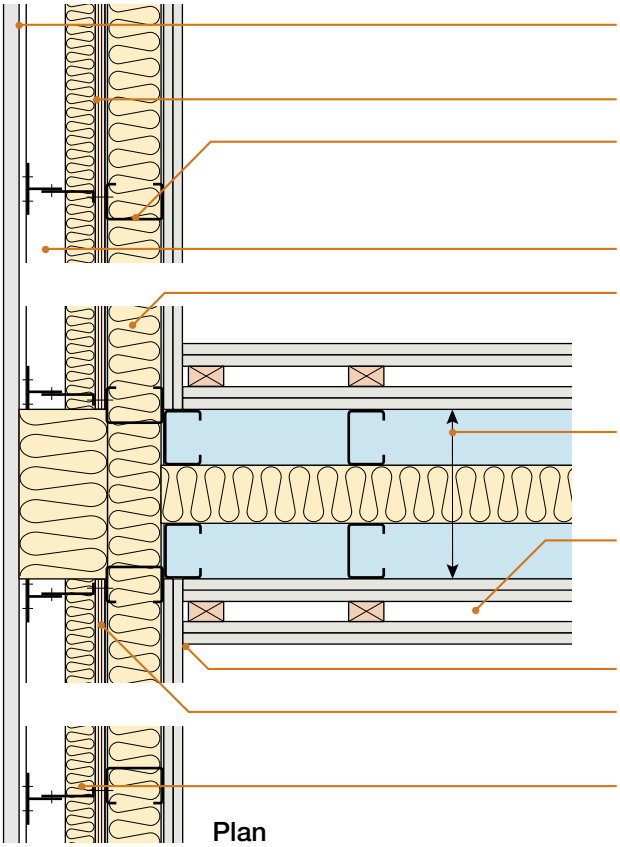
Ensure there is a break and board is not continuous between twin frames

Seal all perimeter joints with tape or caulk with sealant

Flexible cavity stop MUST close off the void

Plan

3.2 Lightweight cladding external treatment



Glazing, render board or cladding system* spaced off inner leaf

Cavity sheathing board

75mm (min) metal stud. Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

External wall cavity (min 50mm)

Inner leaf - two layers of gypsum-based board total min 20 kg/m² and 50mm (min) mineral wool (min 10 kg/m³), placed between all studs

190mm (min) or 230mm (min) where no service zone is used (see Section 6)

Optional service zone

Seal all perimeter joints with tape or caulk with sealant

Ensure there is a break and board is not continuous between twin frames

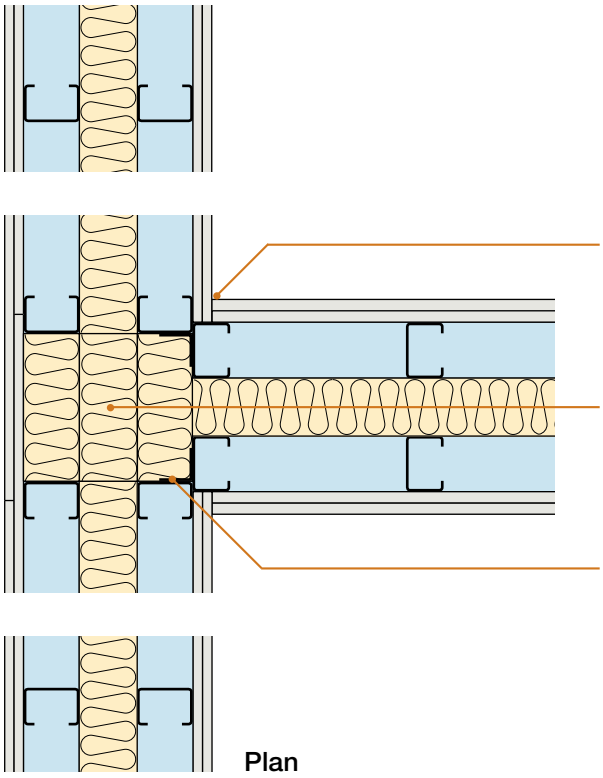
Cavity filled with insulation to comply with thermal requirements

Plan

*Particular care should be taken in respect of Buiding Regulations Part B Fire

4. Separating wall internal junctions

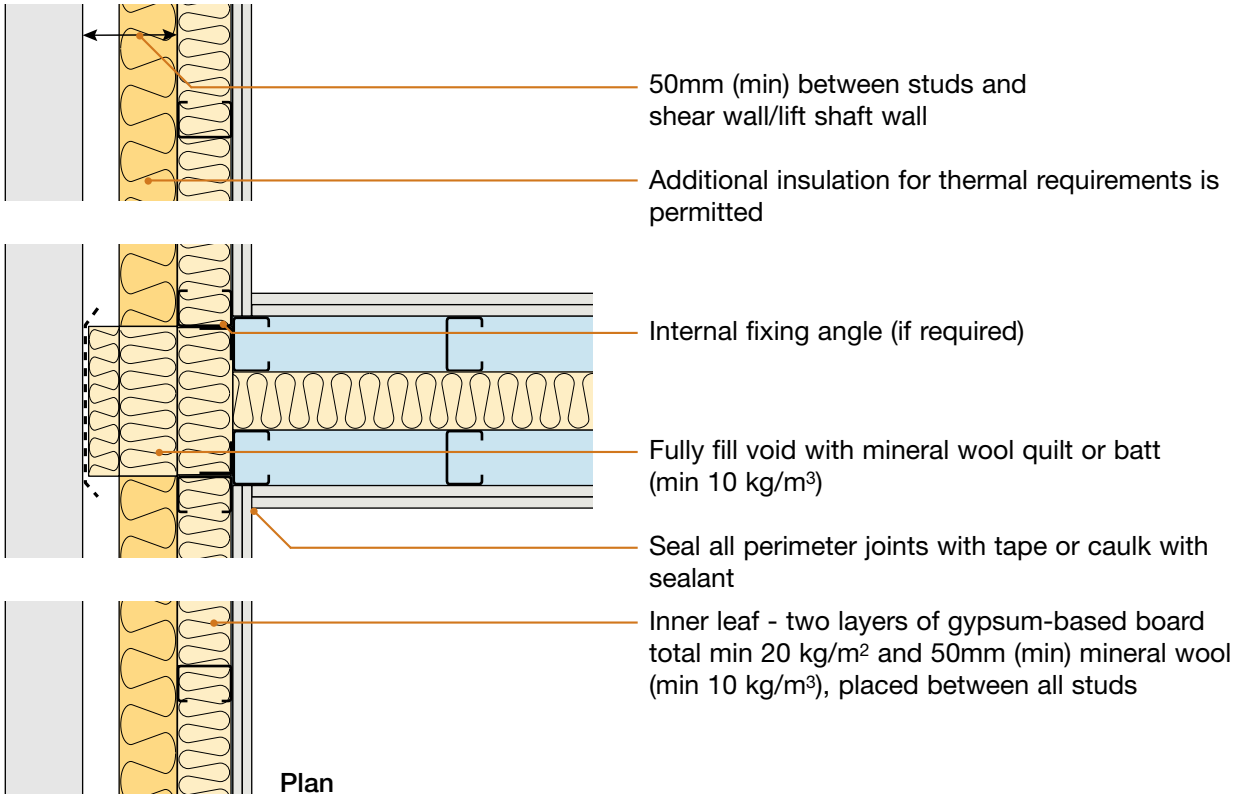
4.1 Where separating wall meets separating wall



Plan

Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

4.2 Where separating wall meets lift shaft wall or other such structure

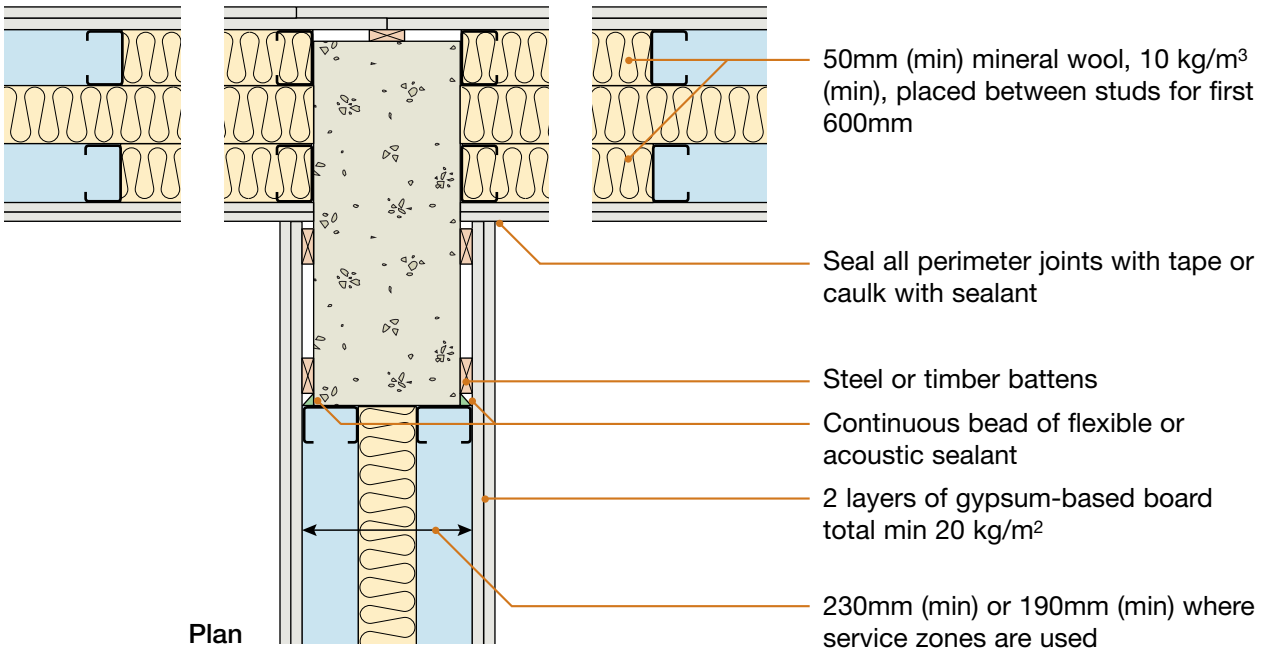


Plan

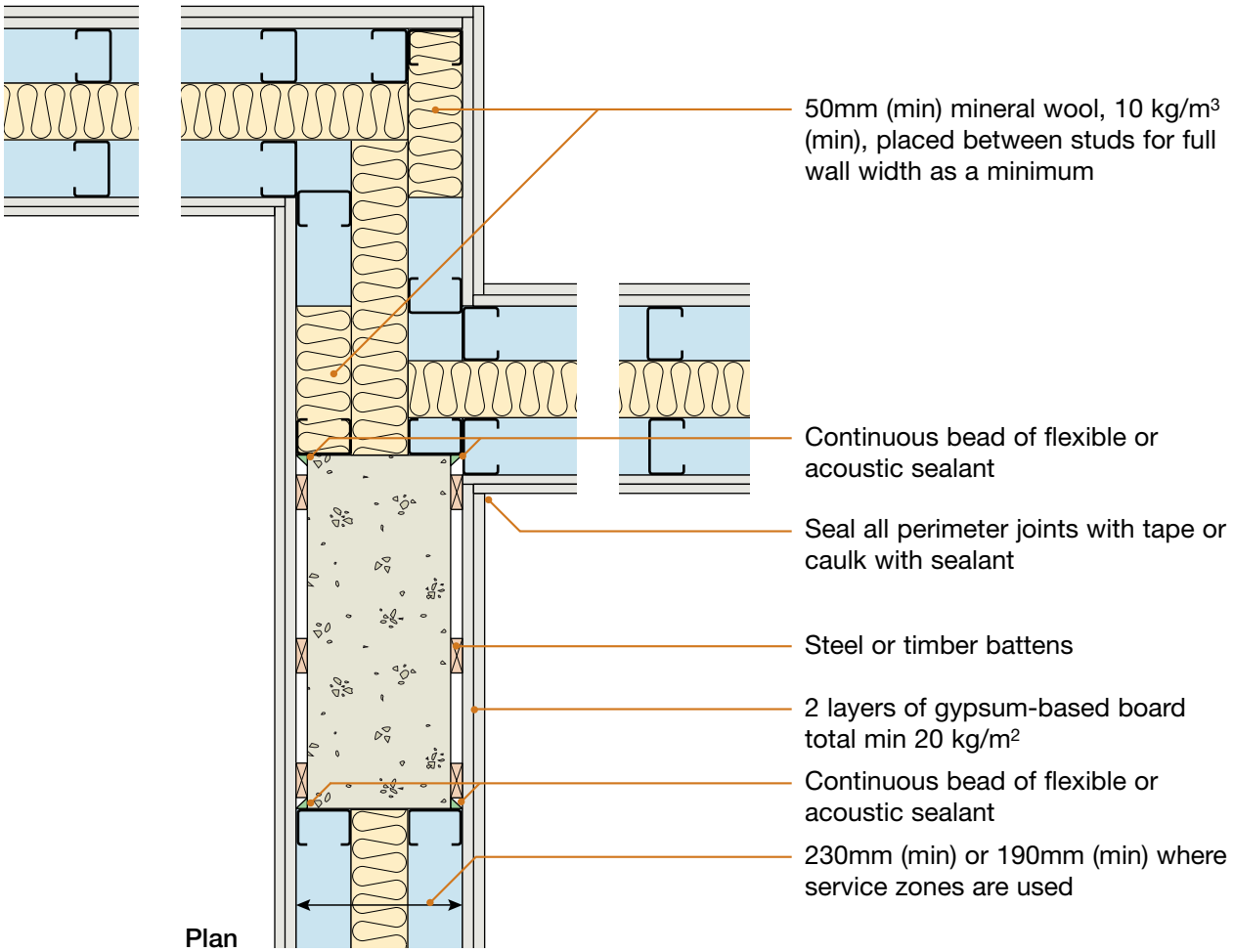
Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

5. Separating wall to separating wall junction with column/shear wall

5.1 T-junction at column or shear wall



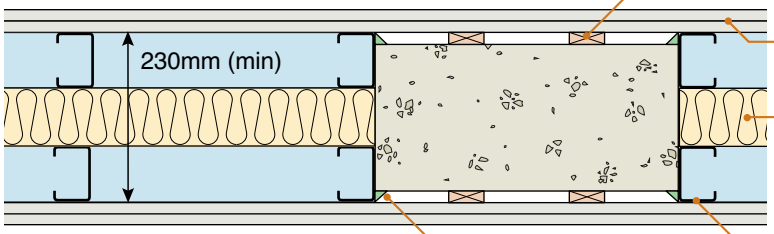
5.2 Junction offset from column or shear wall



Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

6. Service zone and wall options for in-line concrete columns

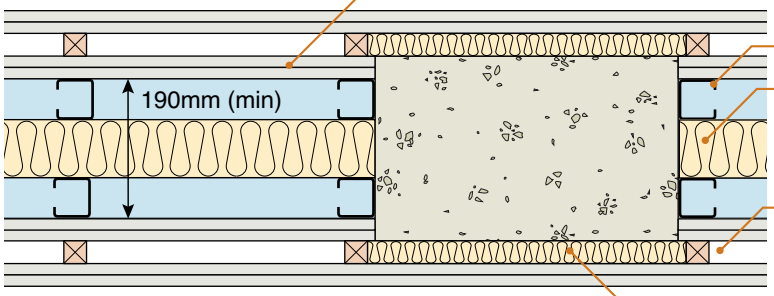
Option A



Plan

- Steel or timber battens
- 2 layers of gypsum-based board total min 20 kg/m²
- 75mm (min) slab/batt insulation (10-40 kg/m³)
- 60mm (min) metal studs
- Continuous bead of flexible or acoustic sealant to all four junctions

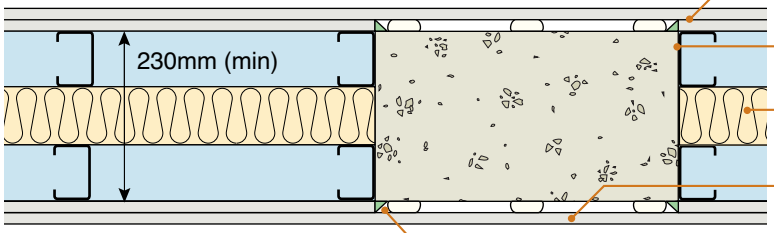
Option B



Plan

- 2 layers of gypsum-based board total min 20 kg/m²
- 60mm (min) metal studs
- 75mm (min) slab/batt insulation (10-40 kg/m³)
- Service void using min 25mm battens with 2 layers of gypsum-based board combined 20 kg/m²
- Service zone bay at column filled with 25mm mineral wool insulation min 10 kg/m³

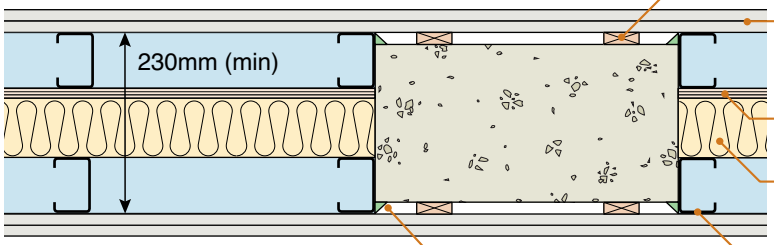
Option C



Plan

- 2 layers of gypsum-based board total min 20 kg/m²
- 60mm (min) metal studs
- 75mm (min) slab/batt insulation (10-40 kg/m³)
- 1 layer of gypsum-based board min 12 kg/m² on dabs across face of insitu column
- Continuous bead of flexible or acoustic sealant to all four junctions

Option D

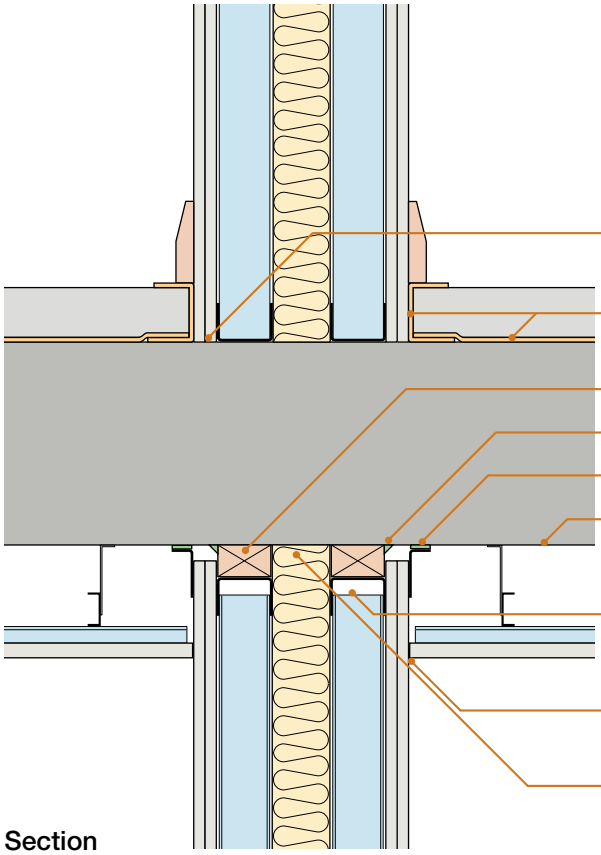


Plan

- Steel or timber battens
- 2 layers of gypsum-based board total min 20 kg/m²
- Sheathing to one leaf only
- 75mm (min) slab/batt insulation (10-40 kg/m³)
- 60mm (min) metal studs
- Continuous bead of flexible or acoustic sealant to all four junctions

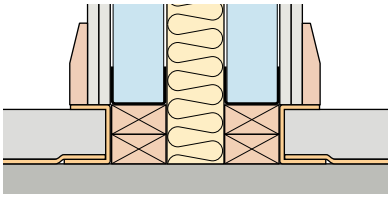
Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

7. Separating floor junction – in-situ concrete floor E-FC-18



Section

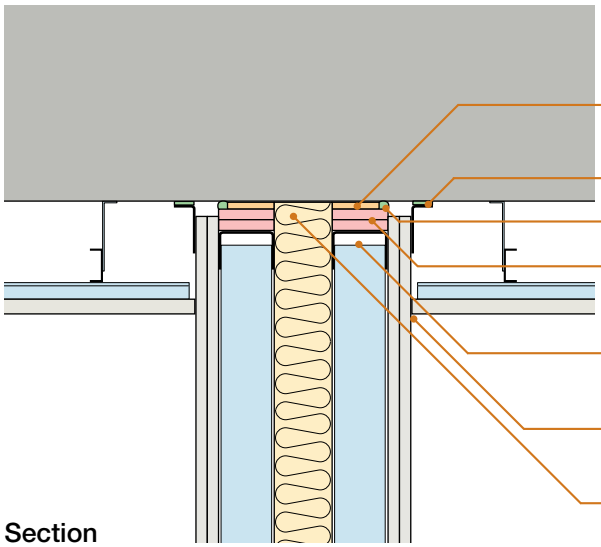
Alternative detail with timber sole plates



- Where specified within the proprietary drywall system, apply additional sealing at this position
- Flanking strip and resilient layer to isolate screed from metal frame/lining and concrete floor
- Timber batten
- Continuous bead of flexible sealant
- Steel angle to seal void
- Insitu slab to have flat soffit – profiled-deck permanent shutter must not be used
- Junction to allow for deflection of slab where required
- Seal all perimeter joints with tape or caulk with sealant
- Quilt must be taken up to underside of slab, no gaps to remain

An alternative deflection head detail is shown below

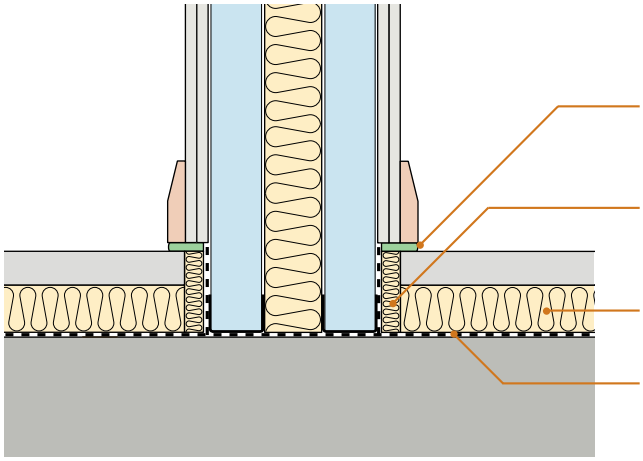
8. Slab junction (with alternative deflection head detail)



Section

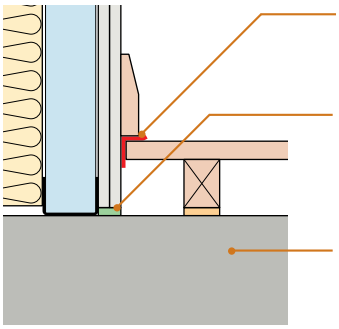
- 20mm mineral fibre or 5mm foamed polyethylene resilient strip
- Steel angle to seal void
- Flexible or acoustic sealant
- Gypsum board packers
- Junction to allow for deflection of slab where required
- Seal all perimeter joints with tape or caulk with sealant
- Quilt must be taken up to underside of slab, no gaps to remain

9. Ground floor junction

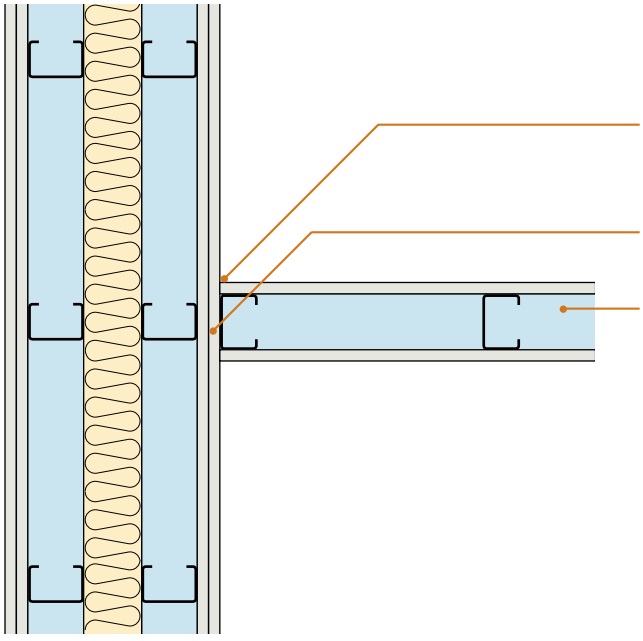


Section

Alternative detail with timber floating floor finish



10. Internal wall junction

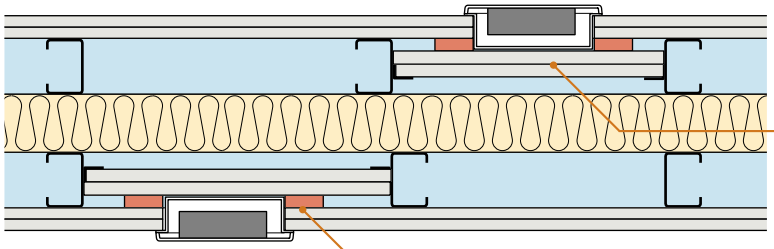


Plan

Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

11. Services and sockets in the separating wall

11.1 Electrical sockets, switches etc



Plan

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

Provide two or more layers of gypsum-based board (total nominal mass per unit area 20 kg/m^2) to enclose electrical boxes

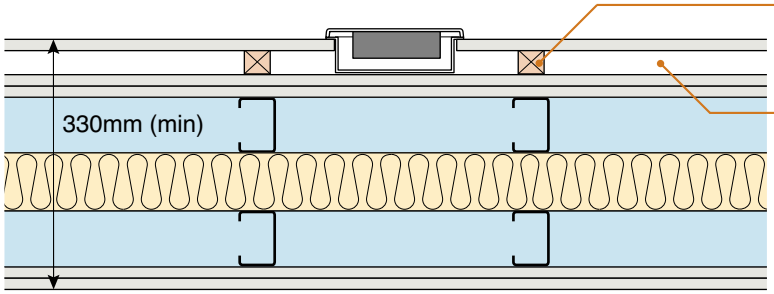
Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

Fire resistant seal where required by Part B of the Building Regulations

11.2 Electrical sockets and switches in service void



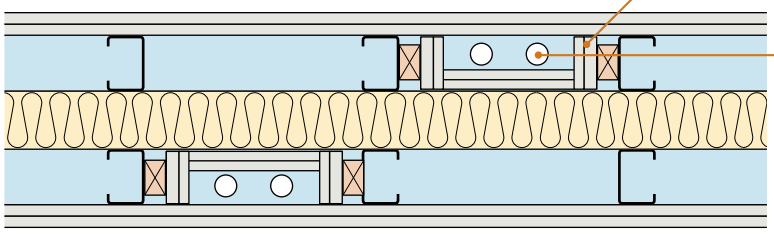
Plan

Service void using min 25mm battens or steel studs with 1 layer of gypsum board

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure

11.3 Piped services located within wall



Plan

Provide two or more layers of gypsum-based board (total nominal mass per unit area 20 kg/m^2) to enclose pipes

Stagger services on each side of the wall such that they are not positioned in opposite bays

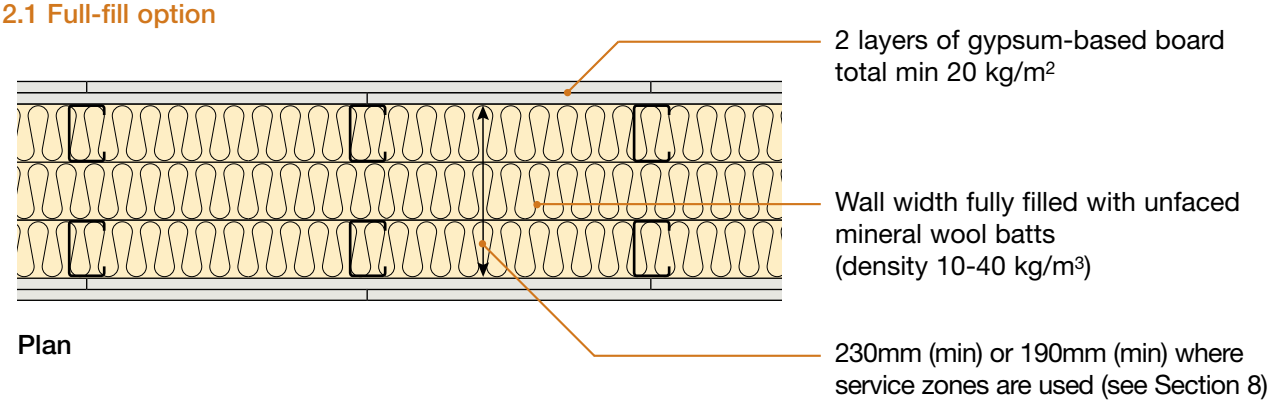
Note: this detail is not applicable for SVPs or gas pipes

Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

12. Higher performing wall constructions

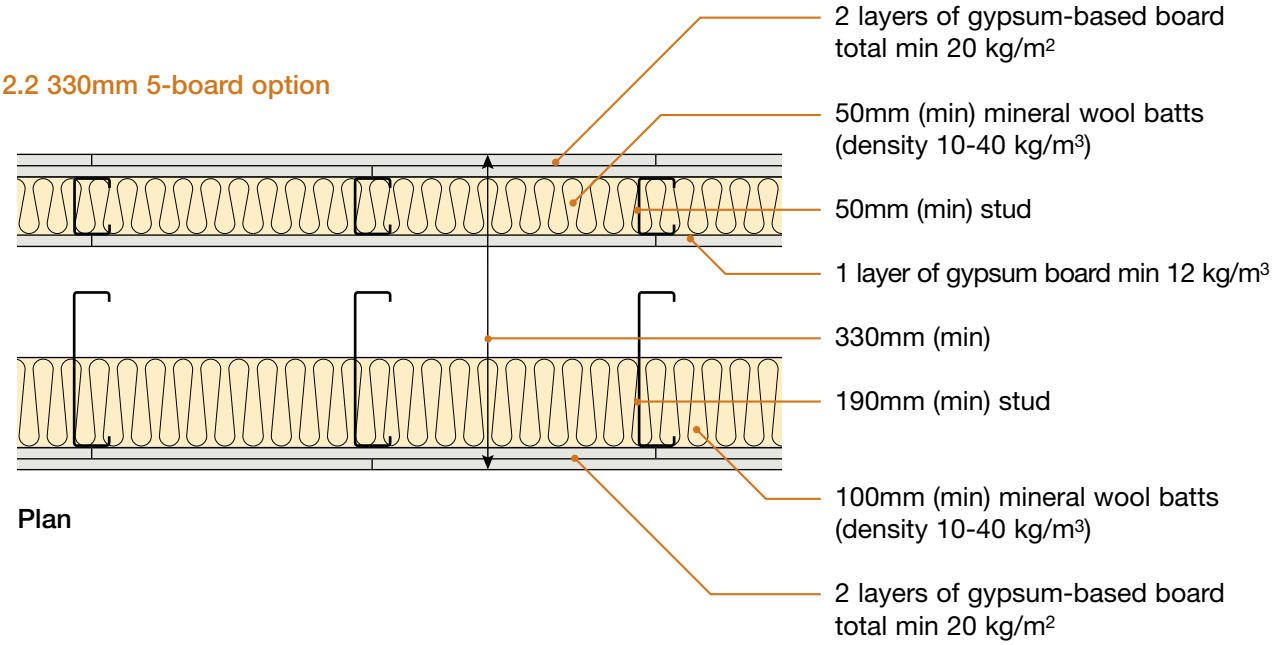
The sound insulation performance can be increased by using the following:

12.1 Full-fill option



Plan

12.2 330mm 5-board option



Plan

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

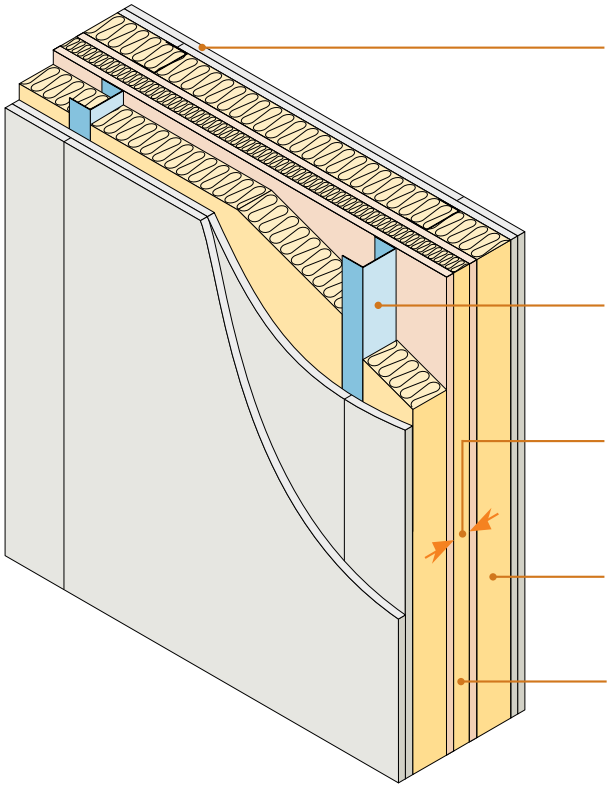
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings min 230mm apart or min 190mm apart (if using service linings)?			
2.	Are the twin frames acoustically isolated?			
3.	Is quilt fully covering zone between twin frames with no gaps?			
4.	Are the wall lining boards min 20 kg/m^2 combined?			
5.	Are all joints in wall lining staggered?			
6.	Are all joints sealed?			
7.	Are the inner leaf flanking walls non continuous at the junction with separating wall or column?			
8.	Does the cavity stop fully seal the void in the external cavity?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

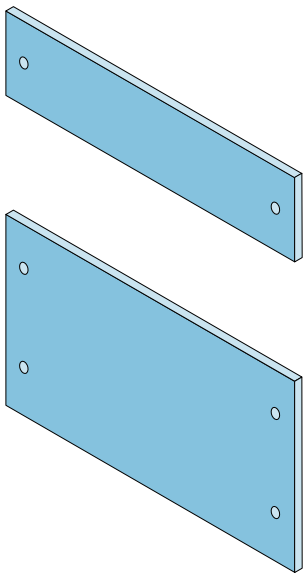
Separating Wall – Modular Build Steel Frame E-WS-6

Modular build twin metal frames ■
Only for use in lightweight steel frame modular houses ■



Wall lining	2 layers of gypsum-based board, total mass per unit area 23 kg/m² (min), both sides - all joints staggered
Metal frame	Metal frame 'C' or 'I' studs minimum 100mm
Sheathing board	Minimum 15mm board with 40mm (min) spacing between boards
Absorbent material	100mm (min) mineral wool 10-40 kg/m³
Cavity insulation	Mineral wool batts to fill cavity (site-filled)

Tie Plates



Single tie plate

Double tie plate

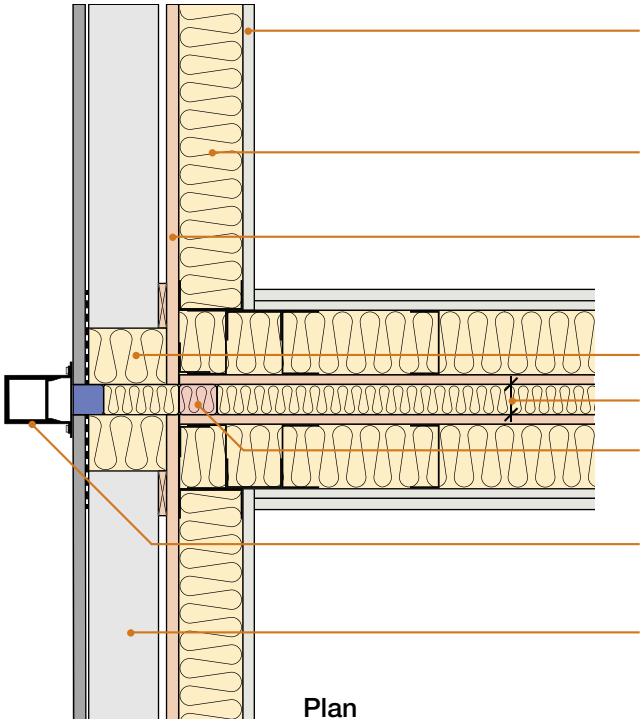
At both ends of modules:

- 1 single tie plate at the top of uppermost modules
- 1 double plate at intermediate floor level

DO

- Keep wall sheathing boards at least 40mm apart
- Ensure that batts cover the whole wall area and are fitted together tightly
- Ensure that all cavity stops/closers are flexible
- Make sure there is no connection between the two leafs except for specified tie plates
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A

1. External wall junction – render



Inner leaf - 1 layer gypsum-based board nominal 11.5 kg/m²

Inner leaf - 100mm mineral wool 10-40 kg/m³

15mm (min) sheathing board

Mineral wool slab

40mm (min)

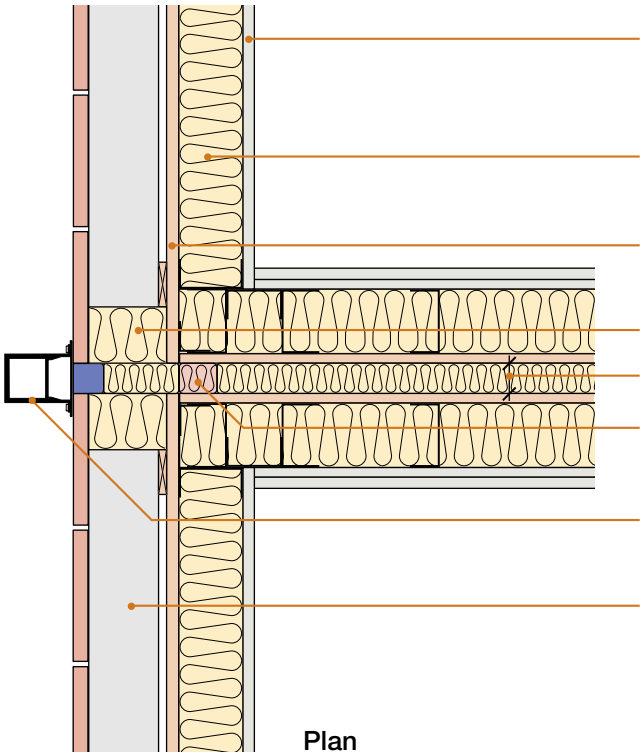
Flexible cavity closer

Rainwater pipe bracket (if required)

Insulated render system (EPS slab) or 8mm render on stone wool external wall insulation slab

Plan

2. External wall junction – brick slip



Inner leaf - 1 layer gypsum-based board nominal 11.5 kg/m²

Inner leaf - 100mm mineral wool 10-40 kg/m³

15mm (min) sheathing board

Mineral wool slab

40mm (min)

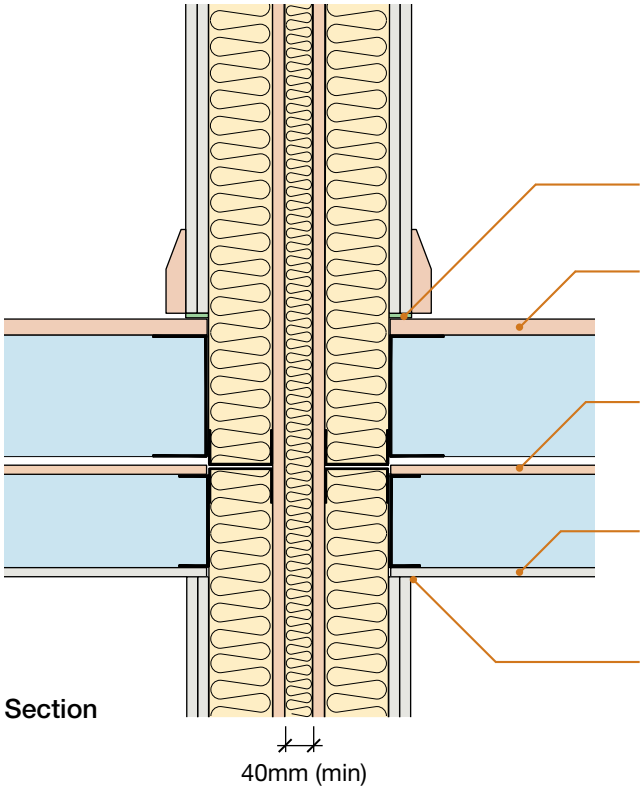
Flexible cavity closer

Rainwater pipe bracket (if required)

Brick slips mounted on EPS slab or on stone wool external wall insulation slab

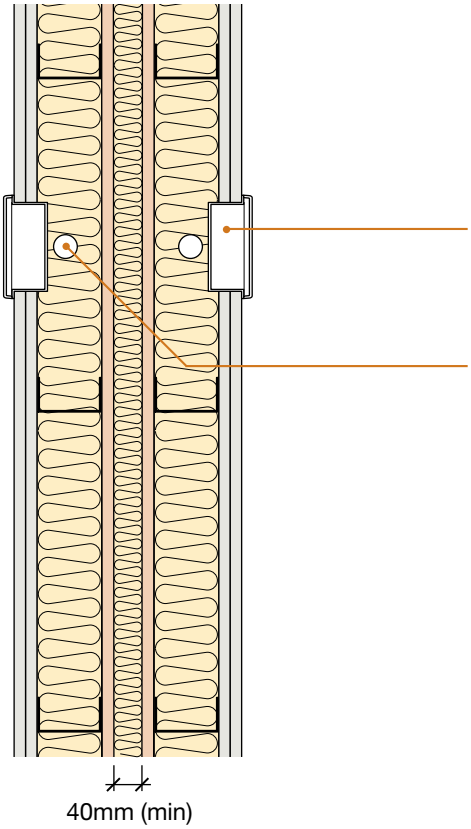
Plan

3. Internal floor junction



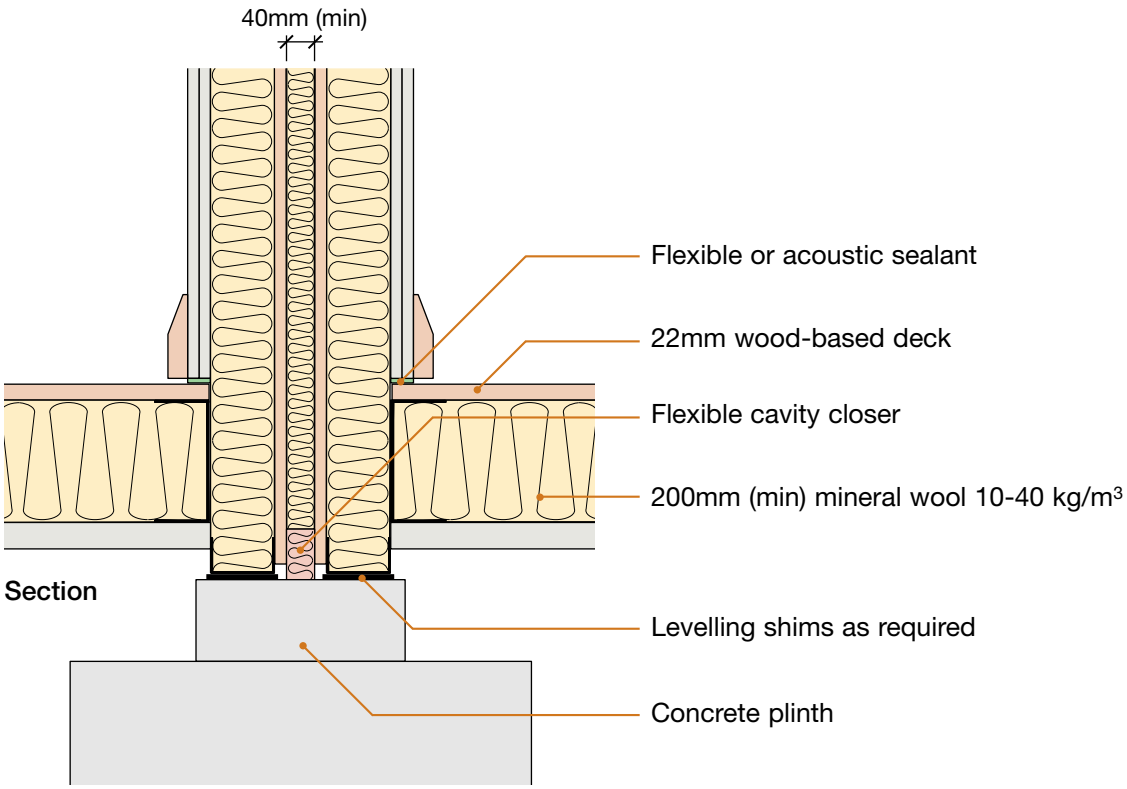
Section

4. Services and sockets in the separating wall

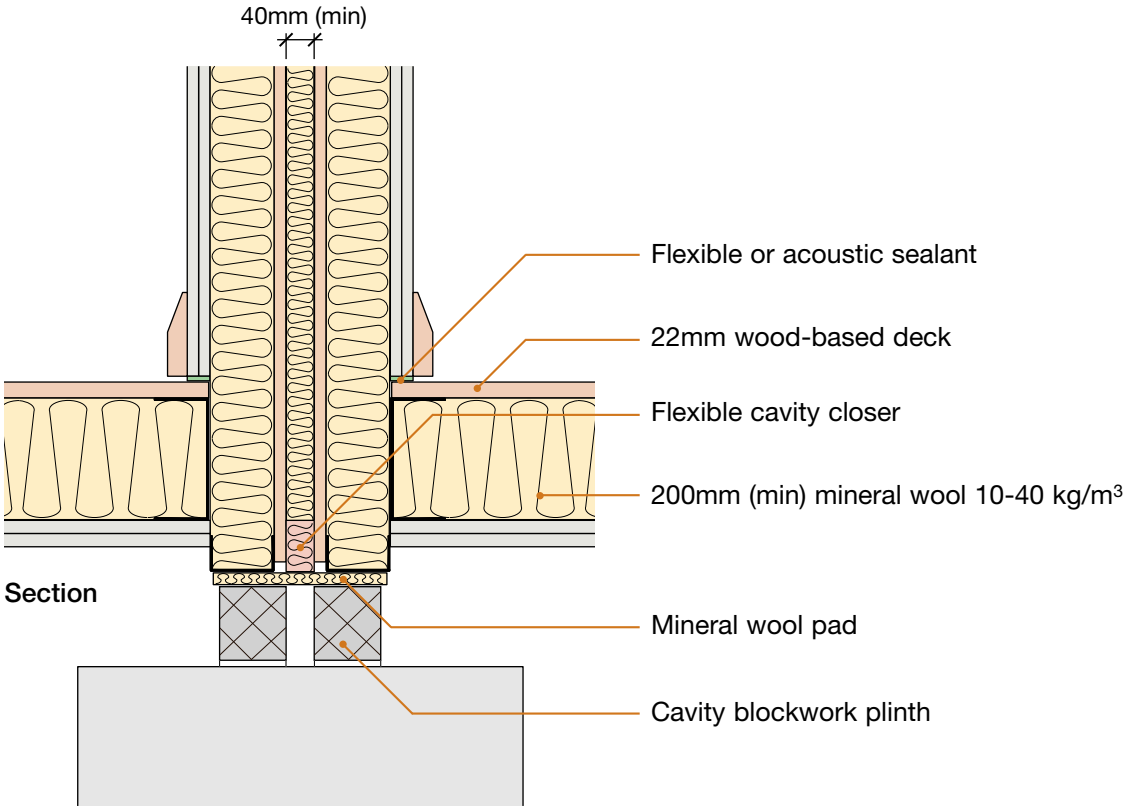


Plan

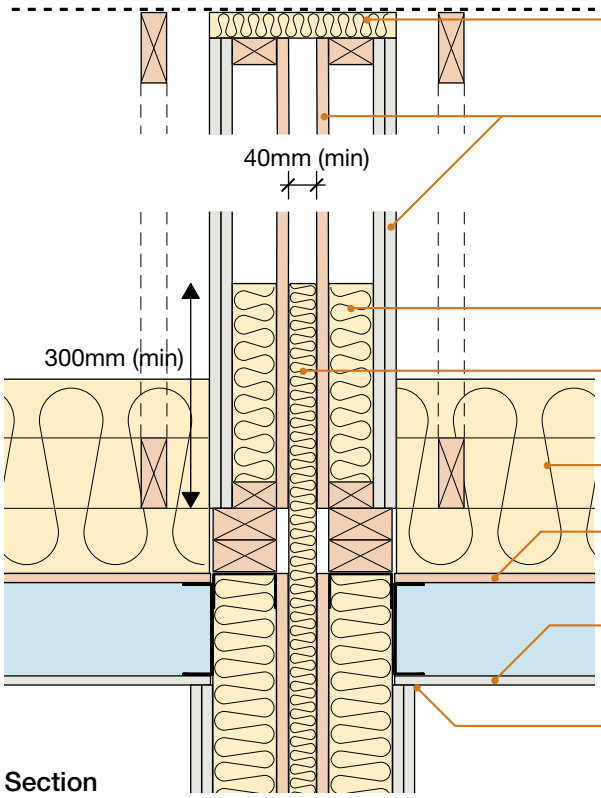
5. Ground floor junction – at ends of modules



6. Ground floor junction – separating wall between plinths



7. Roof junction – pitched roof with no room-in-roof



Junction between spandrels and roof filled with flexible closer

Spandrel linings to be either:
2 layers gypsum-based board nominal 11.5kg/m² with an internal 15mm (min) sheathing board (as per section)
alternatively, 1 layer 15mm (min) Fermacell board to both sides of spandrel leafs

150mm (min) mineral wool 10-40 kg/m³

Separating wall insulation to extend 300mm (min) into spandrel cavity

300mm (min) mineral wool insulation 10 kg/m³ (min)

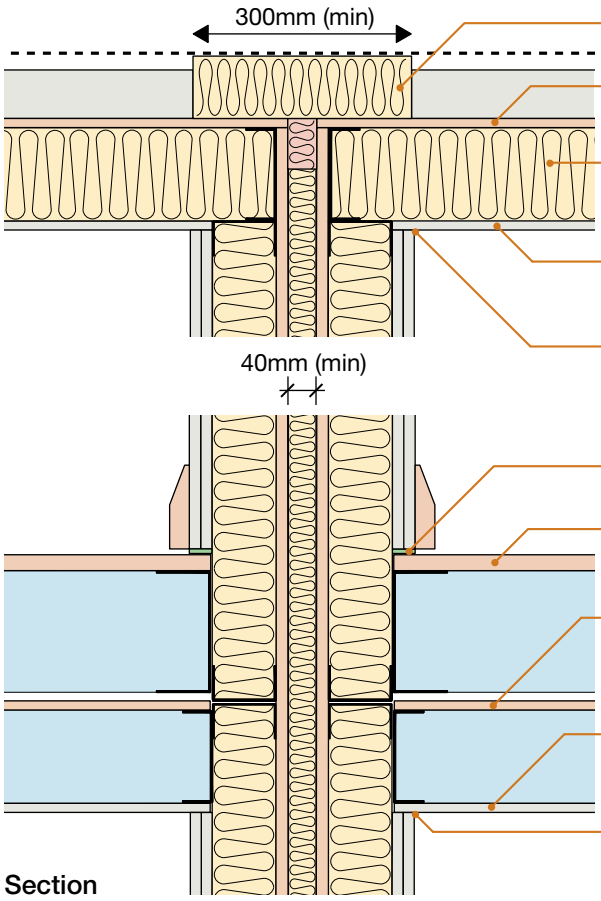
15mm (min) sheathing board

1 layer gypsum-based board nominal 11.5 kg/m²

Seal all perimeter joints with tape or caulk with sealant

Section

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



Flexible cavity closer

15mm (min) sheathing board

150mm (min) mineral wool 10-40 kg/m³

1 layer gypsum-based board nominal 11.5 kg/m²

Seal all perimeter joints with tape or caulk with sealant

Flexible or acoustic sealant

22mm wood-based deck

15mm (min) sheathing board

1 layer gypsum-based board nominal 11.5 kg/m²

Seal all perimeter joints with tape or caulk with sealant

Section

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

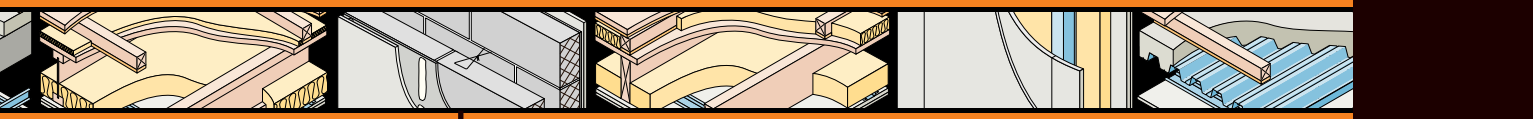
Plot: Site manager/supervisor:

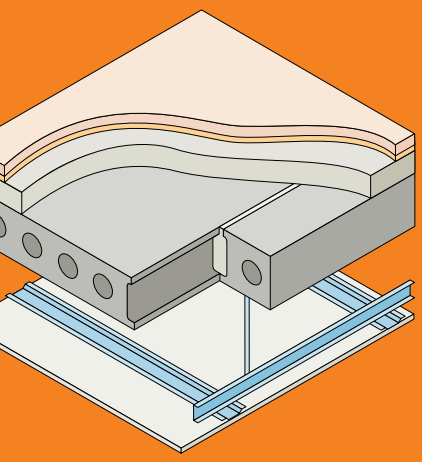
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are separating wall leafs at least 40mm apart?			
2.	Are the metal frames a minimum of 100mm or greater?			
3.	Are the twin wall frames isolated from each other (no direct fixings) except for specified tie plates?			
4.	Is the mineral wool placed in the cavities of both leafs?			
5.	Are the 2 layers of gypsum-based board nominal mass per unit area 23 kg/m^2 for both sides?			
6.	Are all joints in the separating wall lining staggered?			
7.	Are all joints sealed with tape or caulked with sealant?			
8.	Is the separating wall satisfactorily complete?			

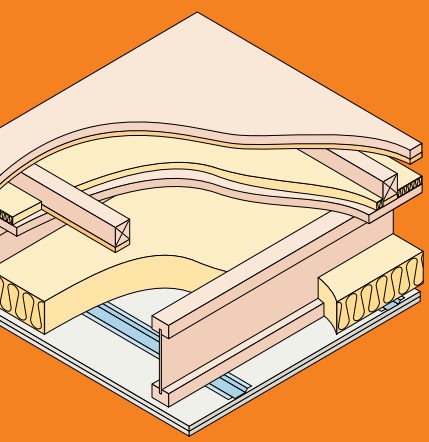
Notes (include details of any corrective action)

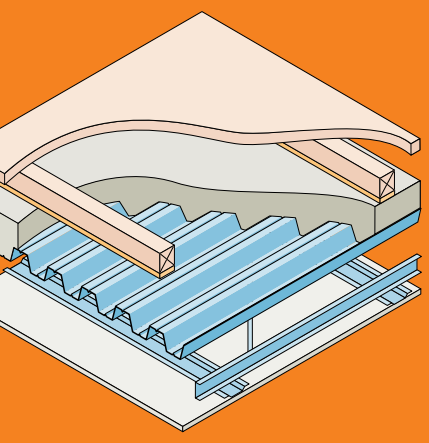
Site manager/supervisor signature . . . . . .

robustdetails®

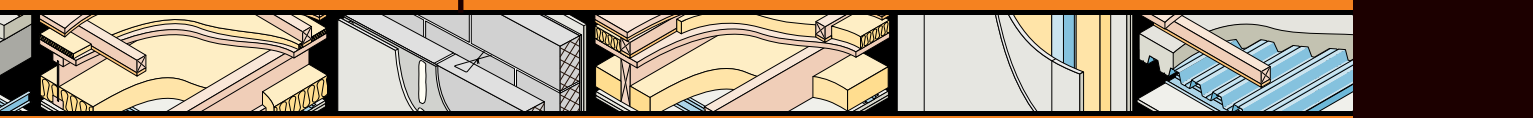


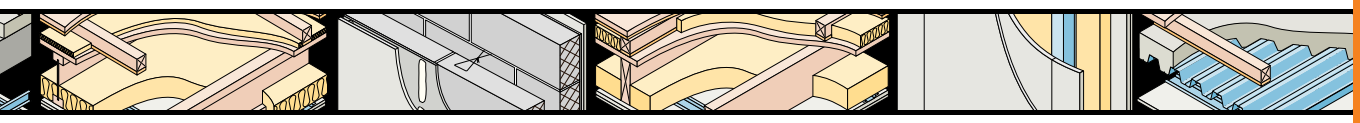


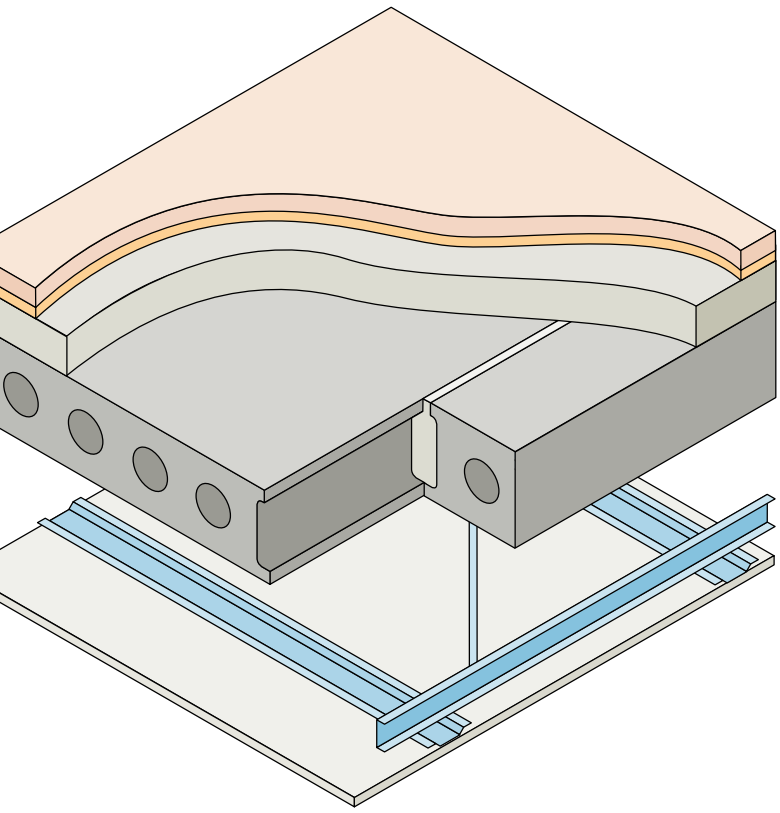




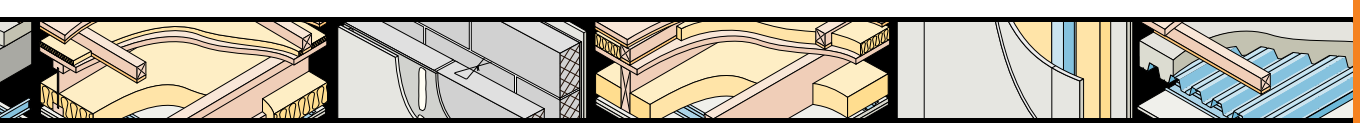
SEPARATING FLOORS







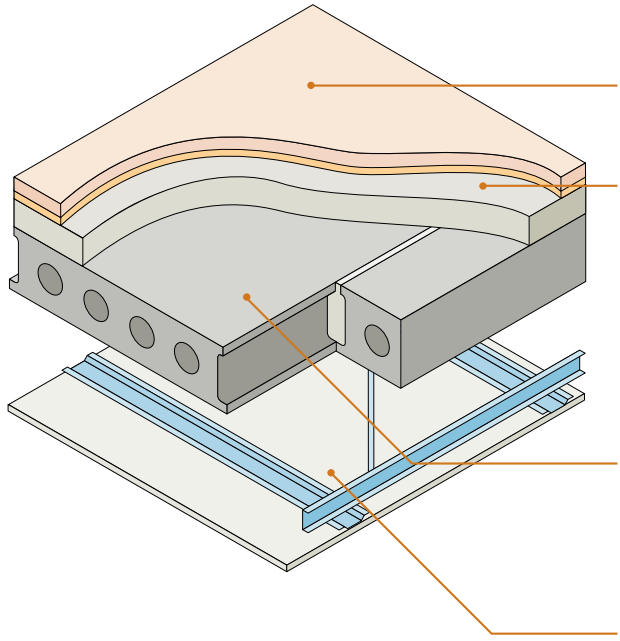
CONCRETE



Separating Floor – Concrete

E-FC-1

Precast concrete plank ■
Screed with floating floor treatment ■



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

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

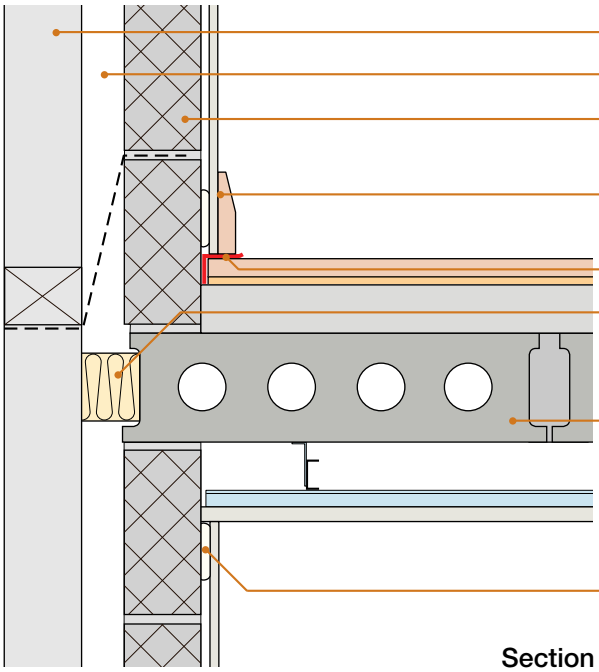
Direct applied screed

It is permissible to lay the screed over a max. 0.5mm thick membrane, if required

DO

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

1. External (flanking) wall junction

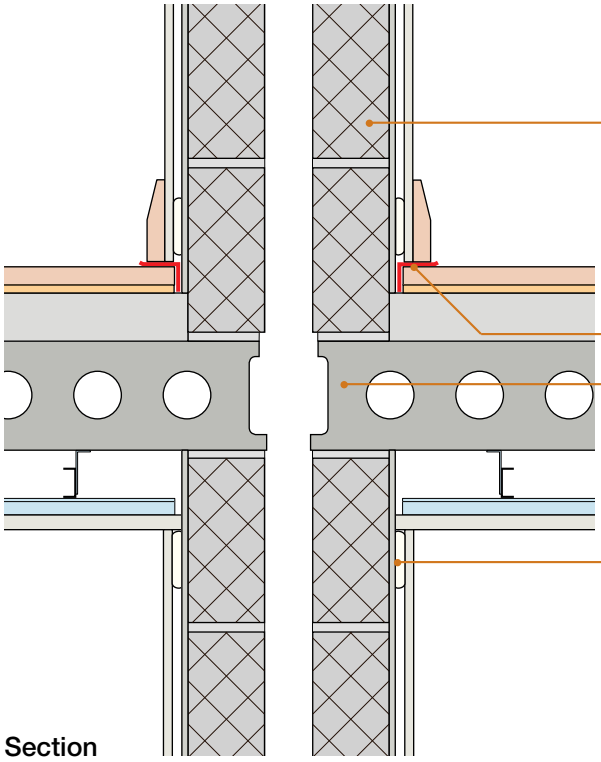


Section

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

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

2. Separating wall junction



Section

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

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

3. Ceiling treatments for E-FC-1

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

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

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

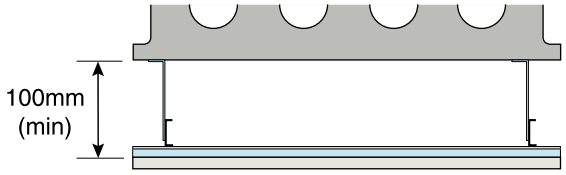
- 25mm (min) mineral wool quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void of 75mm downlighters or recessed lighting may be installed in the ceiling:

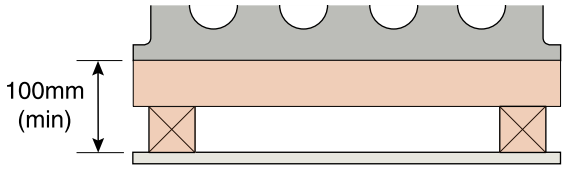
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



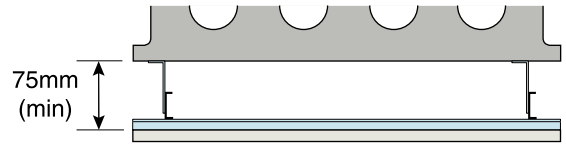
CT1 – Metal ceiling system - 100mm void

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



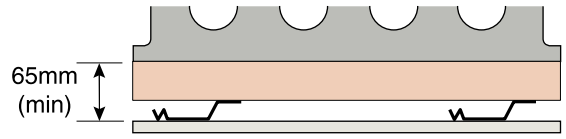
CT2 – Timber battens and counterbattens

- 50x50mm softwood battens
- 50x50mm counterbattens
- one layer of 8 kg/m² gypsum-based board



CT3 – Metal ceiling system - 75mm void

- any metal ceiling system providing 75mm (min) ceiling void
- one layer of nominal 10 kg/m² gypsum-based board



CT4 – Timber battens and metal resilient bars

Only suitable for use in conjunction with 200mm (min) precast concrete floor plank of mass per unit area 300 kg/m² (min).

- 50x50mm softwood battens
- metal resilient ceiling bars mounted at right angles to the battens (bars must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 17$dB and rd $\Delta L_w = 16$dB) - see Appendix E
- one layer of minimum nominal 10 kg/m² gypsum-based board

4. Floating floor treatments for E-FC-1

All floating floor treatments :

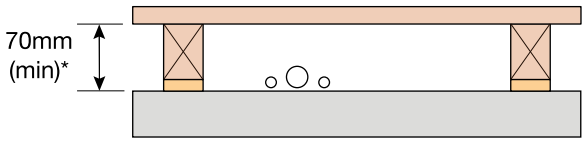
a) Must achieve a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

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

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

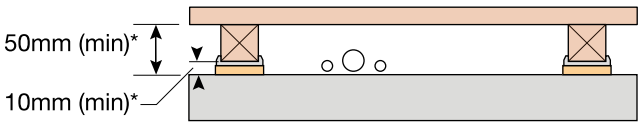
d) For further guidance on floating floor treatments and flanking strips, please refer to Appendix A.

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



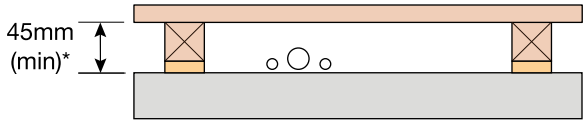
FFT 1 – Resilient composite deep batten system

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



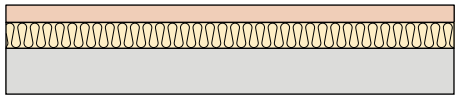
FFT 2 – Resilient cradle and batten system

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



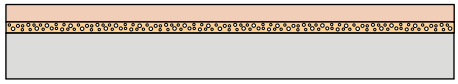
FFT 3 – Resilient composite standard batten system

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



FFT 4 – Resilient overlay platform floor system

- proprietary platform system inclusive of resilient layer greater than or equal to 16 kg/m^2 mass per unit area
- no services to be installed in floor system*

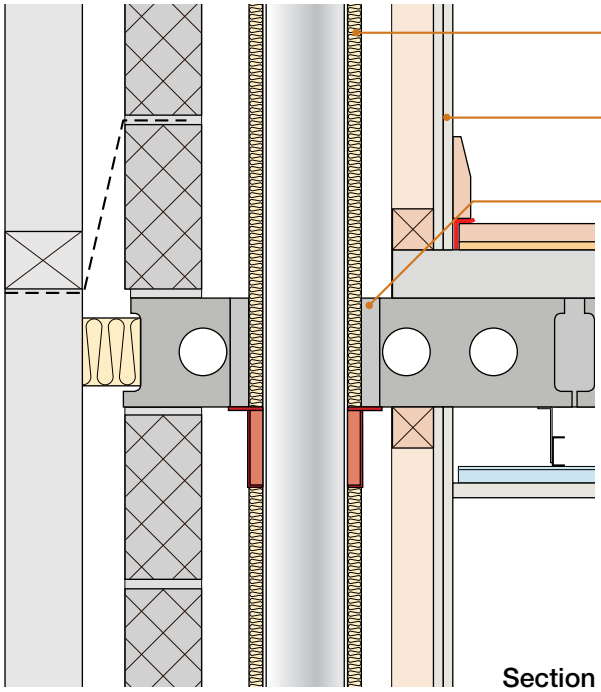


FFT 5 – Resilient overlay shallow platform floor system

- 9mm (min) t&g flooring board
- resilient layer pre-bonded to flooring board
- no services to be installed in floor system*

* Additional under floor heating layers may be incorporated within FFT4 and FFT5 provided the complete build-up, using all components, has been tested to give a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

5. Services – Service pipes through separating floor



Sketch shows FFT5 type floating floor treatment and CT3 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.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (min)?			
2.	Are inner leaves to external (flanking) walls of the correct block density?			
3.	Are joints between precast concrete planks grouted?			
4.	Are precast concrete planks built into the masonry walls?			
5.	Is screed applied directly to the planks; or over a max 0.5mm thick membrane?			
6.	Has ceiling system been installed in accordance with the manufacturer's instructions (where applicable)?			
7.	Are all ceiling board joints sealed with tape or caulked with sealant?			
8.	Has floating floor treatment been installed in accordance with the manufacturer's instructions?			
9.	Have all resilient flanking strips been fitted?			
10.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
11.	Is separating floor satisfactorily complete?			

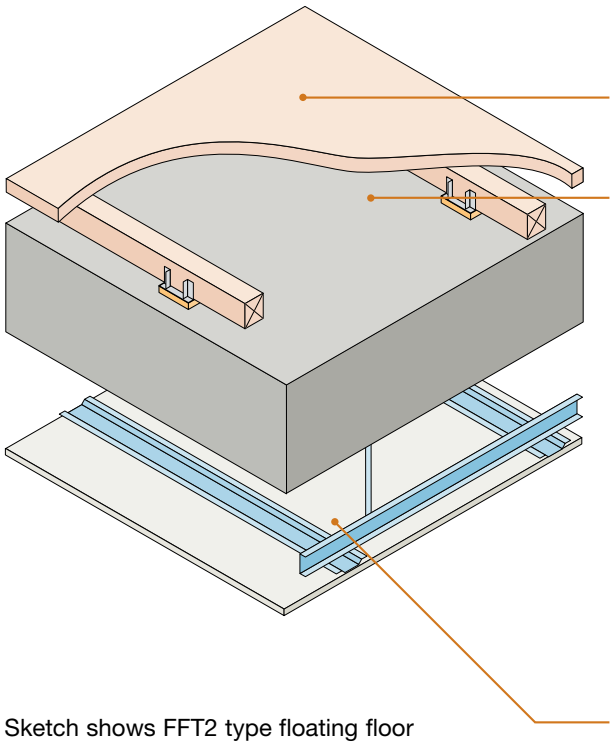
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-2

In-situ concrete slab ■
Use with reinforced concrete frame construction only ■



Sketch shows FFT2 type floating floor treatment and metal ceiling treatment

Floating floor	See section 5 for suitable floating floor treatment
Structural floor	• 250mm (min) in-situ concrete floor slab, 2400 kg/m³ (min) density without screed, or • 200mm (min) in-situ concrete floor slab, 2400 kg/m³ (min) density, with screed: - 40mm (min) screed directly applied to slab - cement:sand or proprietary screed nominal 80 kg/m² mass per unit area, See Appendix A
Ceiling	See section 4 for suitable ceiling treatment

Alternative external (flanking) wall construction

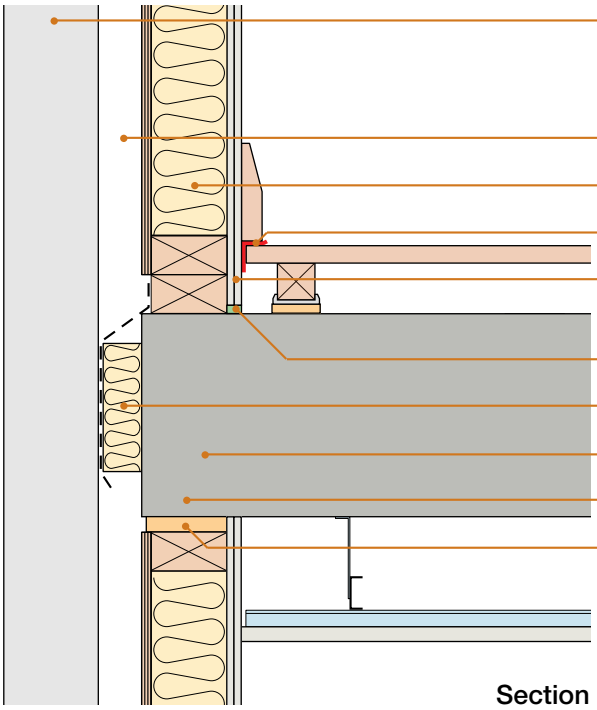
Storey height glazing units are an acceptable alternative to the cavity walls illustrated:

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

DO

- Ensure floor slab density is 2400kg/m³ (min)
- Fill all voids between walls and floor
- Ensure floating floor treatment is suitable and install in accordance with the manufacturer's instructions
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Make sure there is a ceiling void of 75mm (min) and ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure that, where used, only solid blocks (i.e. not hollow or cellular) are used in the construction of external (flanking) walls
- Refer to Appendix A

1. External (flanking) wall junction - steel or timber frame inner leaf



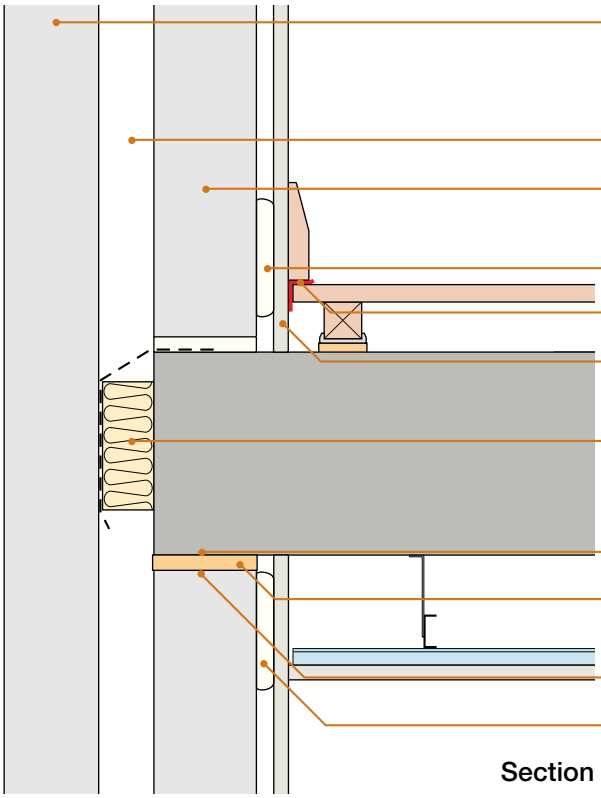
Section

Sketch shows FFT2 type floating floor treatment and metal ceiling treatment

- Outer leaf may be:
  - masonry, or
  - precast panels
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- 5mm (min) resilient flanking strip
- 2 layers of gypsum-based board nominal 8 kg/m² each layer
- Acoustic or flexible sealant
- Close cavity with a flexible cavity stop
- Inner leaf must not be continuous between storeys
- Slab must not abut inner leaf
- All voids between slab and inner leaf filled with flexible closer or sealant

Note: If using E-FC-2 in combination with Robust Detail E-WS-2 separating wall, please refer to E-WS-2 when using lightweight steel frame inner leaf

2. External (flanking) wall junction - masonry inner leaf

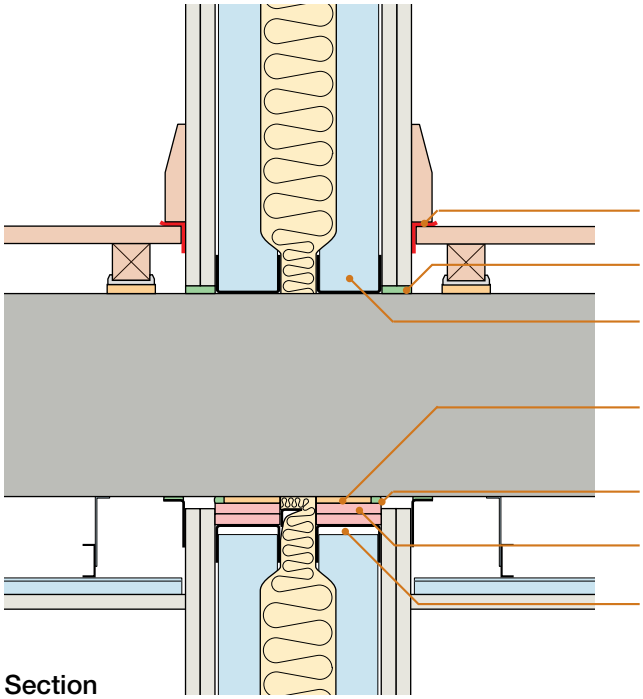


Section

Sketch shows FFT2 type floating floor treatment and metal ceiling treatment

- Outer leaf may be:
  - masonry, or
  - precast panels
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) concrete block (1350 to 1600 kg/m³ or 1850 to 2300 kg/m³)
- Continuous ribbon of adhesive
- 5mm (min) resilient flanking strip
- Gypsum-based board nominal 8 kg/m² or 13mm plaster
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation or expanded polystyrene beads
- Slab must not abut inner leaf
- All voids between slab and inner leaf filled with flexible closer or sealant
- Inner leaf must not be continuous between storeys
- Continuous horizontal ribbon of adhesive

3. Separating wall junction



5mm (min) resilient flanking strip

Flexible or acoustic sealant

Separating wall must not be continuous between storeys

20mm mineral fibre or 5mm foamed polyethylene resilient strip

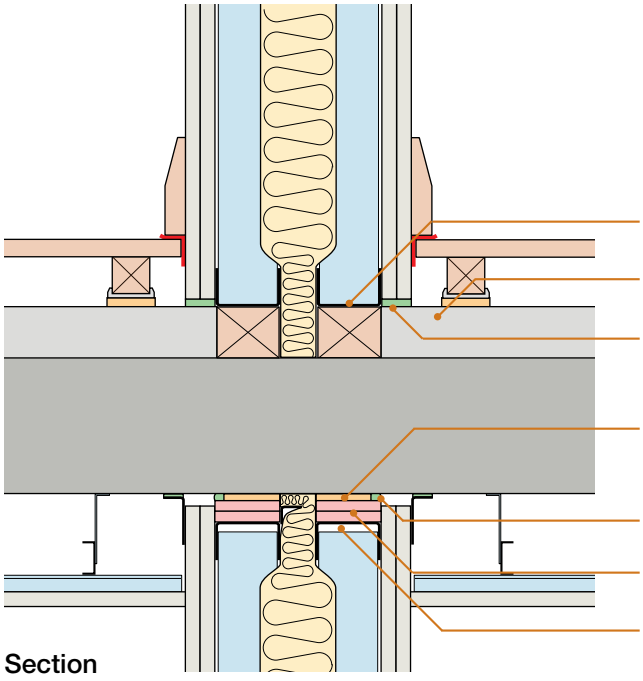
Flexible or acoustic sealant

Gyproc Core board

Junction to allow for deflection of slab where required

Section

Sketch shows 250mm concrete slab, FFT2 type floating floor treatment and metal ceiling treatment



Wall frames fixed to timber sole plates

Screed must not be continuous between dwellings

Screed should not come into contact with steel channel or wall lining

20mm mineral fibre or 5mm foamed polyethylene resilient strip

Flexible or acoustic sealant

Gyproc Core board

Junction to allow for deflection of slab where required

Section

Sketch shows 200mm concrete slab with screed, FFT2 type floating floor treatment and metal ceiling treatment

4. Ceiling treatment for E-FC-2

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

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

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

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

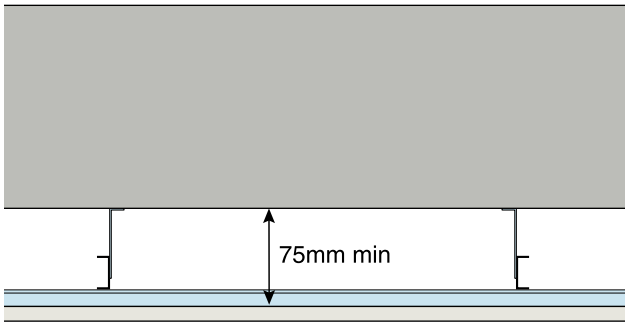
- 25mm (min) mineral wool quilt is placed in the ceiling void, and/or
- resilient hangers are used

Downlighters and recessed lighting

Provided there is a minimum ceiling void of 75mm downlighters or recessed lighting may be installed in the ceiling:

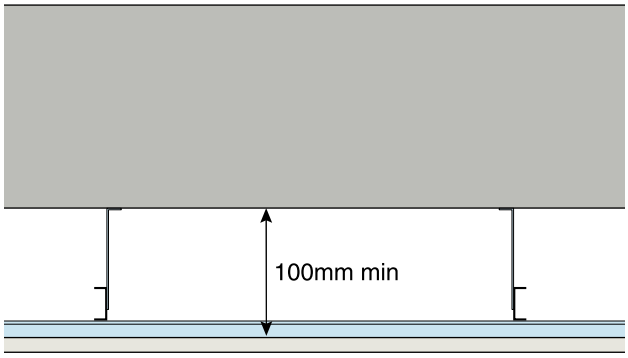
- in accordance with the manufacturer's instructions
- at no more than one light per 2m^2 of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



Any ceiling system - 75mm void

- any timber or metal ceiling system providing 75mm (min) ceiling void
- one layer of nominal 10 kg/m^2 gypsum-based board



Any ceiling system - 100mm void

- any timber or metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m^2 gypsum-based board

5. Floating floor treatments for E-FC-2

All floating floor treatments :

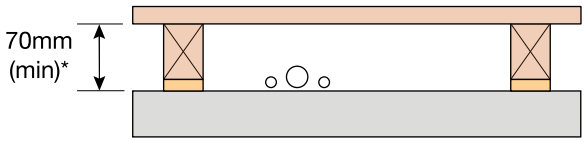
a) Must achieve a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

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

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

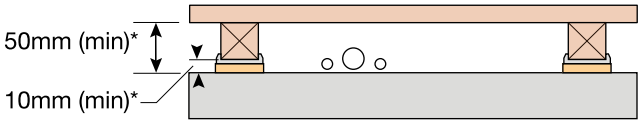
d) For further guidance on floating floor treatments and flanking strips, please refer to Appendix A.

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



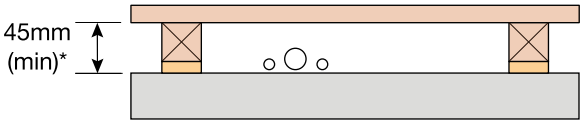
FFT1 – Resilient composite deep batten system

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



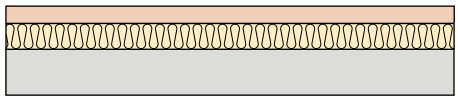
FFT2 – Resilient cradle and batten system

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



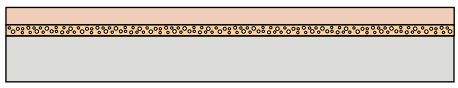
FFT3 – Resilient composite standard batten system

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



FFT4 – Resilient overlay platform floor system

- proprietary platform system inclusive of resilient layer greater than or equal to 16 kg/m^2 mass per unit area
- no services to be installed in floor system*

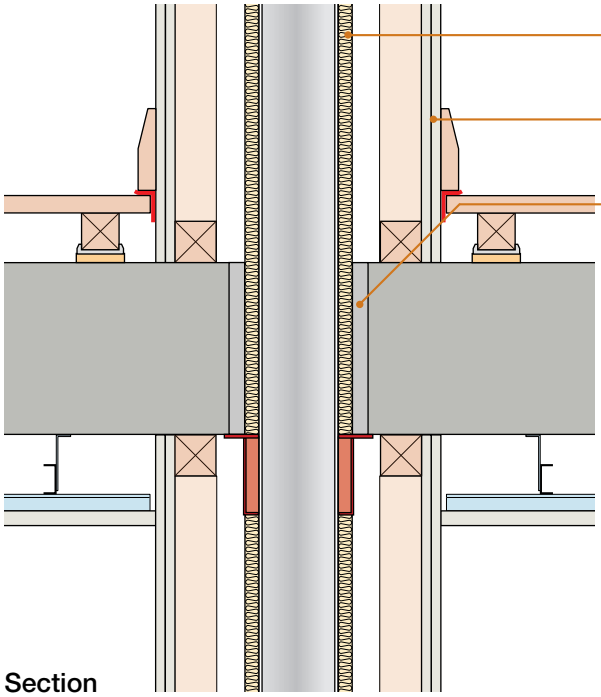


FFT5 – Resilient overlay shallow platform floor system

- 9mm (min) t&g flooring board
- resilient layer pre-bonded to flooring board
- no services to be installed in floor system*

***** Additional under floor heating layers may be incorporated within FFT4 and FFT5 provided the complete build-up, using all components, has been tested to give a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

6. Services – Service pipes through separating floor



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

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

All voids around pipe sealed

Section

Sketch shows FFT2 type floating floor treatment and metal ceiling treatment

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

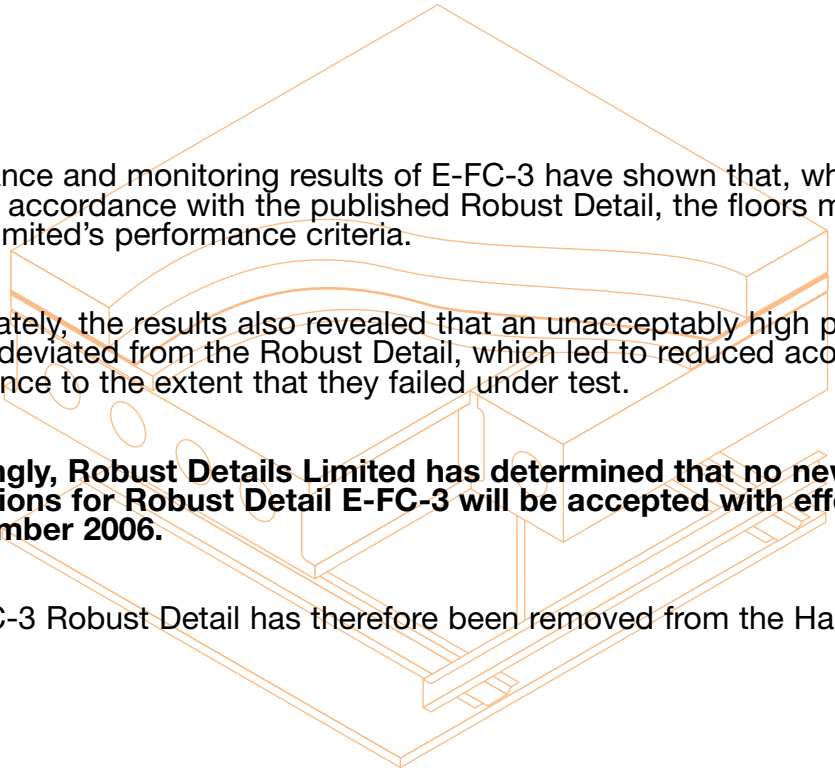
Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is concrete slab density 2400 kg/m^3 (min)?			
2.	Where blockwork inner leaves are adopted to the external (flanking) walls are they of the correct density?			
3.	Is concrete slab 250mm (min) thick without screed, or 200mm (min) thick where a 40mm (min) screed covers the in-situ concrete slab?			
4.	Is inner leaf discontinuous between storeys?			
5.	Has ceiling system been installed in accordance with the manufacturer's instructions (where applicable)?			
6.	Is there a minimum ceiling void of 75mm?			
7.	Are all ceiling board joints sealed with tape or caulked with sealant?			
8.	Has floating floor treatment been installed in accordance with the manufacturer's instructions?			
9.	Have all resilient flanking strips been fitted?			
10.	Are service pipes wrapped in quilt and boxed in with two layers of gypsum-based board, nominal 8 kg/m^2 each layer?			
11.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .



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

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

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

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

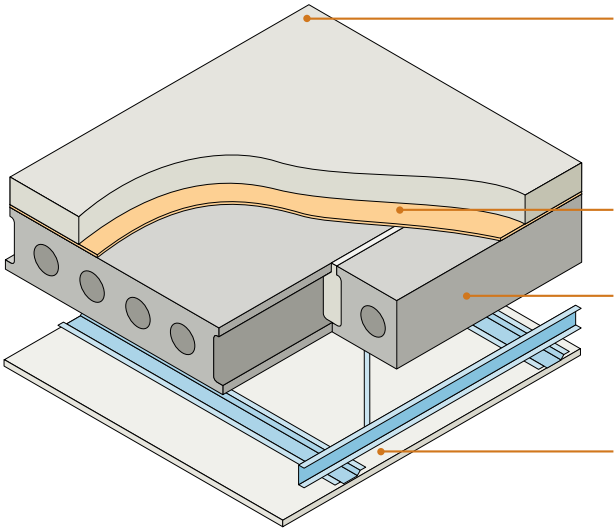
Dave Baker OBE

Chief Executive, Robust Details Limited

Separating Floor – Concrete

E-FC-4

Precast concrete plank ■
Screed laid on Thermal Economics 6mm Isorubber Base resilient layer ■



Sketch shows CT0 type ceiling treatment

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

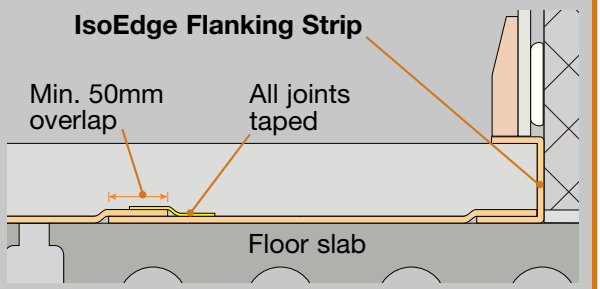
SYSTEM INSTALLATION

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

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

2) **IsoEdge** flanking strip

3) All joints taped



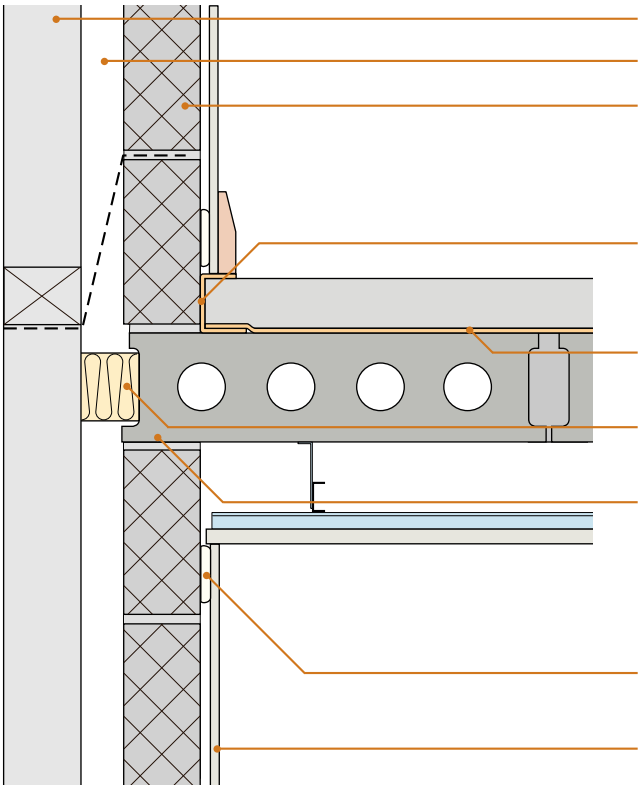
- **IsoEdge** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

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

DO

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

1. External (flanking) wall junction

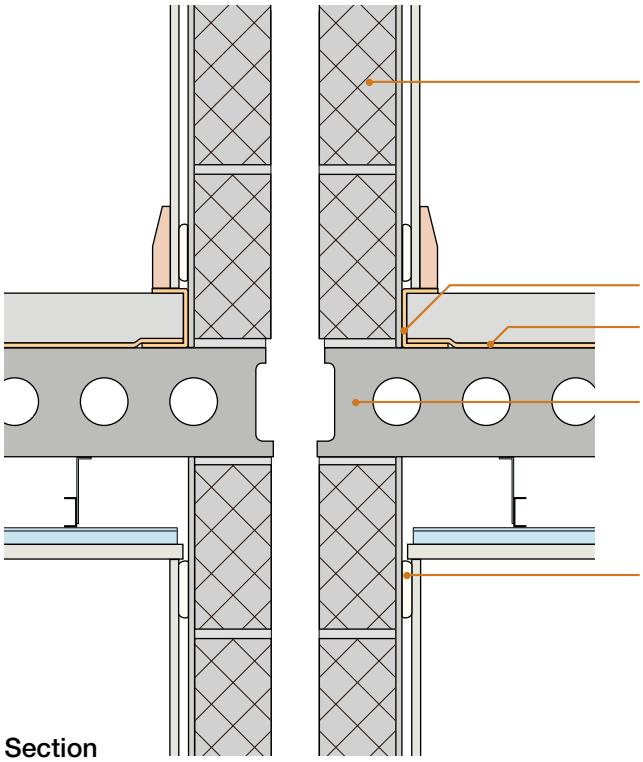


Section

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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

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

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-4

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

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

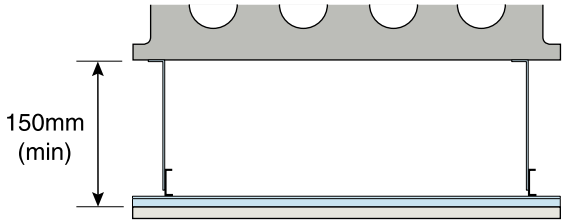
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0, CT1 or CT2, downlighters or recessed lighting may be installed in the ceiling:

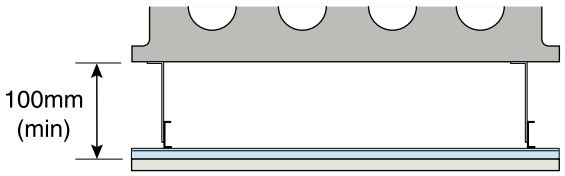
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



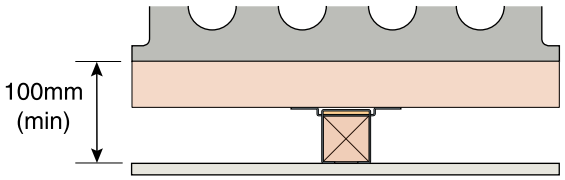
CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

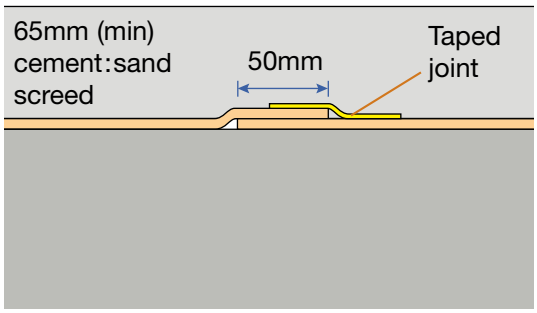
- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT2 – Timber battens and counterbattens with IsoSonic Hangers Type C. Only to be used for 200mm (min) depth concrete planks

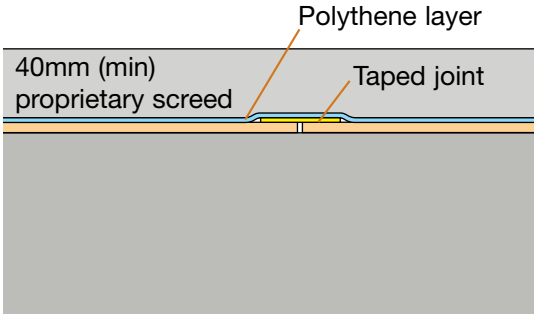
- 50x50mm softwood battens
- 50x50mm counterbattens
- Isosonic Hangers Type C
- one layer of nominal 8 kg/m² gypsum-based board

4. Resilient layer installation for different screed types



SCREED TYPE
65mm (min) cement:sand screed

- Isorubber joints to be overlapped by 50mm (min)
- Upper Isorubber edge joints to be sealed by tape



SCREED TYPE
40mm (min) proprietary screed

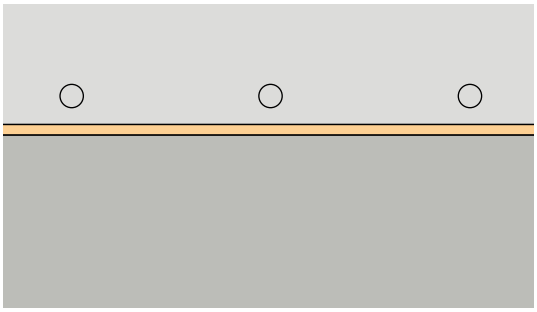
- Isorubber joints to be butt jointed
- Isorubber joints to be sealed by tape
- Polythene layer to be laid over whole floor overlapping joints

5. Underfloor heating systems within screeds

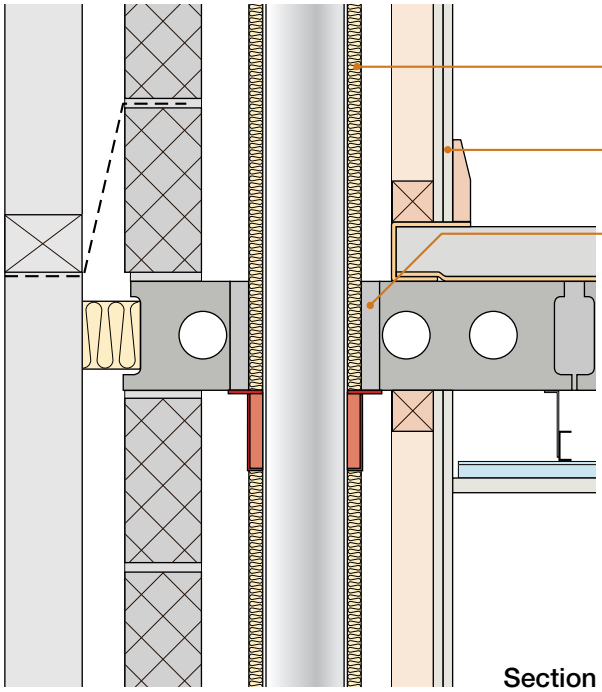
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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

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



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 Thermal Economics?			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (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 IsoEdge flanking strip installed for all room perimeters?			
7.	Are the Isorubber joints overlapped by 50mm and sealed with tape?			
8.	Is the Isorubber layer overlapping the IsoEdge flanking strip?			
9.	Are the skirting boards isolated from the screed by the IsoEdge flanking strip?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Thermal Economics, manufacturer of Isorubber resilient layer system:

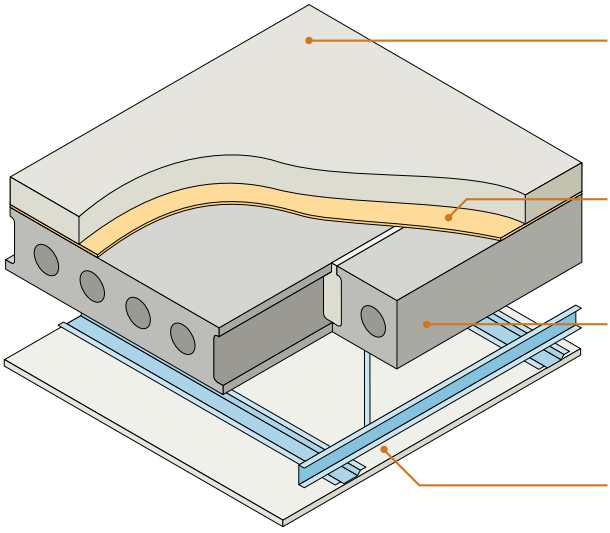
Telephone: 01582 544255 **Fax:** 01582 429305 **E-mail:** technical@thermal-economics.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete E-FC-5

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



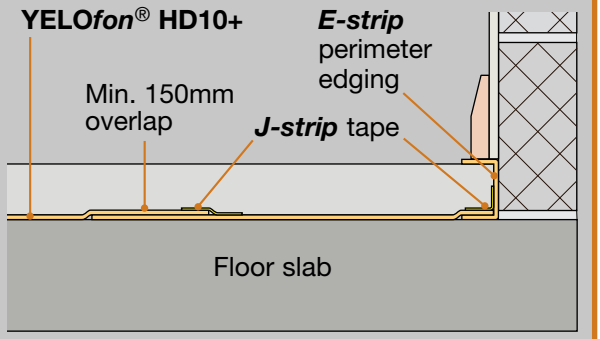
Sketch shows CT0 type ceiling treatment

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

SYSTEM INSTALLATION:

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

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



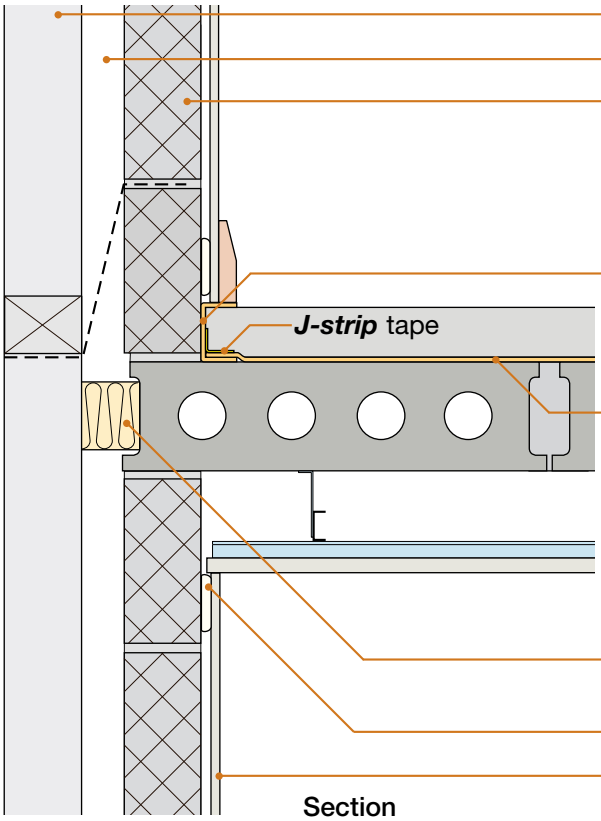
- ***E-strip*** perimeter edging to be installed at all room perimeters. See manufacturer's guidance.
- **YELO*fon*® HD10+** may also be foil faced.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

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

DO

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

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

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

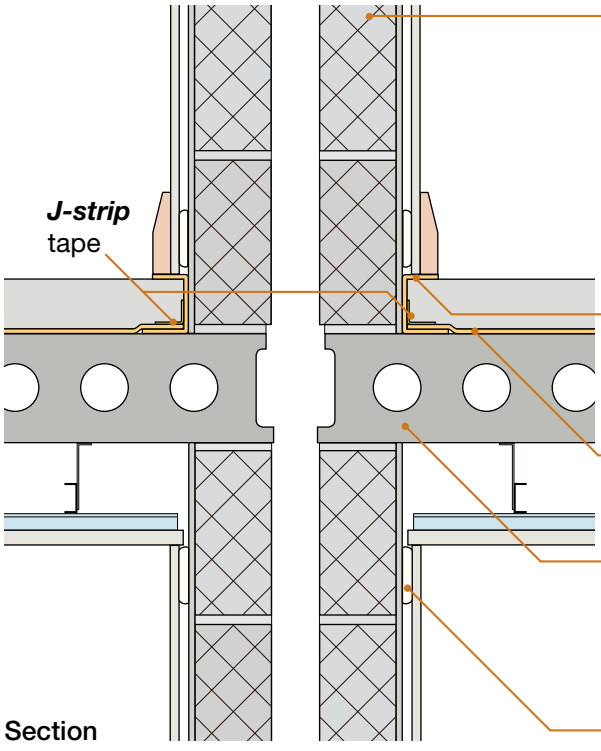
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Continuous horizontal ribbon of adhesive

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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



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

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

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

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

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

Continuous horizontal ribbon of adhesive

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-5

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

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

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

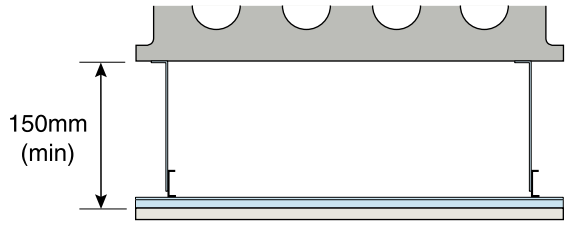
Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0, CT1 or CT5, downlighters or recessed lighting may be installed in the ceiling:

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

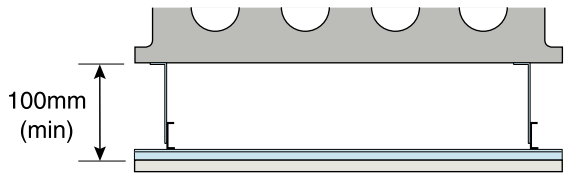
Particular attention should also be paid to Building Regulations Part B - Fire Safety

CT0 and CT1 ceiling treatments can only be used when separating walls are constructed in aggregate blocks.



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

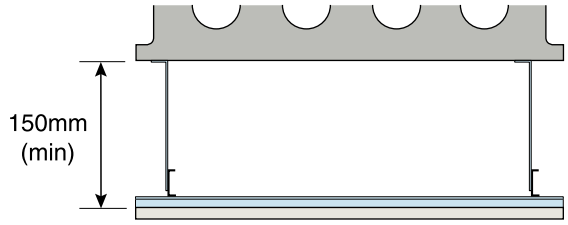


CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

CT5 ceiling treatment MUST be used when flanking AND separating walls are constructed in aircrete blocks.

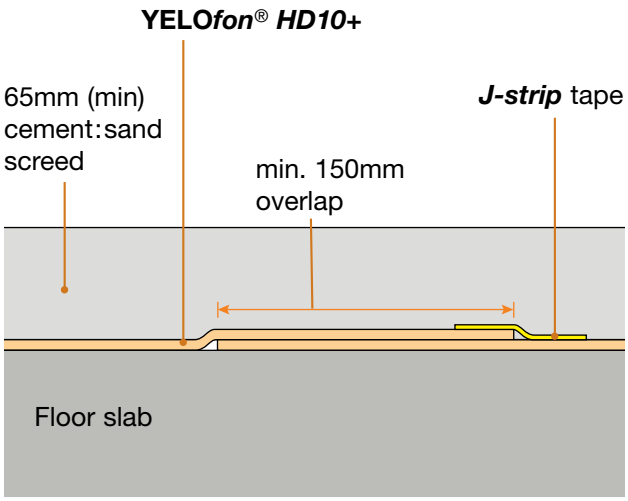
This can also be used with concrete aggregate walls if required.

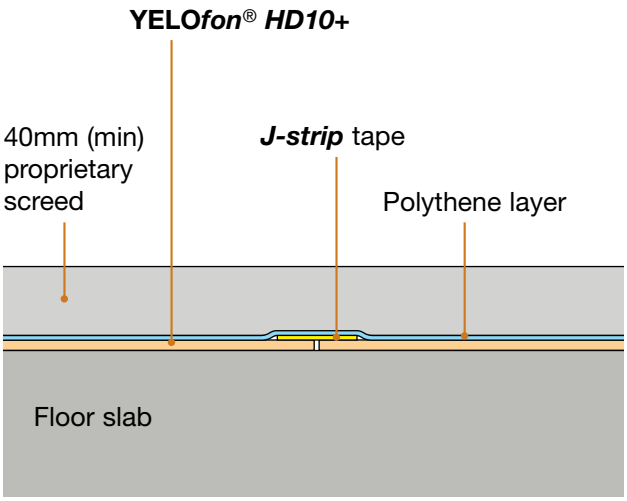


CT5 – Metal ceiling system - 150mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 10 kg/m² gypsum-based board

4. Resilient layer installation for different screed types





SCREED TYPE
65mm (min) cement:sand screed

- **YELO*fon*® HD10+** resilient layer must have 150mm (min) overlapped joints and be sealed with ***J-strip*** tape.
- ***E-strip*** perimeter edging must be overlapped by **YELO*fon*® HD10+** resilient layer with joints sealed with ***J-strip*** tape to isolate screed from perimeter walls and skirtings.
- ***E-strip*** perimeter edging to be installed at all perimeter walls (including door openings, wall recesses) and service pipes. See manufacturer's guidance.

SCREED TYPE
40mm (min) proprietary screed

- **YELO*fon*® HD10+** resilient layer to be butt jointed.
- **YELO*fon*® HD10+** joints to be sealed with ***J-strip*** tape.
- Polythene layer to be laid over whole floor, with joints overlapped.

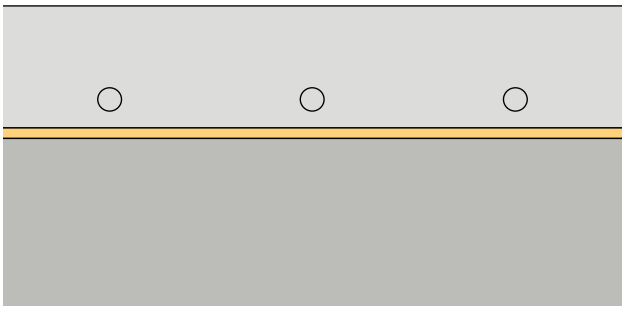
5. Underfloor heating systems within screed

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

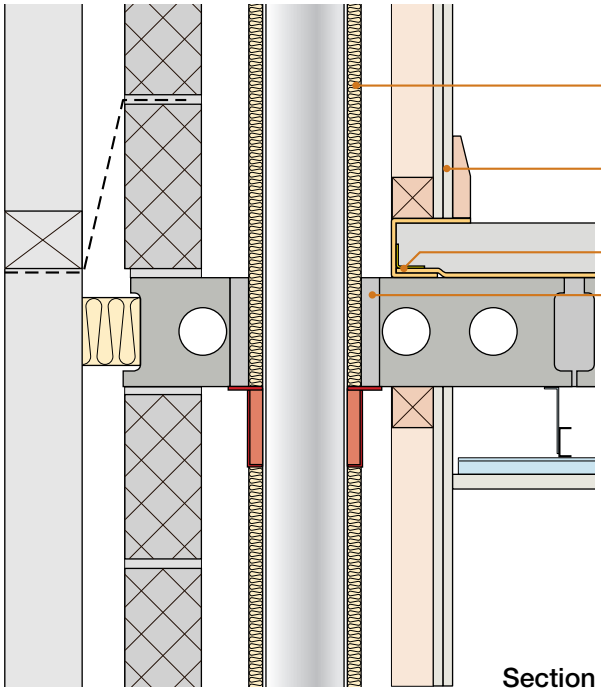
Underfloor heating systems which have a supporting layer/board may be laid on top of the **YELO*fon*® HD10+**.

YELO*fon*® HD10+ may also be foil faced.

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



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; or 200mm (min) where all walls are aircrete; and of mass per unit area 300 kg/m² (min)?			
3.	Are inner leaves to external (flanking) walls of the correct block density and appropriate for precast concrete plank thickness and ceiling treatment?			
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.	Is ceiling treatment CT5 used where all walls are aircrete?			
11.	Are all ceiling board joints sealed with tape or caulked with sealant?			
12.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
13.	Is separating floor satisfactorily complete?			

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

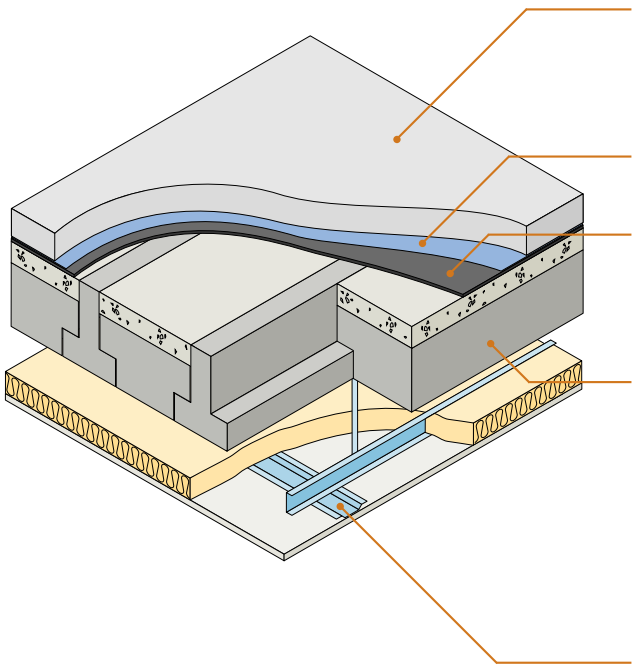
Telephone: 01634 296677 **Fax:** 01634 226630 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete E-FC-6

Beam and block floor with precast or in-situ edge beams ■
Screed laid on REGUPOL sonus curve 8 resilient layer system (formerly known as Regupol E48) ■
For use with dense aggregate block flanking walls only ■

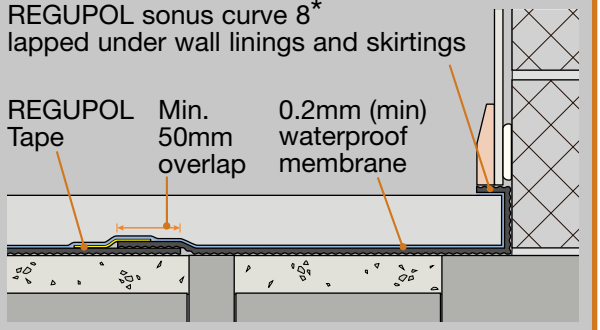


Screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed, nominal 80 kg/m² mass per unit area
DPM	0.2mm (min) waterproof membrane
Resilient layer	REGUPOL sonus curve 8*, fully lapped up walls and REGUPOL tape for jointing
Structural floor	beam and block, min 100mm thick dense aggregate infill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

SYSTEM INSTALLATION

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

1) **REGUPOL sonus curve 8*** laid over entire floor area with 50mm overlaps
2) All joints sealed with REGUPOL tape
3) 0.2mm (min) waterproof membrane



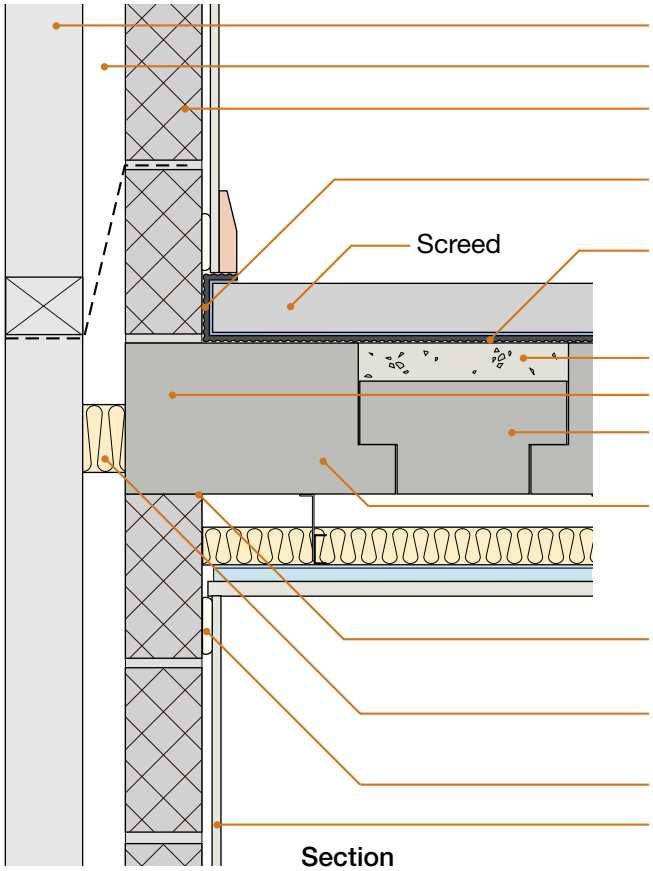
- **REGUPOL sonus curve 8*** must be laid dimpled side down
- **REGUPOL sonus curve 8*** must be turned up at walls and lapped under wall linings and skirtings
- Lay a 0.2mm (min) waterproof membrane over the entire floor

DO

- Butt floor blocks tightly together
- Cover floor blocks with min 50mm concrete topping
- Ensure that concrete does not enter the cavity and bridge the two leaves of supporting wall blockwork - it is acceptable to use proprietary cavity stops to provide a shutter
- Ensure precast or in-situ edge beams are correctly installed
- Ensure in-situ concrete downstand is at least 75mm wide
- Ensure REGUPOL sonus curve 8* is laid dimple side down, covers entire floor area and has overlapped joints sealed with Regupol tape
- Ensure REGUPOL sonus curve 8* resilient layer isolates screed from the perimeter walls, wall linings and skirtings
- Ensure depth from top of beams to ceiling is min 300mm
- Ensure 50mm mineral fibre quilt is installed over whole ceiling board areas
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of external (flanking) walls

*formerly known as Regupol E48

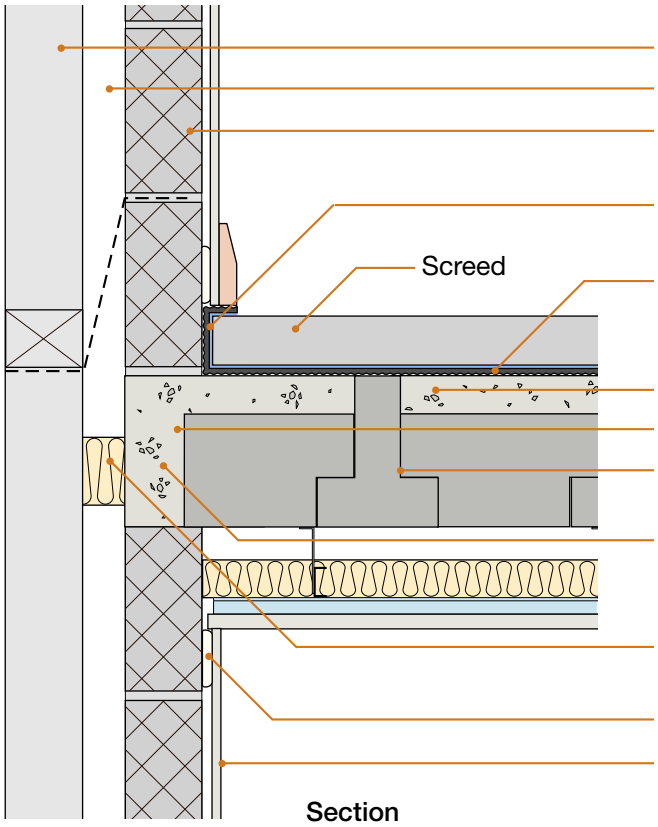
1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- REGUPOL sonus curve 8* **must isolate screed** from all perimeter masonry walls, wall linings and skirting
- REGUPOL sonus curve 8* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape
- Beam and block floor:
  - min 50mm concrete topping to all floor blocks
  - walls must not be continuous between storeys
  - floor blocks to be tightly abutted (see section 7 for floor block types)
  - precast concrete edge beam min 300mm wide must break vertical continuity of wall leaves (NB: edge beam shape may vary between manufacturers)
  - all voids between edge beam and inner leaf blockwork filled with mortar or flexible sealant
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster

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

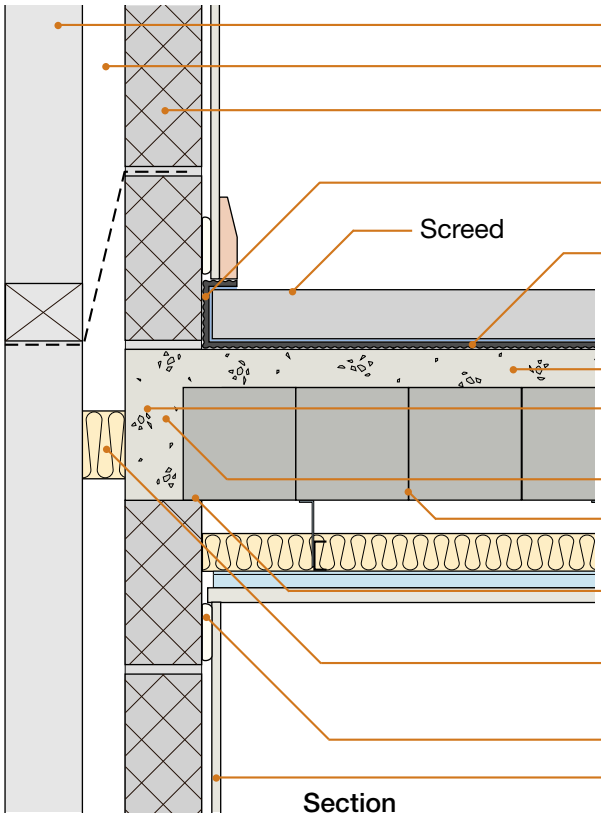


Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- REGUPOL sonus curve 8* **must isolate screed** from all perimeter masonry walls, wall linings and skirting
- REGUPOL sonus curve 8* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape
- Beam and block floor:
  - min 50mm concrete topping to all floor blocks
  - walls must not be continuous between storeys
  - floor blocks to be tightly abutted (see section 7 for floor block types)
  - in-situ concrete downstand must be min 75mm wide and must break vertical continuity of wall leaves
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster

*formerly known as Regupol E48

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



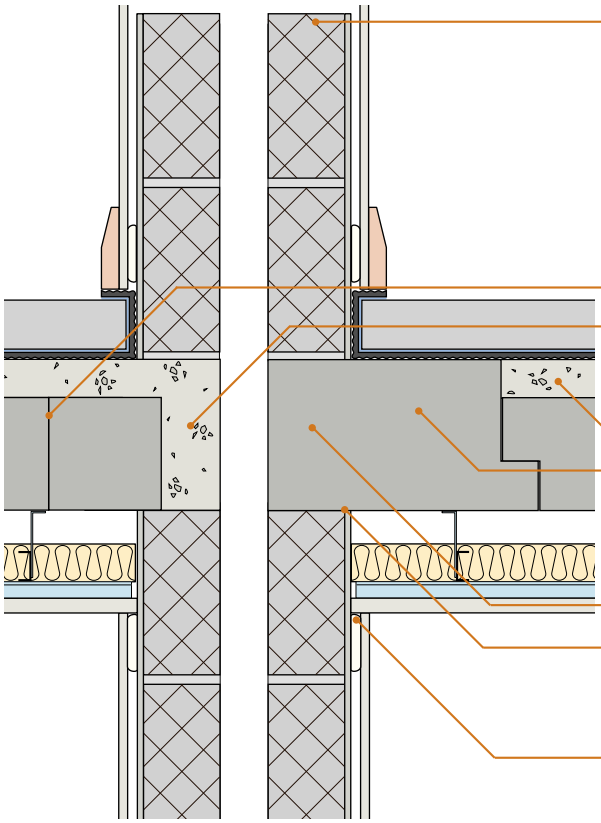
- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- REGUPOL sonus curve 8* **must isolate screed** from all perimeter masonry walls, wall linings and skirting
- REGUPOL sonus curve 8* must have 50mm (min) overlapped joints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

Beam and block floor:

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

- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m² gypsum-based board or 13mm plaster

4. Separating wall junction



Sketch shows E-WM-3 separating wall

Separating wall:

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

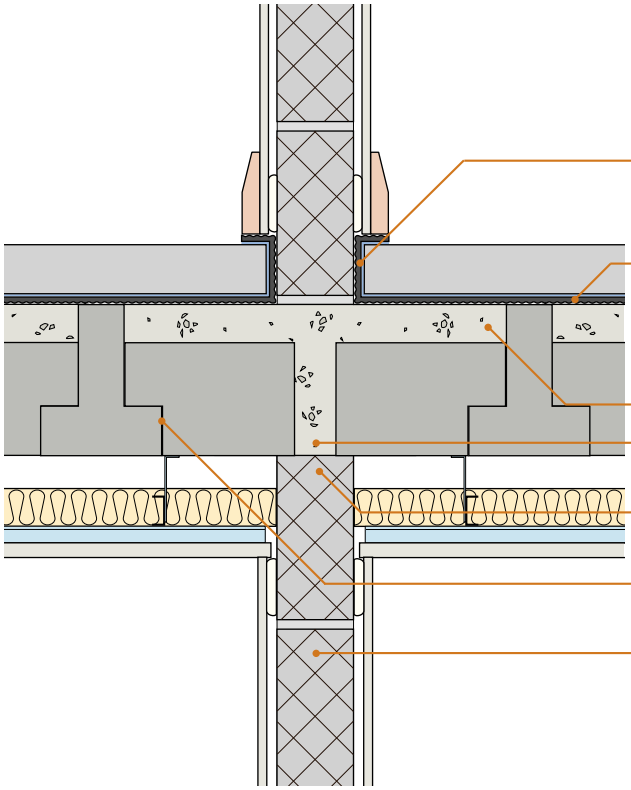
Core floor junctions with wall:

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

- Continuous horizontal ribbon of adhesive

*formerly known as Regupol E48

5. Loadbearing internal wall – floor beams parallel to wall



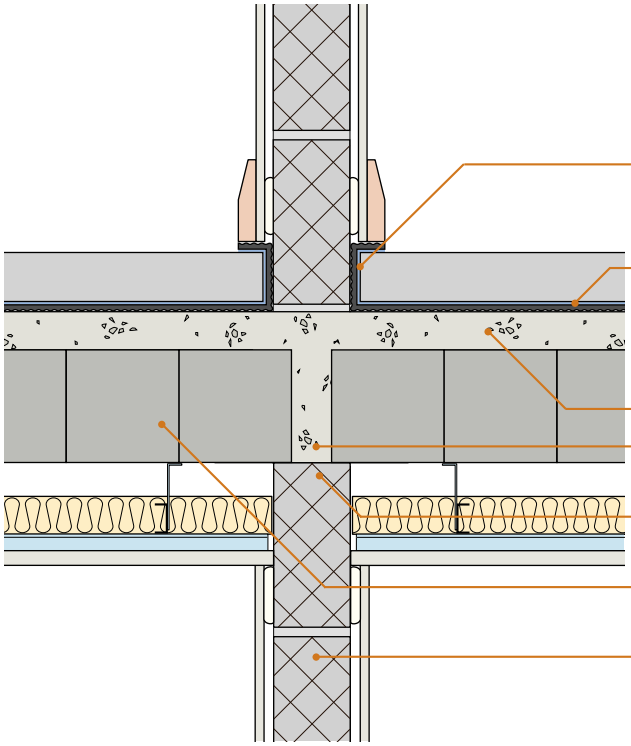
REGUPOL sonus curve 8* **must isolate screed** from all perimeter masonry walls, wall linings and skirting

REGUPOL sonus curve 8* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape

Beam and block floor:

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

6. Loadbearing internal wall – floor beams bearing onto wall



REGUPOL sonus curve 8* **must isolate screed** from all perimeter masonry walls, wall linings and skirting

REGUPOL sonus curve 8* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape

Beam and block floor:

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

*formerly known as Regupol E48

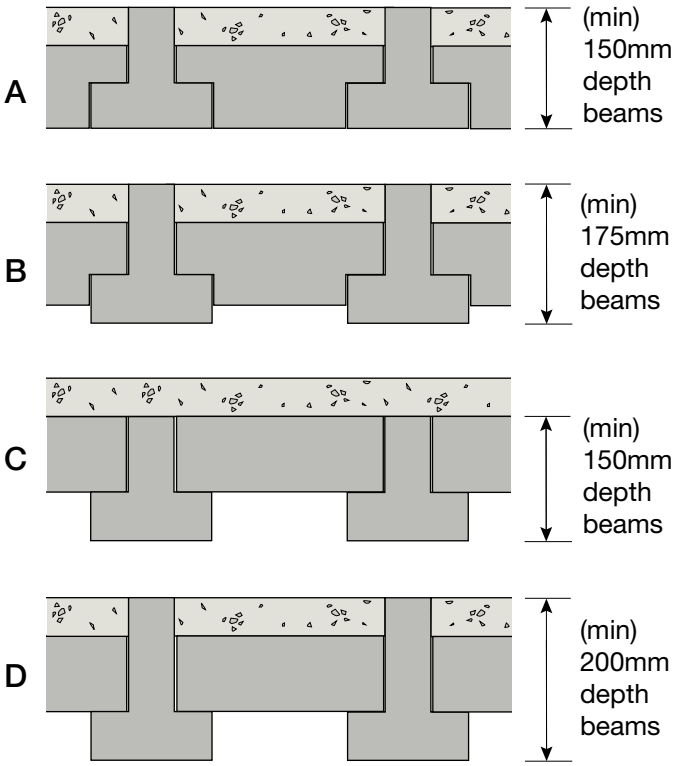
7. Floor block types

Beam/block variations

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

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

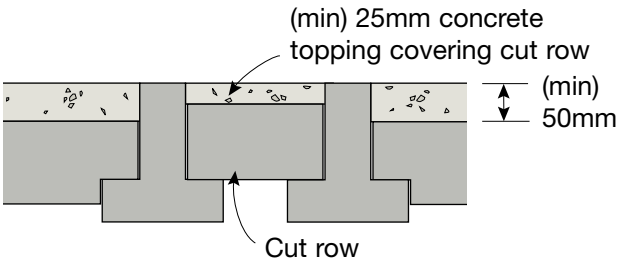
In all cases, the C20 topping must be applied such that it provides a minimum 50mm cover to the blocks.



Cut rows

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

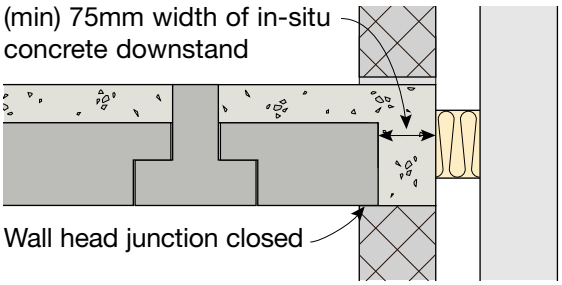
Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.

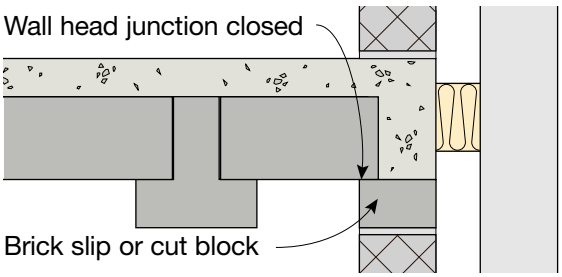


Wall head and floor block junctions

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

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





8. Ceiling treatments for E-FC-6

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

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

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

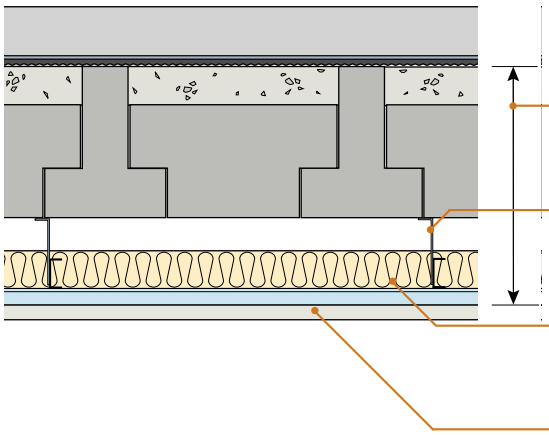
- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the ceiling:

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

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



Floor depth requirements and ceiling treatments

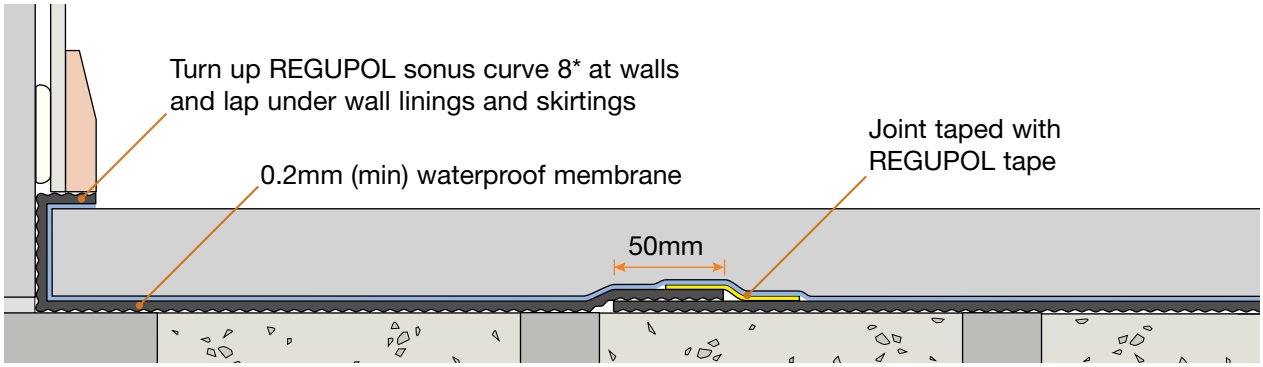
All E-FC-6 floors must have a minimum depth of 300mm **between top of beam and ceiling board**

Only suspended metal frame ceilings systems may be used

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

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

9. Resilient layer installation



SCREED TYPE

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

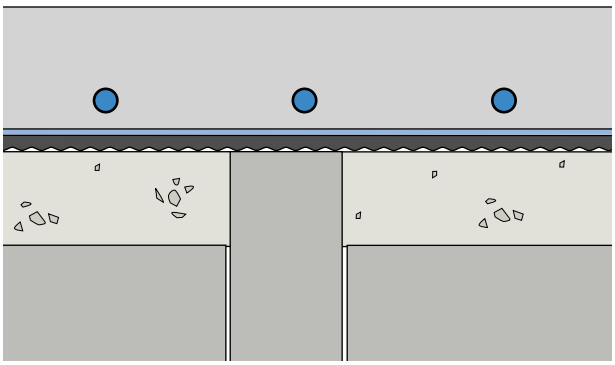
- REGUPOL sonus curve 8* must be laid **dimpled side down**
- overlap all REGUPOL sonus curve 8* joints (both along and across the roll) by at least 50mm and tape all joints using REGUPOL tape
- turn up REGUPOL sonus curve 8* at walls to ensure screed will not touch the walls and is of sufficient length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

10. Underfloor heating

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

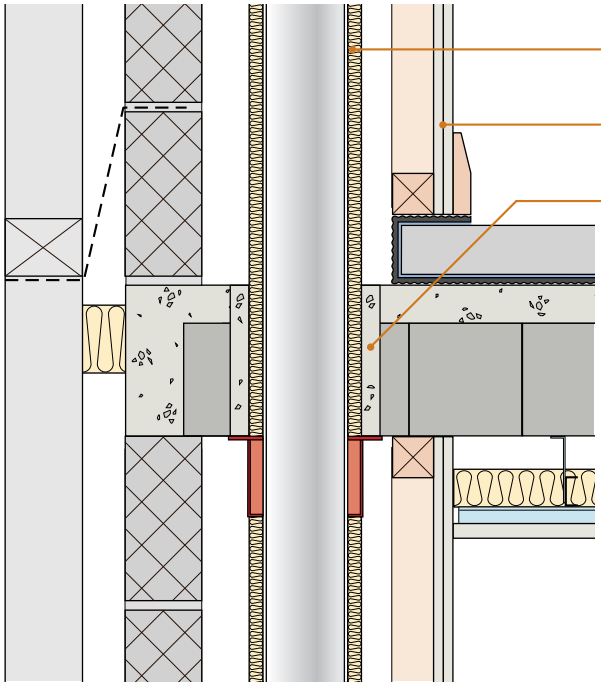
Underfloor heating systems which have a supporting layer/board may be laid on top of the REGUPOL sonus curve 8*

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



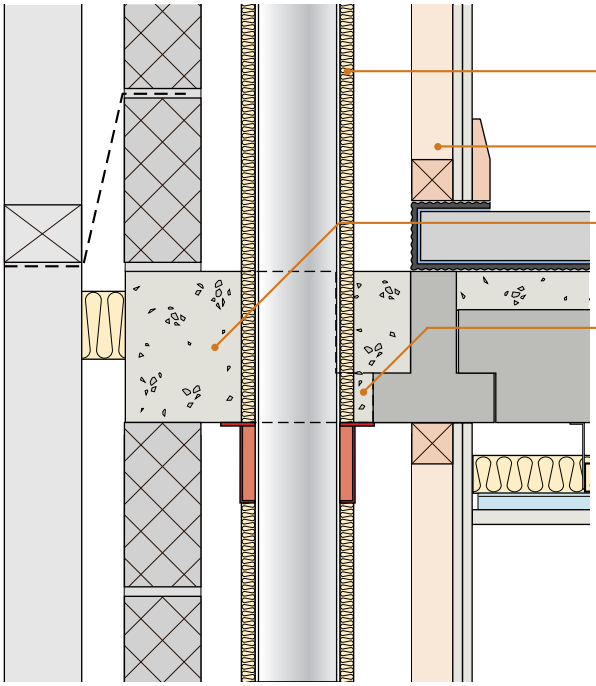
*formerly known as Regupol E48

11. Services – service pipes through separating floor



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

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



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

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

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

Contact details for technical assistance from CMS Acoustics, sole distributor of REGUPOL sonus curve 8* resilient layer system:

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

Notes (include details of any corrective action)

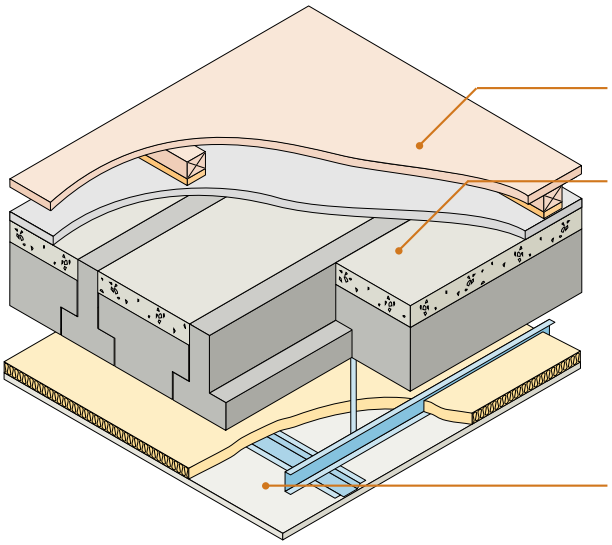
Site manager/supervisor signature . . . . . .

*formerly known as Regupol E48

Separating Floor – Concrete

E-FC-7

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

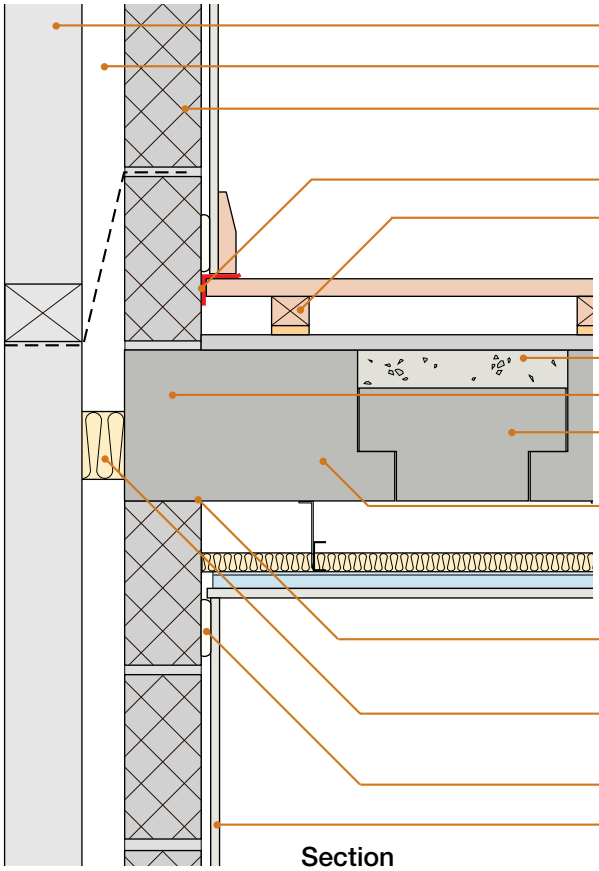


Floating floor	See section 9 for suitable floating floor treatment
Structural floor	beam and block, min 100mm thick dense aggregate infill blocks, min 50mm concrete topping, min strength class C20, to floor blocks, min 300kg/m² combined mass per unit area – see section 7 for cut rows
Ceiling	Min 300mm from top of beam to ceiling board – see section 8

DO

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

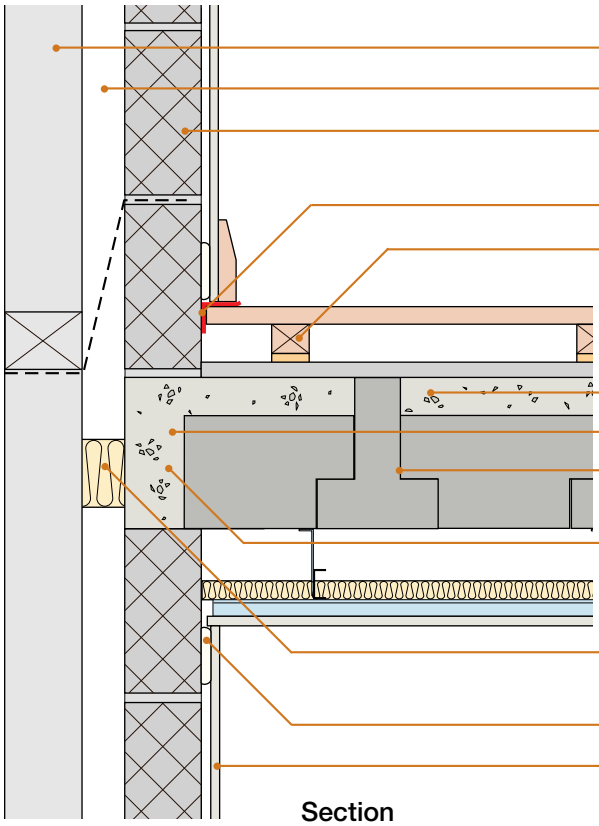
1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



Section

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

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



Section

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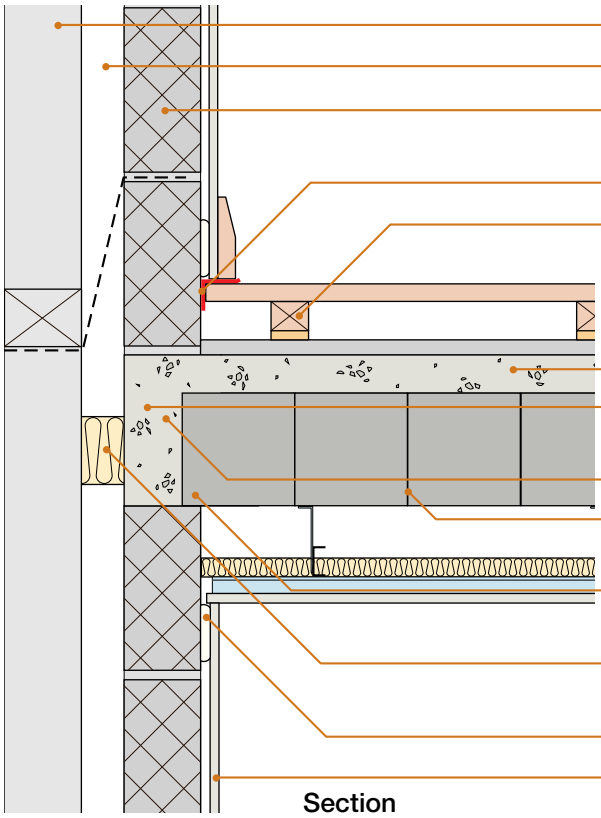
- Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m³)
- 5mm (min) resilient flanking strip
- Section shows FFT3 type floating floor over 20mm (min) levelling screed (see section 9 for acceptable floating floor alternatives)
- Beam and block floor:
  - min 50mm concrete topping to all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

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



Section

Masonry outer leaf

External wall cavity (min 50mm)

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

5mm (min) resilient flanking strip

Section shows FFT3 type floating floor over 20mm (min) levelling screed (see section 9 for acceptable floating floor alternatives)

Beam and block floor:

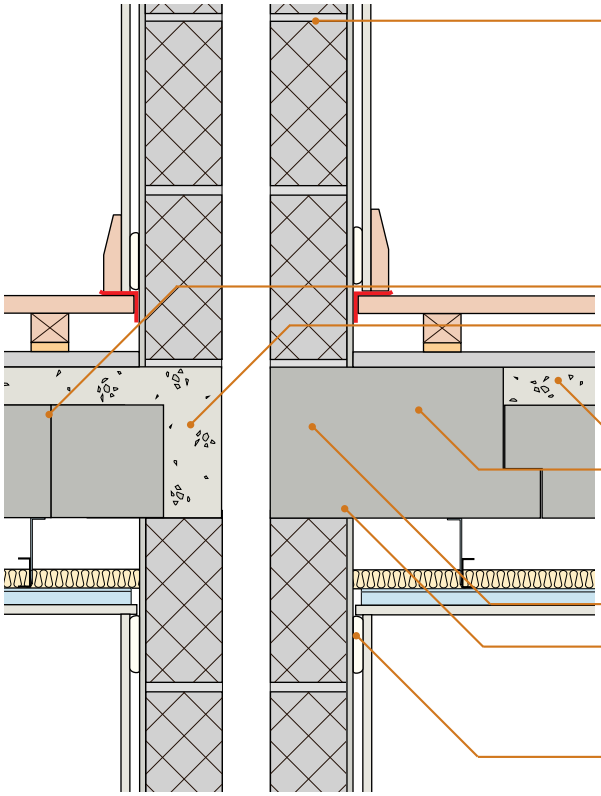
- min 50mm concrete topping to all floor blocks
- in-situ downstand beam must be min 75mm wide and must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- floor blocks to be tightly abutted (see section 7 for floor block types)
- junction between floor blocks and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

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

Continuous horizontal ribbon of adhesive

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

4. Separating wall junction



Separating wall:

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

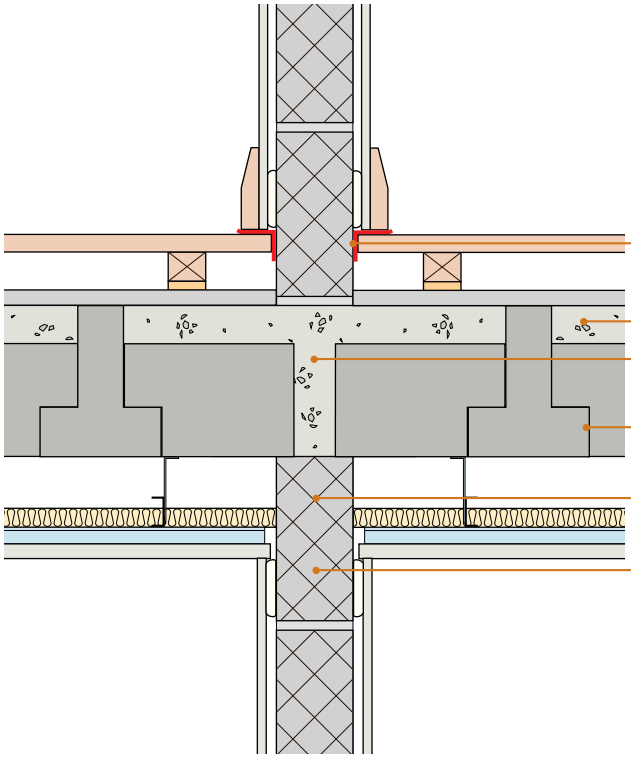
Core floor junctions with wall:

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

Continuous horizontal ribbon of adhesive

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

5. Loadbearing internal wall – floor beams parallel to wall

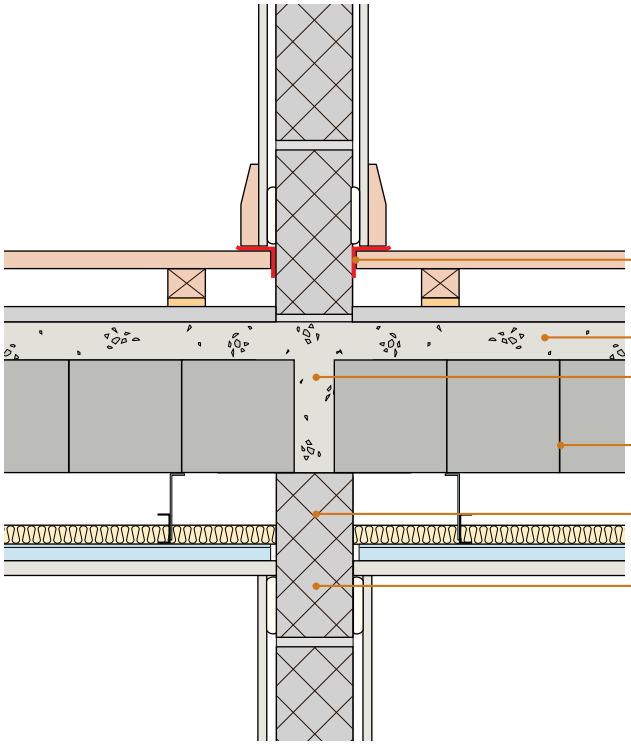


5mm (min) resilient flanking strip

Beam and block floor:

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

6. Loadbearing internal wall – floor beams bearing onto wall



5mm (min) resilient flanking strip

Beam and block floor:

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

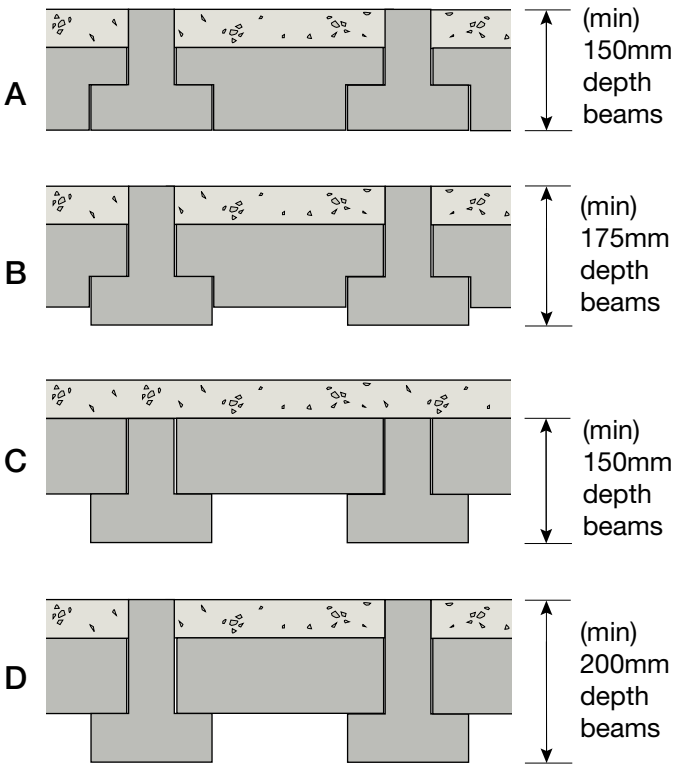
7. Floor block types

Beam/block variations

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

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

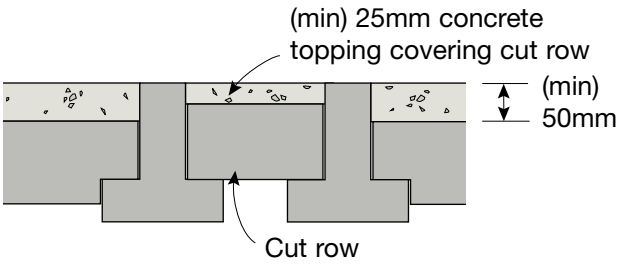
In all cases, the C20 topping must be applied such that it provides a minimum 50mm cover to the blocks.



Cut rows

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

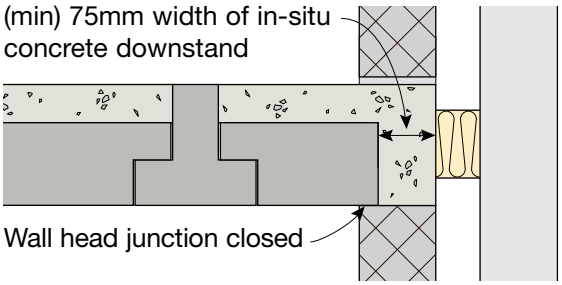
Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.

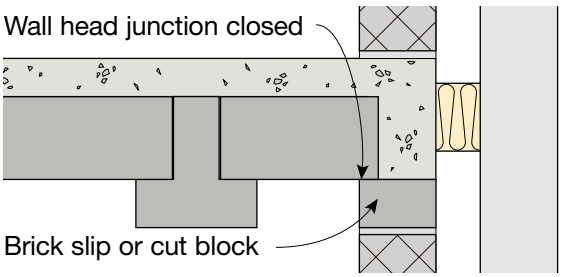


Wall head and floor block junctions

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

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





8. Ceiling treatments for E-FC-7

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

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

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

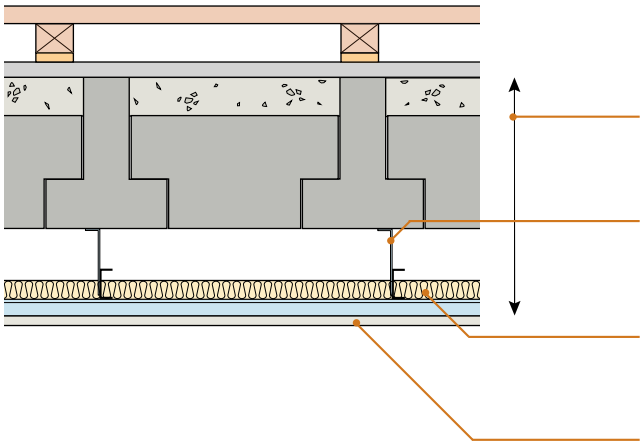
- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the ceiling:

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

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



Floor depth requirements and ceiling treatments

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

Only suspended metal frame ceilings systems may be used

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

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

9. Floating floor treatments for E-FC-7

All floating floor treatments :

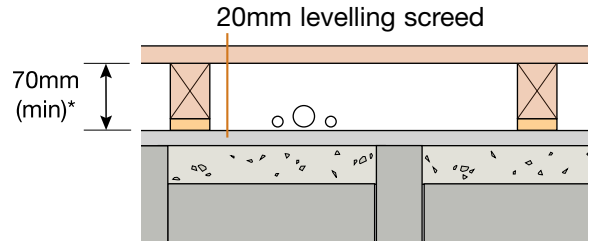
a) Must achieve a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

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

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

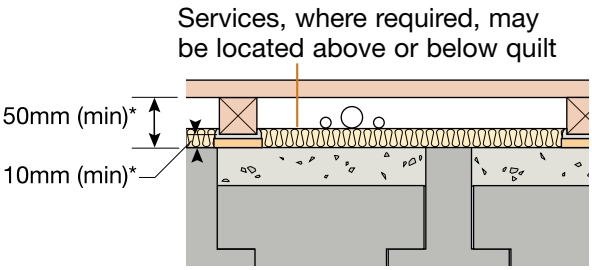
d) For further guidance on floating floor treatments and flanking strips, please refer to Appendix A.

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



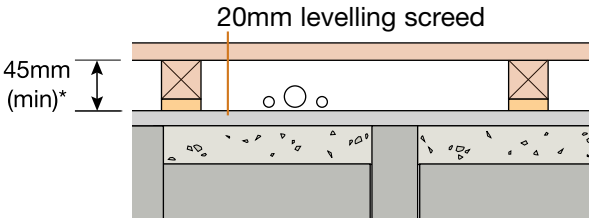
FFT1 – Resilient composite deep batten system with 20mm levelling screed

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



FFT2 – Resilient cradle and batten system with 25mm mineral fibre quilt (min 10kg/m^3)

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



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

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

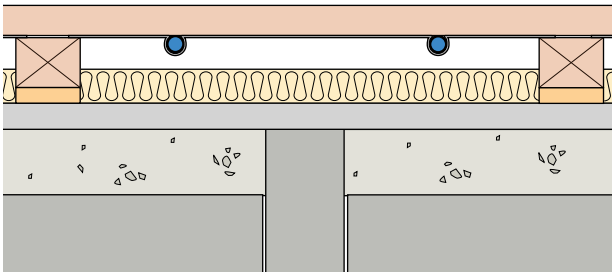
10. Underfloor heating

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

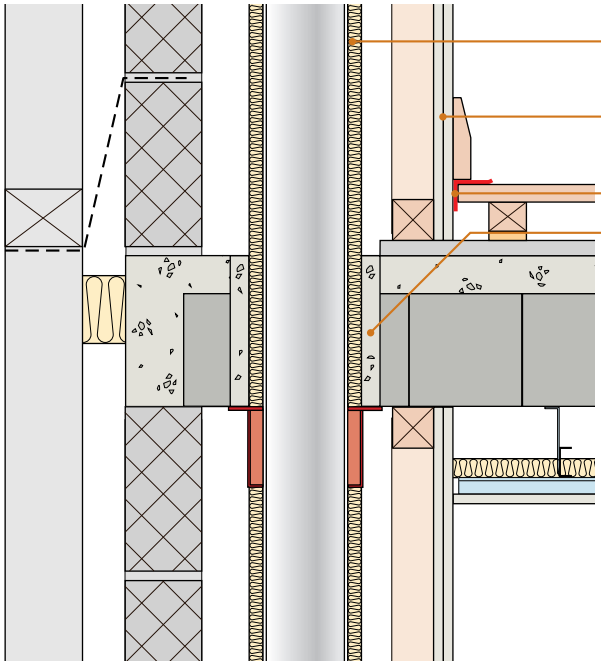
Underfloor heating must not bridge or bypass the FFT resilient layer (i.e. avoid bridging the void between the flooring board and core floor).

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

See Appendix A for further guidance.

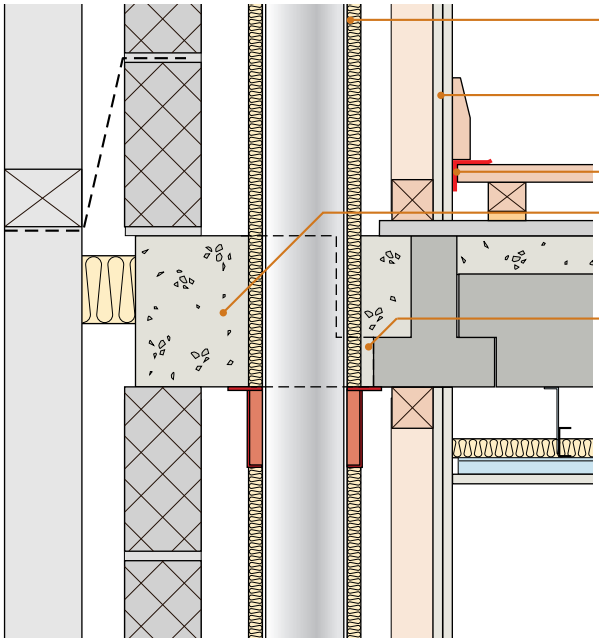


11. Services – service pipes through separating floor



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

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



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

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

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

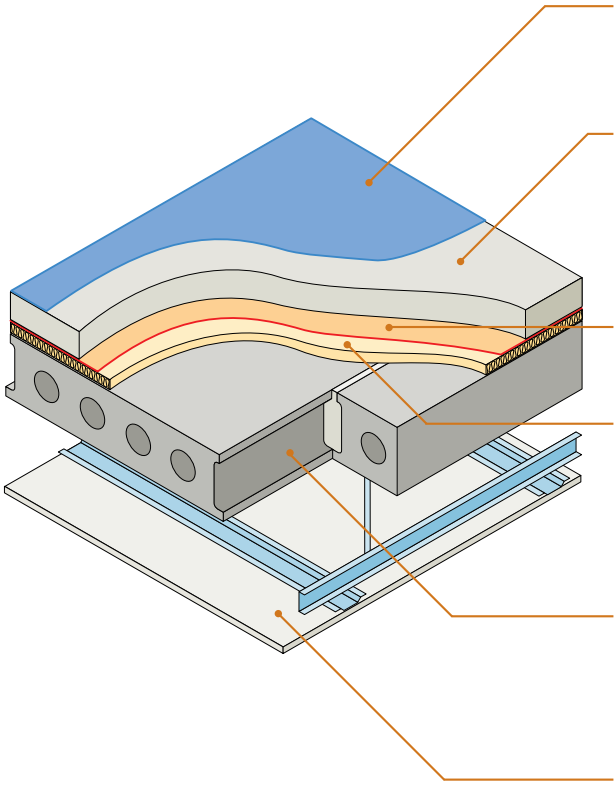
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-8

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



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

IMPORTANT

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

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

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

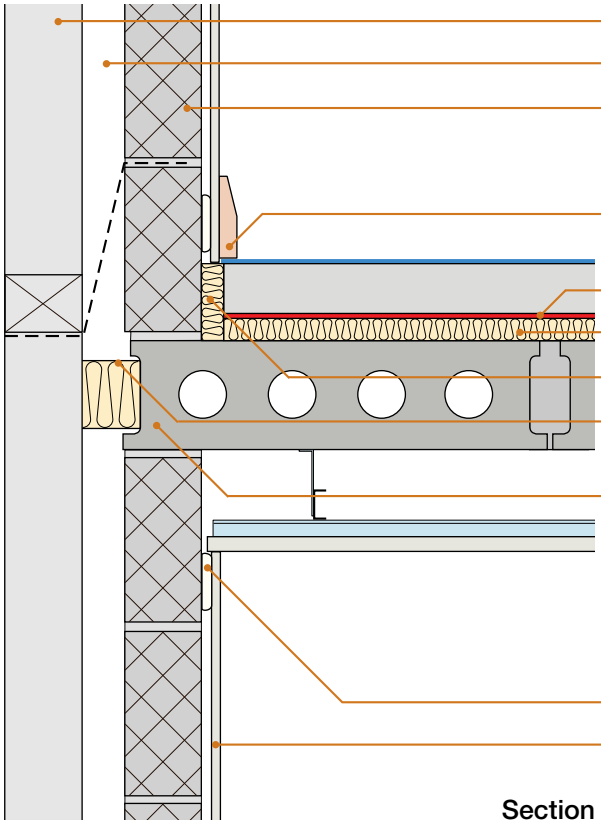
The resilient floor covering material must be overprinted with wording prohibiting its removal.

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

DO

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

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

5mm isolating layer (1)

25mm isolating layer (2)

25mm (min) isolation edge strip

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

Concrete planks must be built into walls:

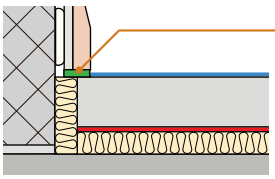
- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

Continuous ribbon of adhesive

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

Section

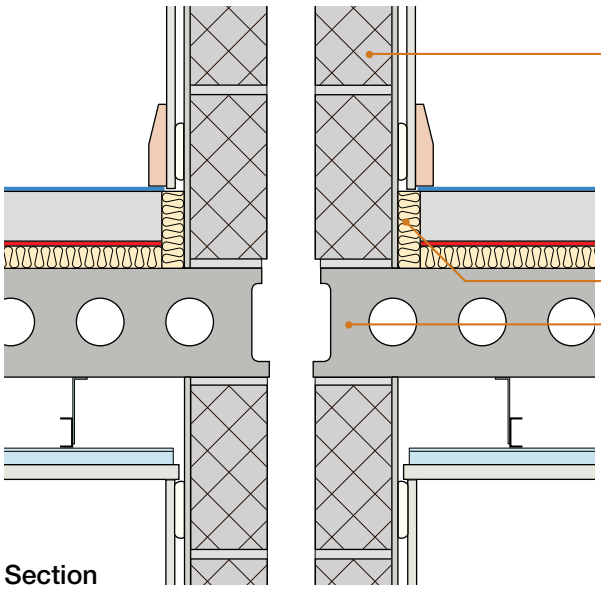
Sketch shows CT0 type ceiling treatment



Mastic sealant ensures skirting and wall lining are isolated from screed

Alternative detail

2. Separating wall junction



Separating wall:

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

25mm (min) isolation edge strip

Concrete planks to be built into wall:

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

Section

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-8

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

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

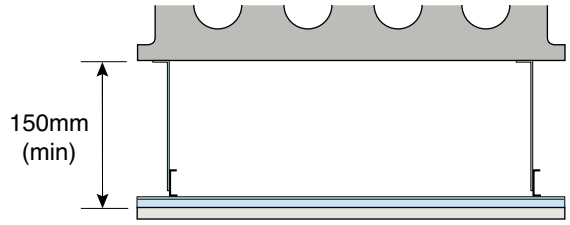
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- if resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void, as stated below for CT0 and CT1, downlighters or recessed lighting may be installed in the ceiling:

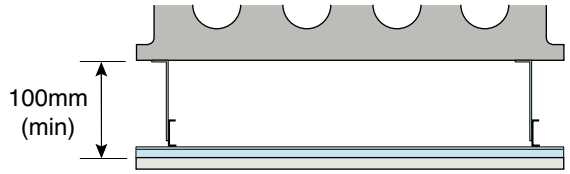
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

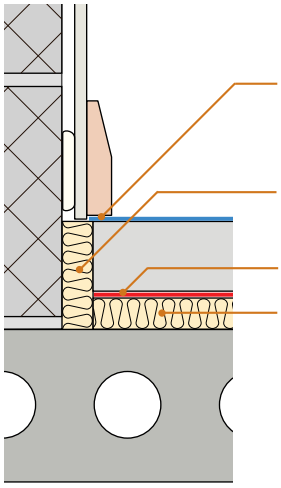
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 10 kg/m² gypsum-based board



CT1 – Metal ceiling system – 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 10 kg/m² gypsum-based board

4. Isolating layers installation, edge strip and bonded resilient floor cover



Bonded resilient floor cover installed between skirting and screed

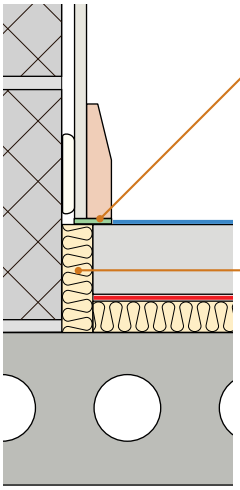
25mm (min) isolation edge strip

5mm isolating layer (1)

25mm isolating layer (2)

(Note: if required, it is permissible to have the 5mm polyethylene installed as the lower secondary isolating layer)

OPTION A



Bonded resilient floor may be installed up to skirting provided mastic sealant isolates skirting and wall lining from screed

25mm (min) isolation edge strip

OPTION B

Isolating layer (1)
- 5mm (min) foamed polyethylene

Isolating layer (2) and isolating edge strip
- 25mm (min) thick
- may be mineral wool batt (min 140 kg/m^3) or expanded (SD grade) or extruded polystyrene insulation board

(Note: joints for isolating layers 1 and 2 should be staggered)

Bonded resilient floor cover
- min 4.5mm thickness and must be bonded
- must be capable of supporting carpet and wood finishes in habitable rooms
- ***Laboratory testing performance must be undertaken directly on the resilient cover, and with a wood floor finish as outlined in Appendix G (minΔL_w 17 dB without timber board overlay; min rdΔL_w 17 dB with timber board overlay)***

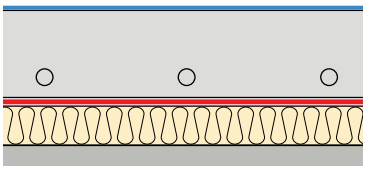
5. Underfloor heating systems within screeds

Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the isolating layers or bridge the screed to the slab. Isolating layers with preformed surface indent channels, for the heating elements, may be used provided the material meets the specification for Isolating layer (2) above.

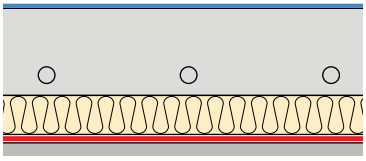
Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.

Note: If required it is permissible to have the 5mm layer installed as the lower secondary isolating layer (as shown in Option B).

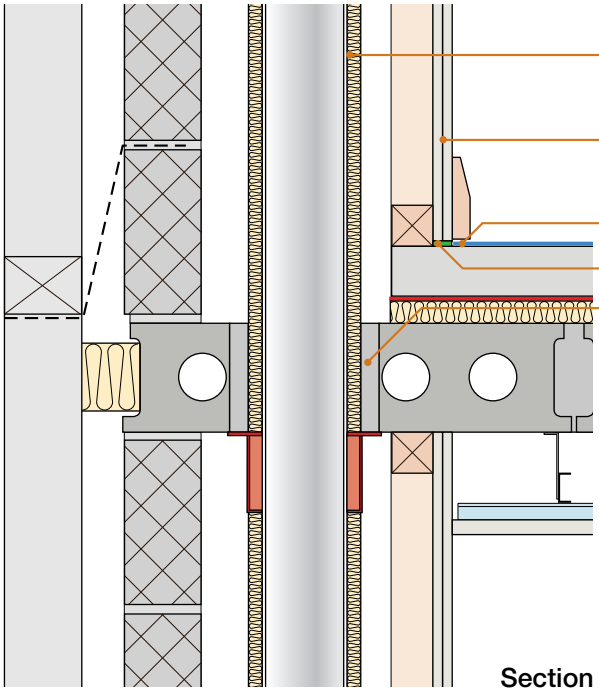
OPTION A



OPTION B

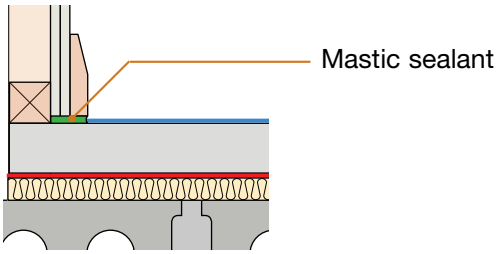


6. Services – Service pipes through separating floor



Sketch shows CT0 type ceiling treatment

Alternative detail



CHECKLIST (to be completed by site manager /supervisor)

Company:

Site:

Plot: Site manager/supervisor:

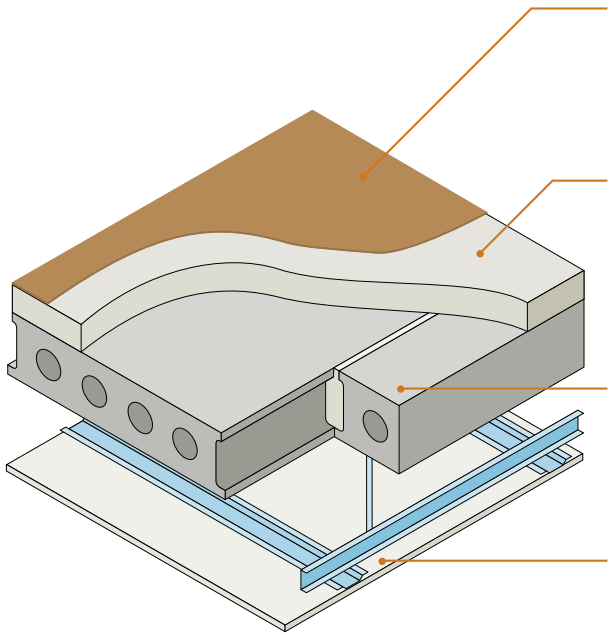
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (min)?			
2.	Are joints between precast concrete planks grouted and sealed?			
3.	Are precast concrete planks built into the masonry walls?			
4.	Has the 25mm edge strip been installed for all room perimeters?			
5.	Are both isolating layers each fully covering the floor slab?			
6.	Is the resilient floor cover fully covering, and fully bonded to the screed?			
7.	Are the skirting boards isolated from the screed by the resilient floor cover or flexible sealant?			
8.	Are all ceiling board joints sealed with tape or caulked with sealant?			
9.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
10.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

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

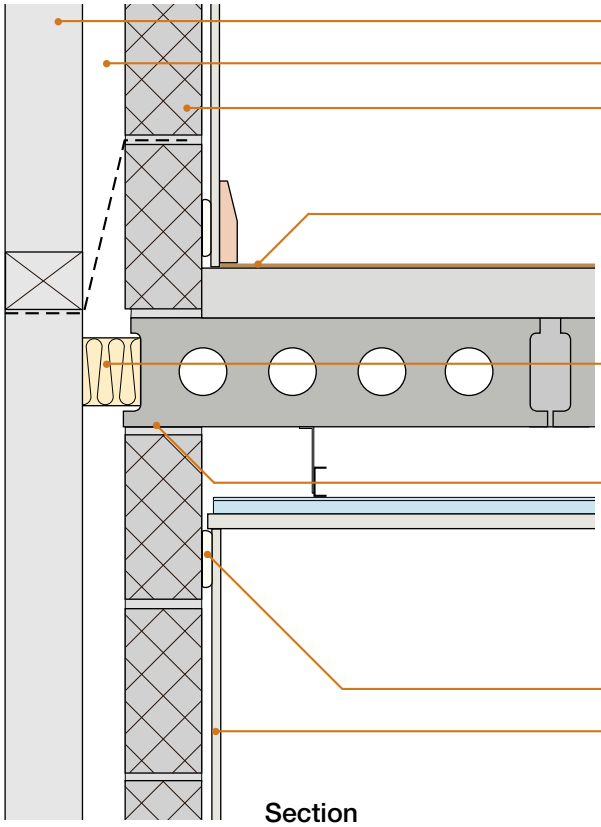


Floor covering	3mm Thermal Economics IsoRubber Top or IsoRubber FR (bonded with IsoBond adhesive)
Screed	65mm (min) sand cement screed, or 40mm proprietary screed, 80 kg/m^2 (min) mass per unit area
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m^2 (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor plank depth

DO

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

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

Concrete planks must be built into walls:

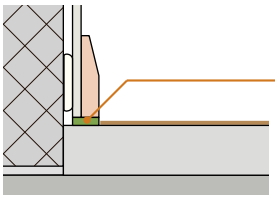
- wall must not be continuous between storeys
- planks must not abut separating wall
- all voids between planks and blockwork filled with mortar or flexible sealant

Continuous ribbon of adhesive

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

Section

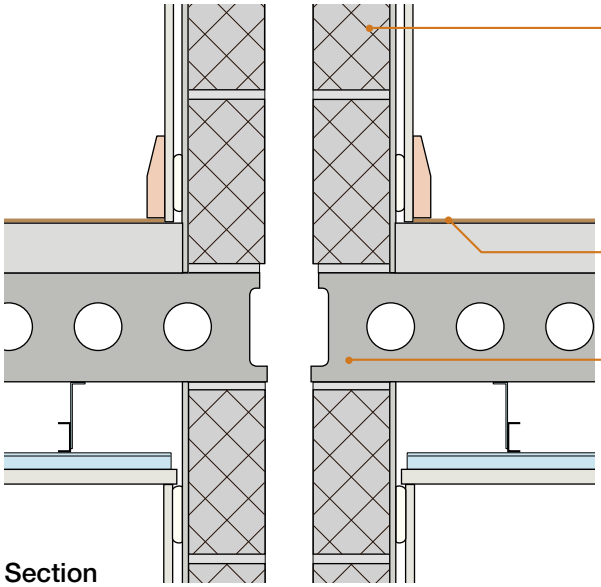
Sketch shows CT0 type ceiling treatment



Mastic sealant

Alternative detail

2. Separating wall junction



Separating wall:

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

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

Concrete planks to be built into wall:

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

Section

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-9

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

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

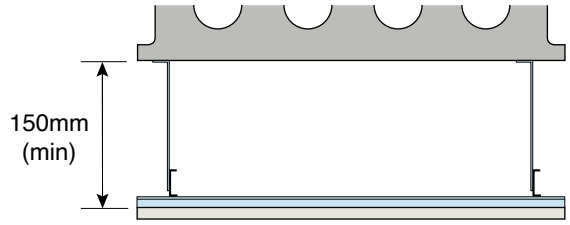
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- if resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void, as stated below for CT0 and CT1, downlighters or recessed lighting may be installed in the ceiling:

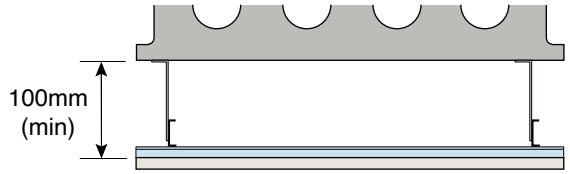
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT1 – Metal ceiling system – 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

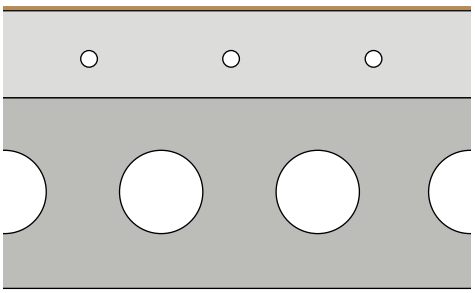
4. Underfloor heating systems within screeds

Underfloor heating systems may be installed within the screed.

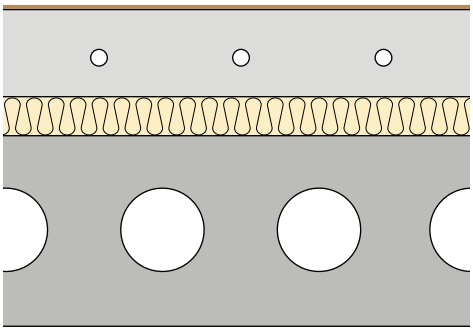
Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.

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

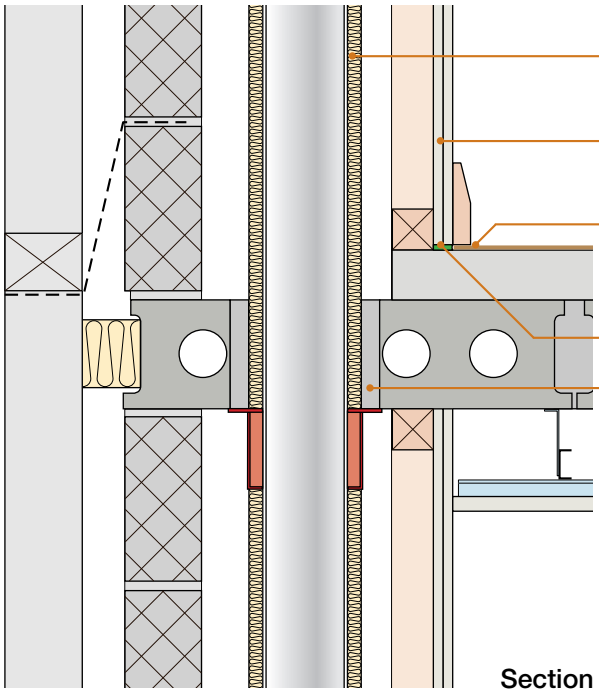
OPTION A



OPTION B



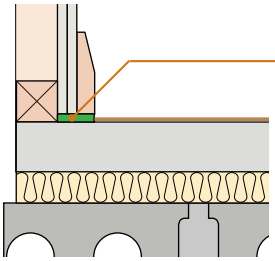
5. Services – Service pipes through separating floor



Section

- 25mm (min) mineral wool quilt (min 10kg/m³) around pipe
- Pipe boxed in with two layers gypsum-based board, each layer nominal 8 kg/m²
- 3mm IsoRubber Top or IsoRubber FR installed over whole floor area and between skirting and screed
- Remaining gap may be sealed with mastic
- All voids around pipe sealed

Alternative detail



- Mastic sealant

Sketch shows CT0 type ceiling treatment

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See overleaf for checklist

CHECKLIST (to be completed by site manager /supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m² (min)?			
2.	Are joints between precast concrete planks grouted and sealed?			
3.	Are precast concrete planks built into the masonry walls?			
4.	Is IsoBond adhesive being used?			
5.	Is the IsoRubber Top or IsoRubber FR fully covering and fully bonded to the screed?			
6.	Are the skirting boards isolated from the screed by the resilient floor cover or flexible sealant?			
7.	Is the correct ceiling type being used for precast concrete plank thickness?			
8.	Are all ceiling board joints sealed with tape or caulked with sealant?			
9.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
10.	Is separating floor satisfactorily complete?			

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

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

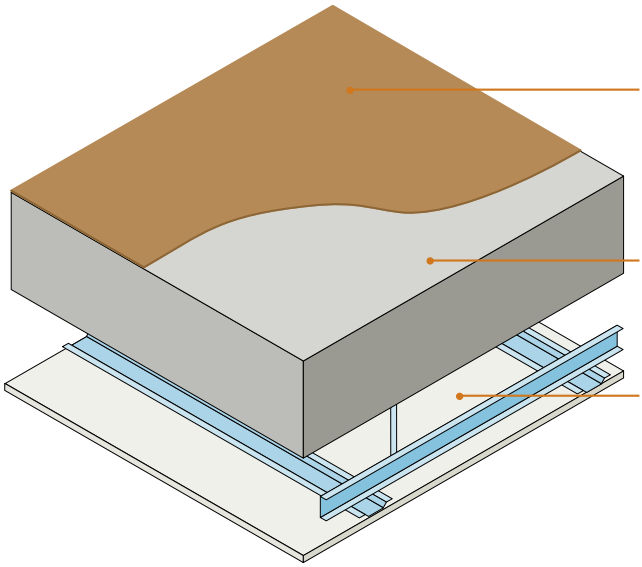
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-10

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



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

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

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

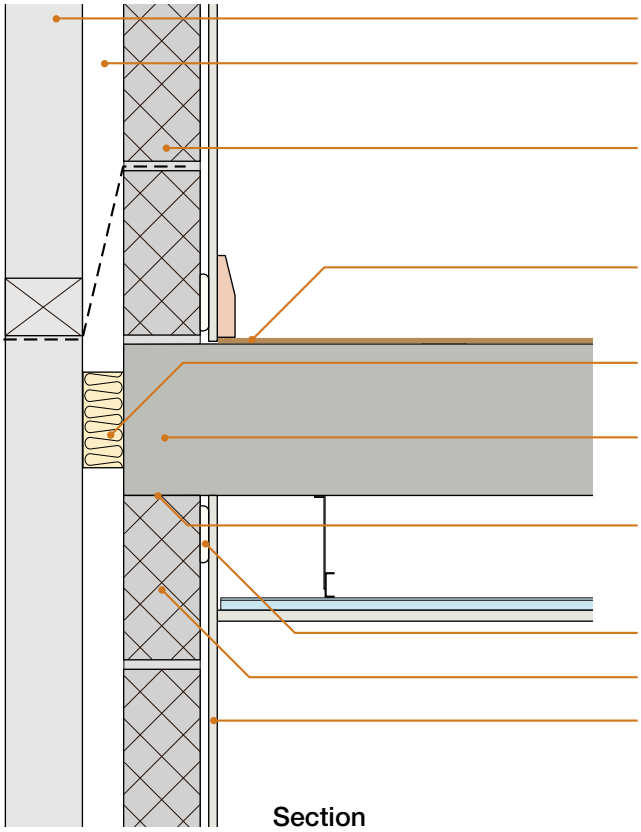
- glazing units should not be continuous between storeys
- mullion or transom supports/framing should not be continuous between dwellings
- Refer to Appendix A

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

DO

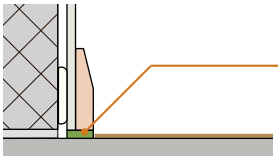
- Ensure floor slab density is 2400 kg/m³ (min)
- Fill all voids between walls and floor
- Ensure IsoRubber Top or IsoRubber FR is fully bonded to slab with IsoBond adhesive
- Ensure IsoRubber Top or IsoRubber FR fully covers floor surface
- Make sure there is a ceiling void of 150mm (min) and ceiling treatment is installed in accordance with the manufacturer's instructions (where applicable)
- Ensure that floor slab breaks the vertical continuity of flanking walls
- Ensure that concrete does not enter the cavity and bridge the two leaves of supporting wall blockwork – it is acceptable to use proprietary cavity stops to provide a shutter
- Refer to Appendix A

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



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

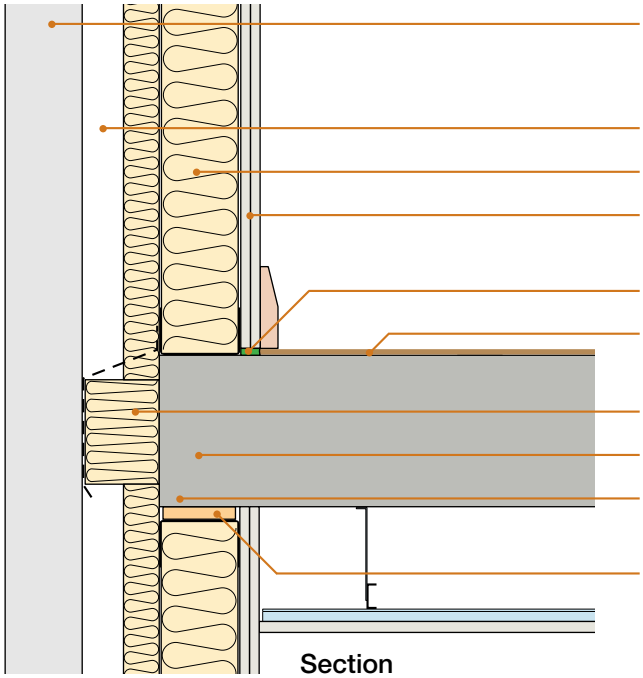
Section



Mastic sealant

Alternative detail

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

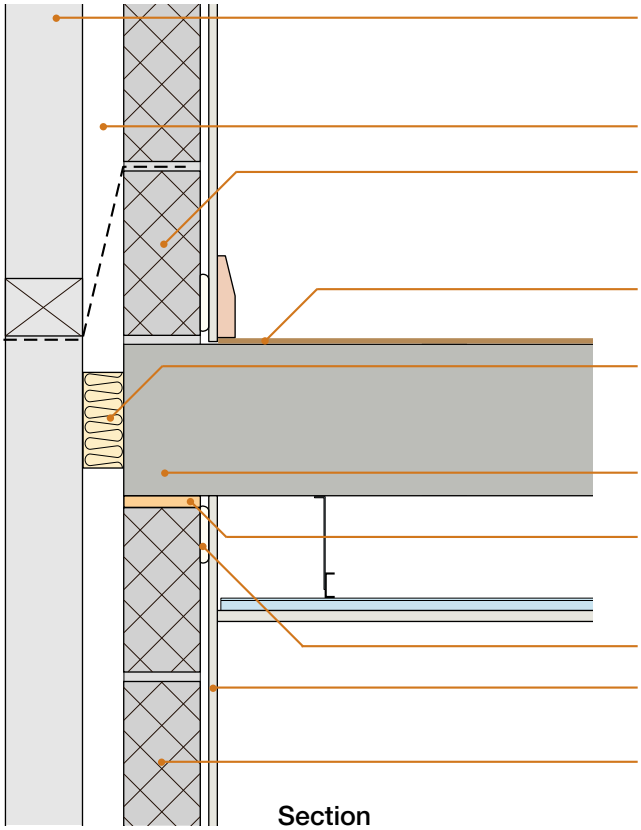


Outer leaf may be:
- masonry, or
- precast panels

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

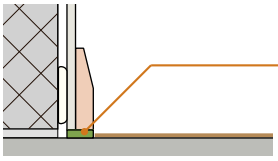
Section

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



Section

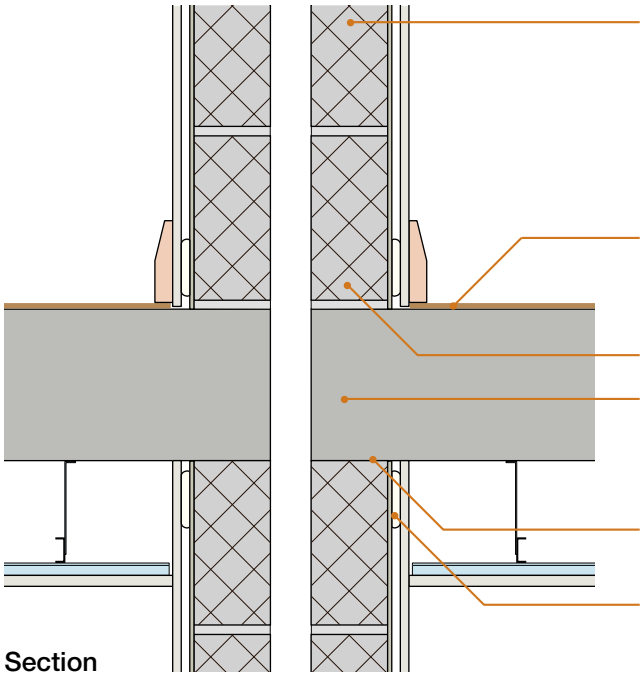
- Outer leaf may be:
  - masonry, or
  - precast panels
- External wall cavity (min 50mm)
- Inner leaf 100mm (min) concrete block (1350 to 1600 kg/m³) or (1850 - 2300 kg/m³)
- 3mm IsoRubber Top or IsoRubber FR installed over whole floor area
- Close cavity with a flexible cavity stop unless it is fully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



Alternative detail

- Mastic sealant

4. Separating wall junction – loadbearing masonry construction



Section

- Separating wall:
  - if using robustdetails® for wall – refer to Table 3a in Introduction to select an appropriate robustdetails® separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- 3mm IsoRubber Top or IsoRubber FR installed over whole floor area
- Wall must not be continuous between dwellings
- Slab must not abut separating wall
- All voids between slabs and blockwork filled with mortar or flexible sealant
- Continuous horizontal ribbon of adhesive

5. Ceiling treatment for E-FC-10

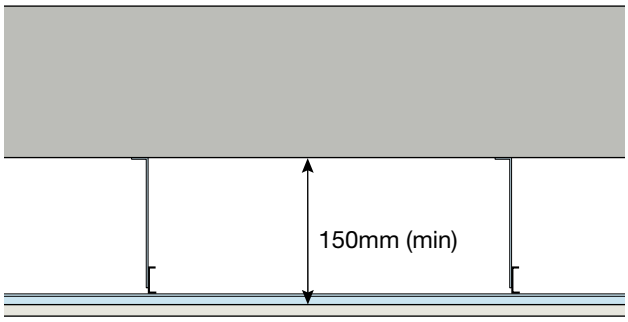
Ceiling treatment must be installed in accordance with the manufacturer's instructions.

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

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

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

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



Downlighters and recessed lighting

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

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

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

Any ceiling system – 150mm void

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

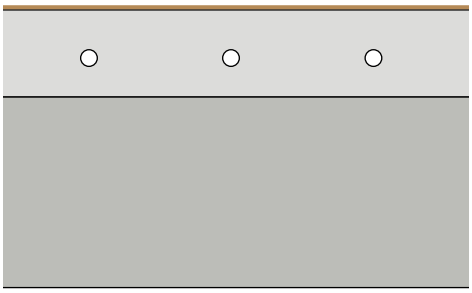
6. Underfloor heating systems within screeds

Underfloor heating systems may be installed within the screed.

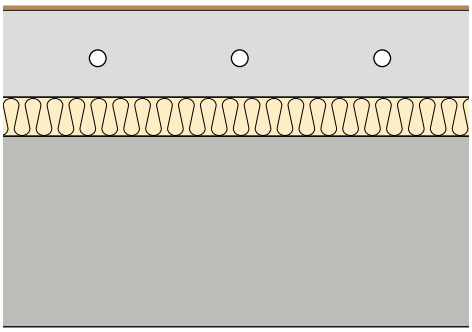
Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.

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

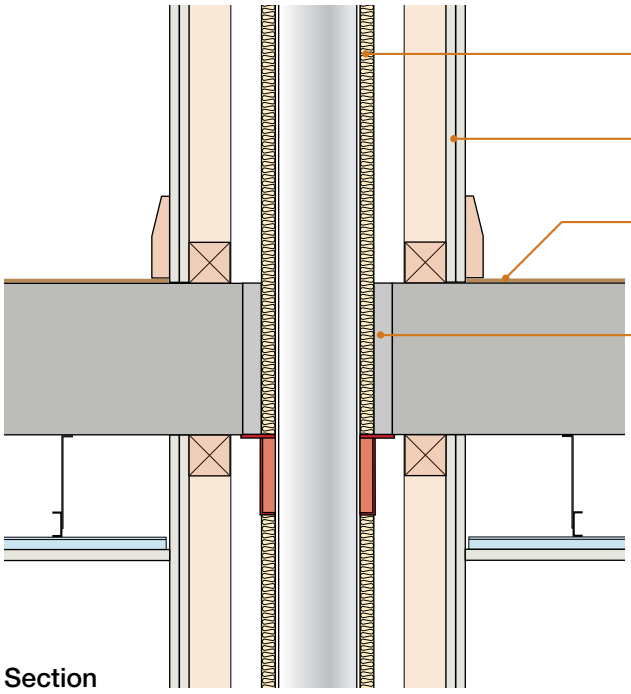
OPTION A



OPTION B



7. Services – Service pipes through separating floor



Section

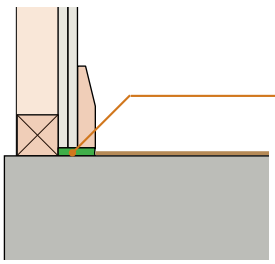
25mm (min) mineral wool quilt (min 10kg/m^3) around pipe

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

3mm IsoRubber Top or IsoRubber FR installed over whole floor area

All voids around pipe sealed

Alternative detail



Mastic sealant

CHECKLIST (to be completed by site manager /supervisor)

Company:

Site:

Plot: Site manager/supervisor:

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

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

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

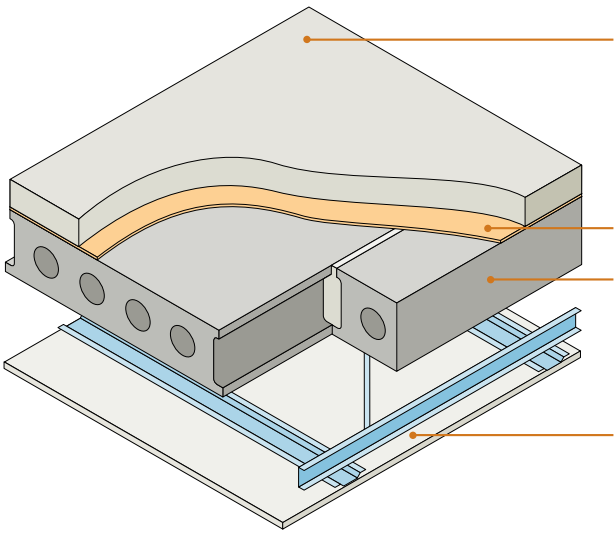
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-11

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



Sketch shows CT0 type ceiling treatment

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

SYSTEM INSTALLATION

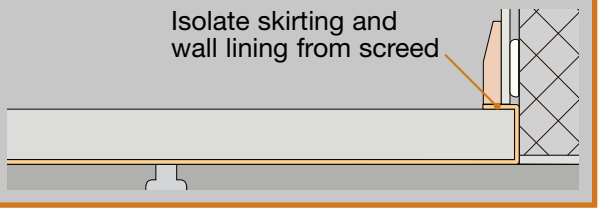
The use of this screed resilient layer system **must** incorporate the following:

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

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

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

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

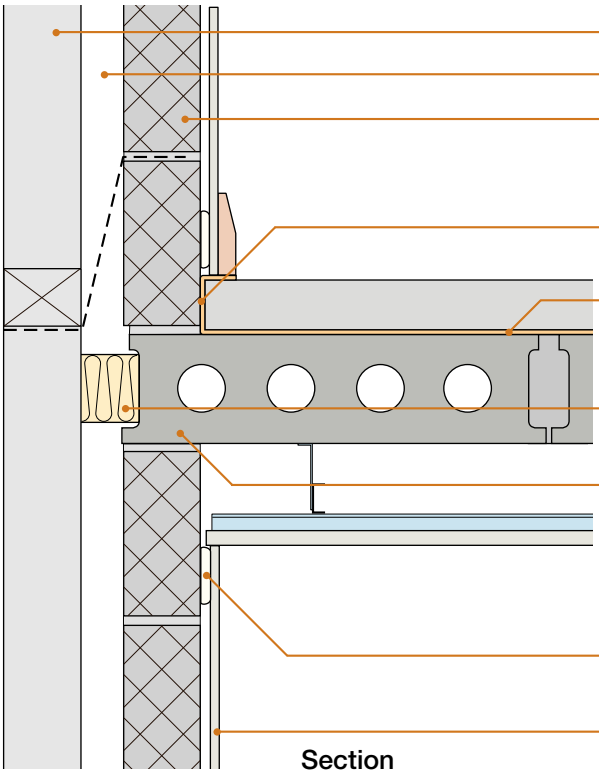


DO

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

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

1. External (flanking) wall junction

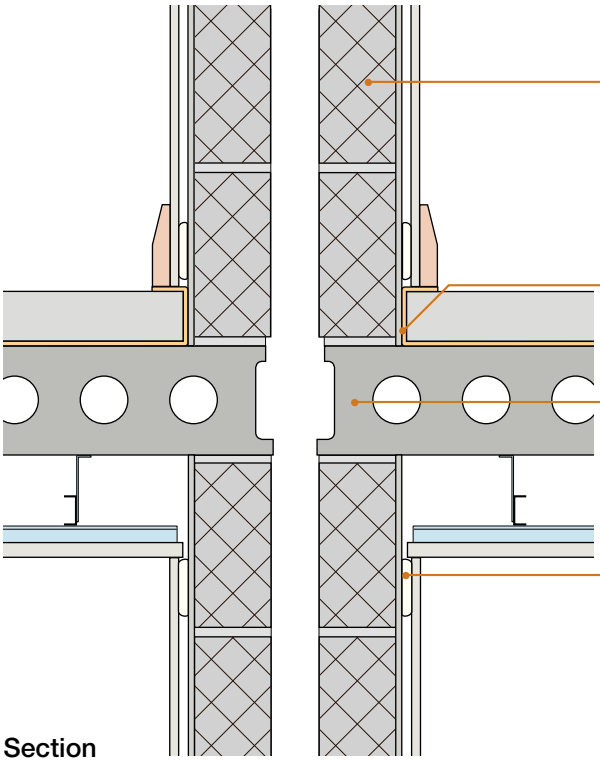


Section

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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

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

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-11

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

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

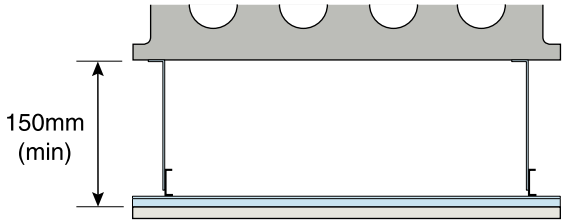
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0, CT1 or CT2, downlighters or recessed lighting may be installed in the ceiling:

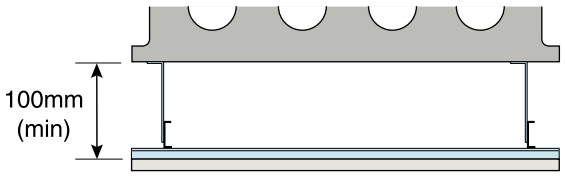
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

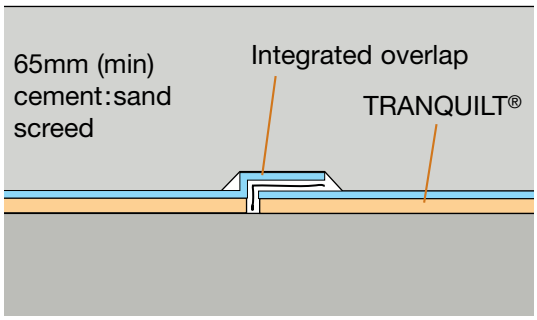
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

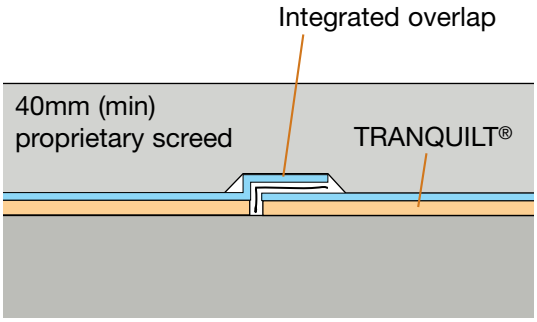


CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

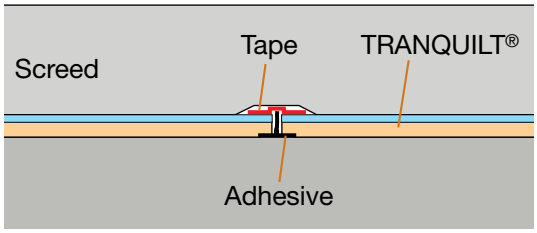
- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

4. Resilient layer installation for different screed types





- Affix TRANQUILT® perimeter with Monarfloor Acoustic Adhesive
- Seal integrated overlap with Monarfloor Acoustic Adhesive



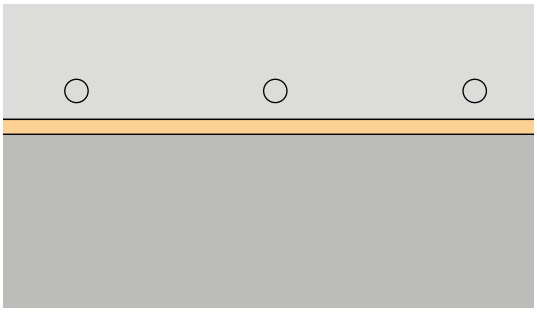
- Use Monarfloor Acoustic Adhesive to seal butt joints (where integrated overlap is not present)

5. Underfloor heating systems within screeds

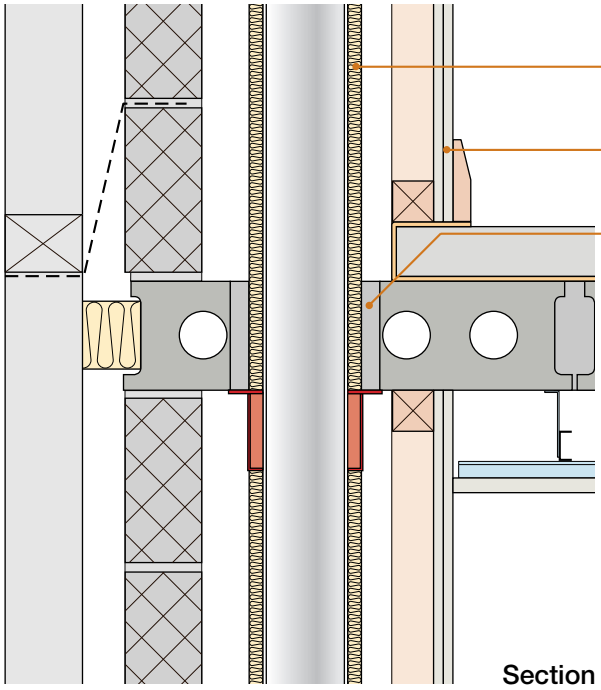
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the TRANQUILT®.

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



6. Services – Service pipes through separating floor



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

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

All voids around pipe sealed

Section

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 Icopal-MONARFLOOR®			
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 10mm TRANQUILT® covering the whole floor slab?			
7.	Is the TRANQUILT® taken 150mm up the wall?			
8.	Are the integrated overlaps sealed with Monarfloor Acoustic Adhesive?			
9.	Are the skirting boards and wall linings isolated from the screed by the TRANQUILT®?			
10.	Has the installation been signed off by Icopal-MONARFLOOR® prior to pouring the screed?			
11.	Are all ceiling board joints sealed with tape or caulked with sealant?			
12.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
13.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Icopal-MONARFLOOR® TRANQUILT®, manufacturer of TRANQUILT® resilient layer system:

Telephone: 0161 866 6540 **Fax:** 0161 866 6527 **E-mail:** acoustics.uk@icopal.com

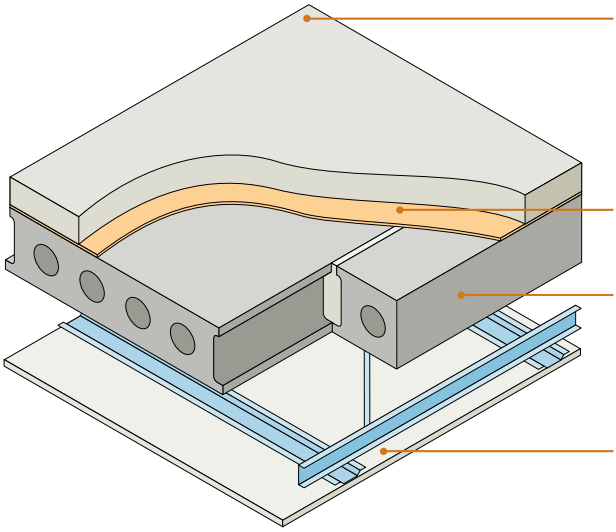
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-12

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



Sketch shows CT1 type ceiling treatment

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

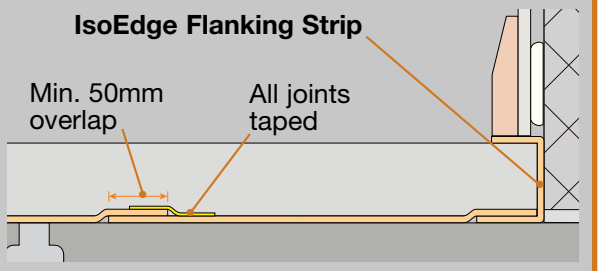
SYSTEM INSTALLATION

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

1) **3mm Isorubber HP3** (resilient layer to be laid over entire floor area with minimum 50mm overlaps)

2) **IsoEdge** flanking strip

3) All joints taped



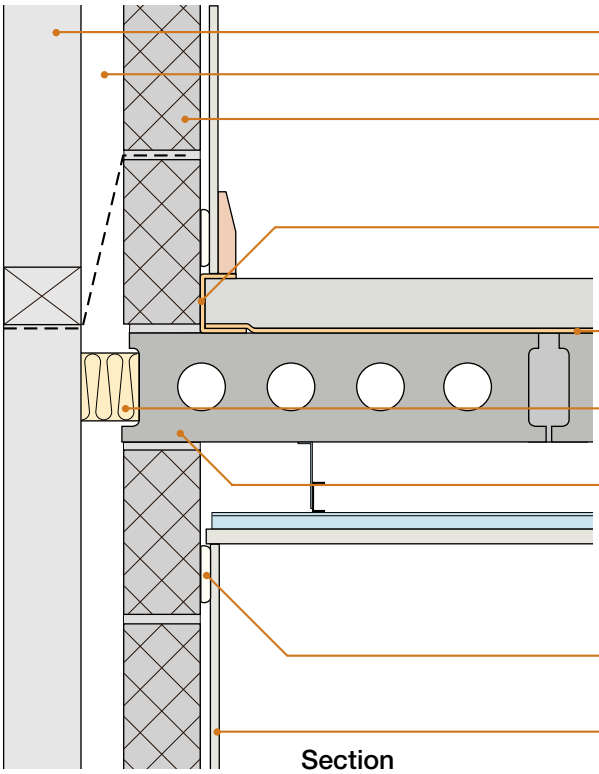
- **IsoEdge** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

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

DO

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

1. External (flanking) wall junction

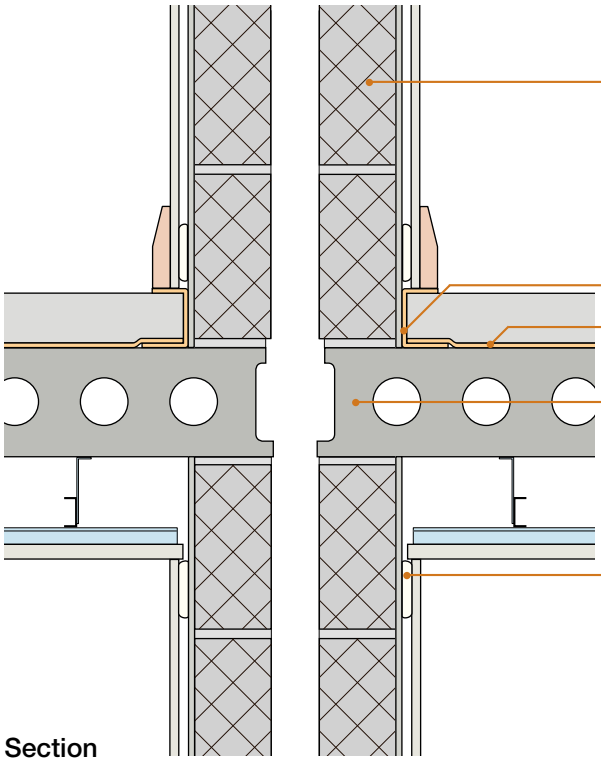


Section

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

Sketch shows CT1 type ceiling treatment

2. Separating wall junction



Section

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

Sketch shows CT1 type ceiling treatment

3. Ceiling treatments for E-FC-12

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

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

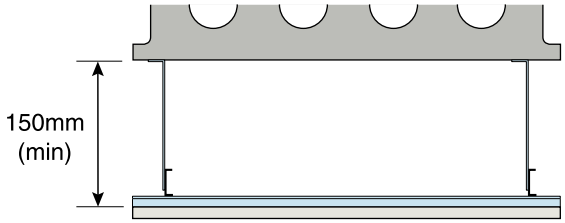
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0, CT1 or CT2, downlighters or recessed lighting may be installed in the ceiling:

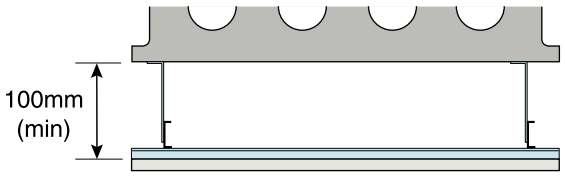
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



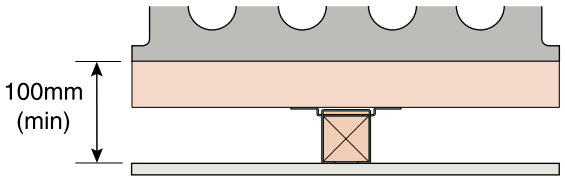
CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

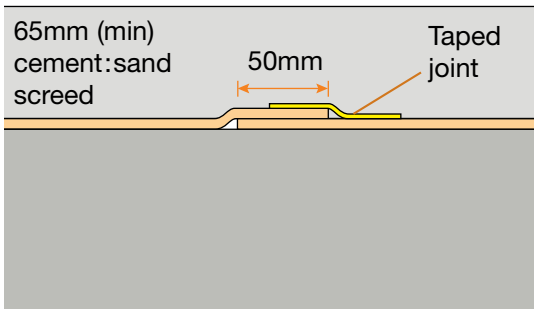
- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT2 – Timber battens and counterbattens with IsoSonic Hangers Type C. Only to be used for 200mm (min) depth concrete planks

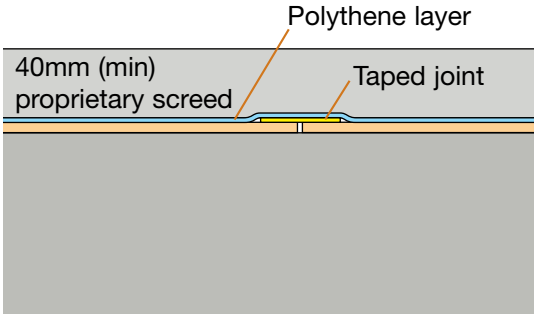
- 50x50mm softwood battens
- 50x50mm counterbattens
- Isosonic Hangers Type C
- one layer of nominal 8 kg/m² gypsum-based board

4. Resilient layer installation for different screed types



SCREED TYPE
65mm (min) cement:sand screed

- Isorubber joints to be overlapped by 50mm (min)
- Upper Isorubber edge joints to be sealed by tape



SCREED TYPE
40mm (min) proprietary screed

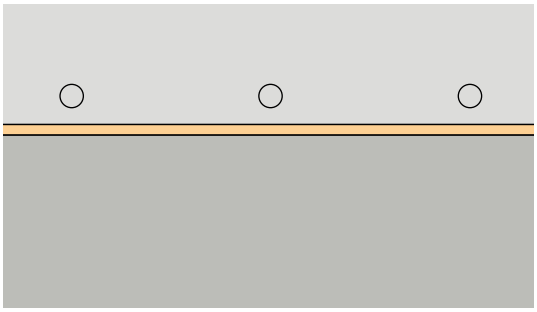
- Isorubber joints to be butt jointed
- Isorubber joints to be sealed by tape
- Polythene layer to be laid over whole floor overlapping joints

5. Underfloor heating systems within screeds

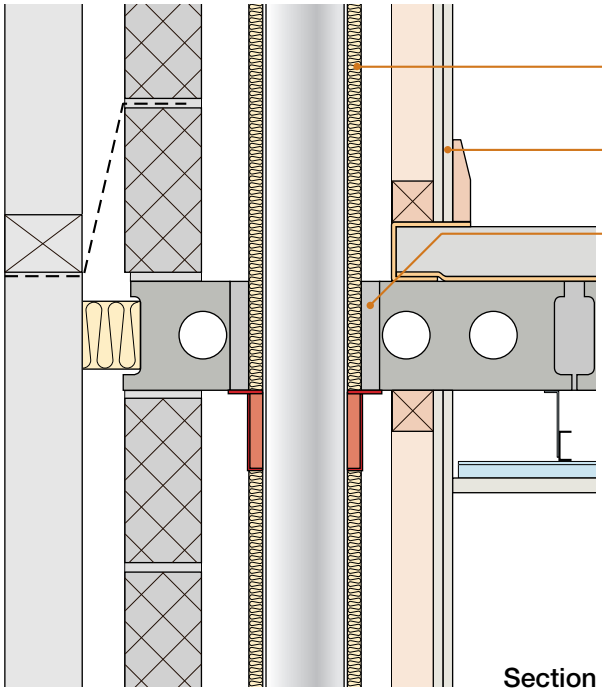
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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

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



6. Services – Service pipes through separating floor



Sketch shows CT1 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 Thermal Economics?			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (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 IsoEdge flanking strip installed for all room perimeters?			
7.	Are the Isorubber joints overlapped by 50mm and sealed with tape?			
8.	Is the Isorubber layer overlapping the IsoEdge flanking strip?			
9.	Are the skirting boards isolated from the screed by the IsoEdge flanking strip?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Thermal Economics, manufacturer of Isorubber resilient layer system:

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

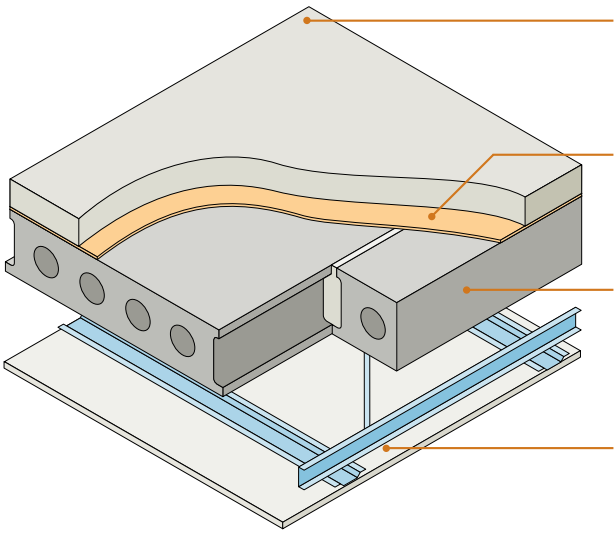
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-13

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



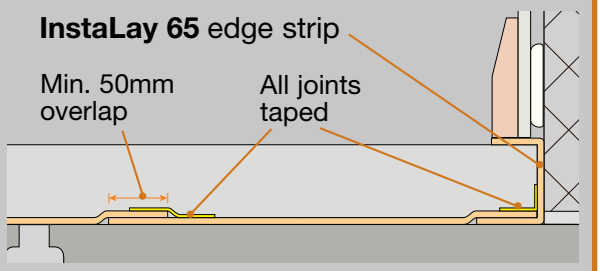
Sketch shows CT0 type ceiling treatment

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

SYSTEM INSTALLATION

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

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



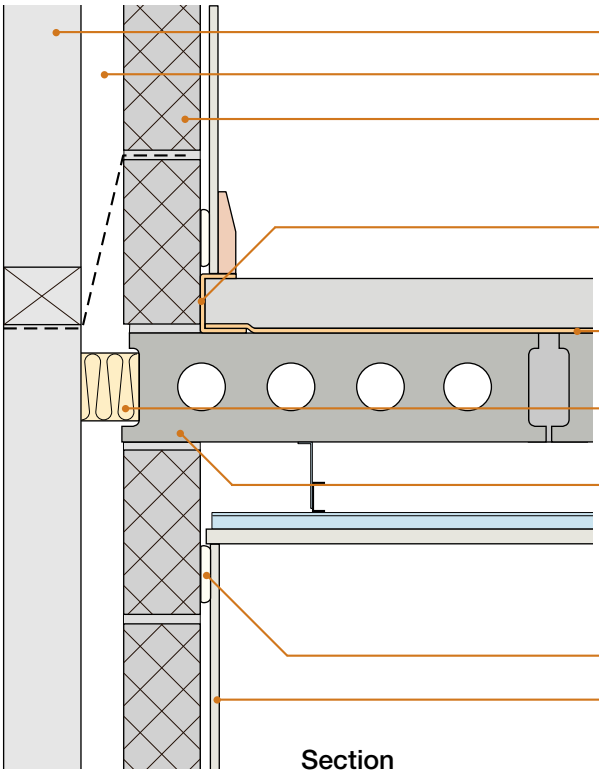
- **InstaLay 65** edge strip to be installed at all room perimeters. See manufacturer's guidance.

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

DO

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

1. External (flanking) wall junction

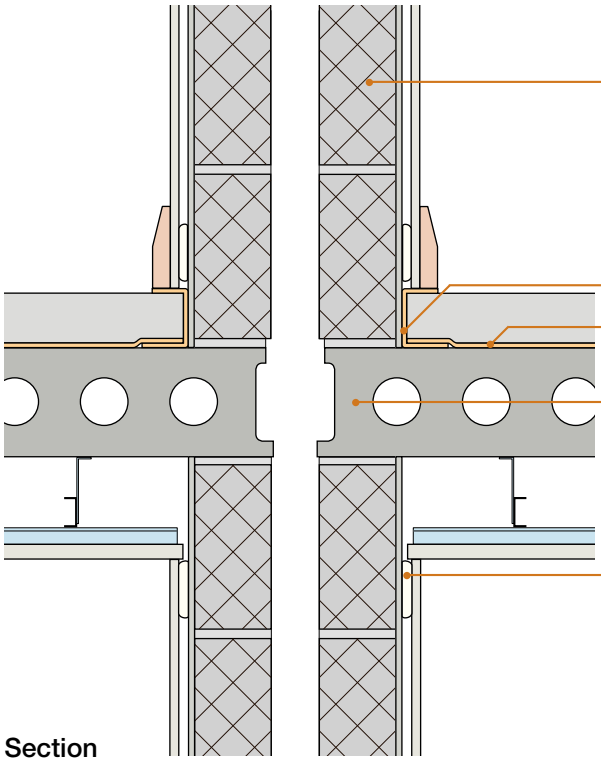


Section

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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

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

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-13

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

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

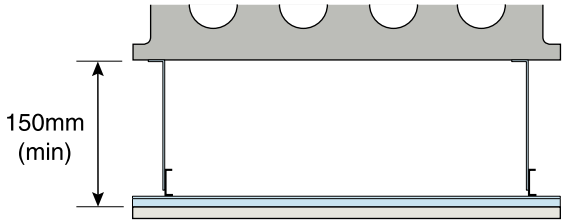
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0 or CT1, downlighters or recessed lighting may be installed in the ceiling:

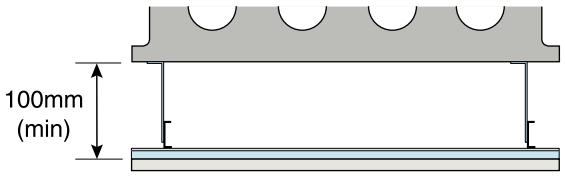
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

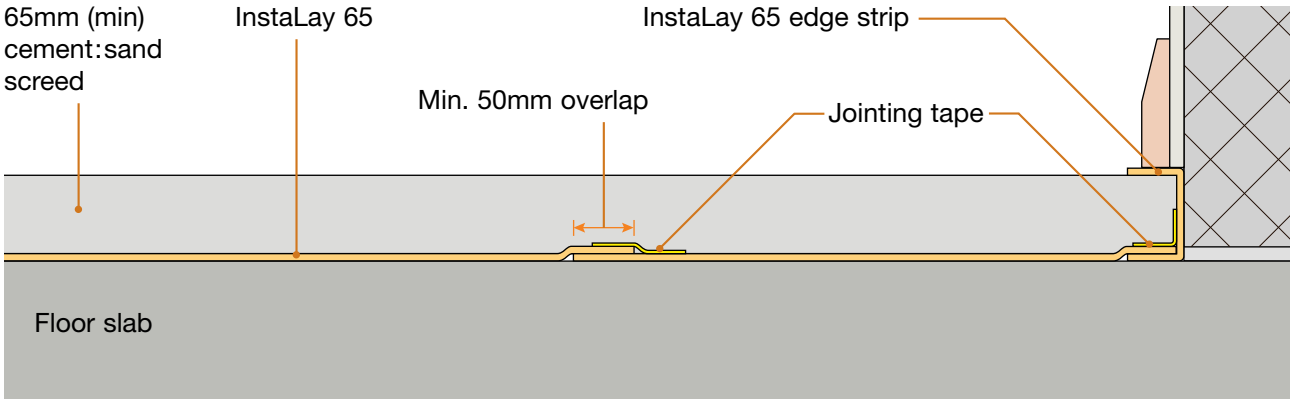
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

4. Resilient layer installation



SCREED TYPE
65mm (min) cement:sand screed

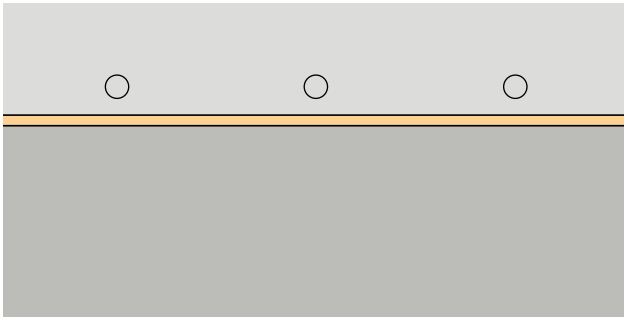
- InstaLay 65 resilient layer must have 50mm (min) overlapped joints and be sealed with jointing tape
- InstaLay 65 edge strip must be overlapped by InstaLay 65 resilient layer with joints sealed with jointing tape to isolate screed from perimeter walls and skirtings
- InstaLay 65 edge strip to be installed at all perimeter walls (including door openings, wall recesses) and service pipes. See manufacturer's guidance

5. Underfloor heating systems within screeds

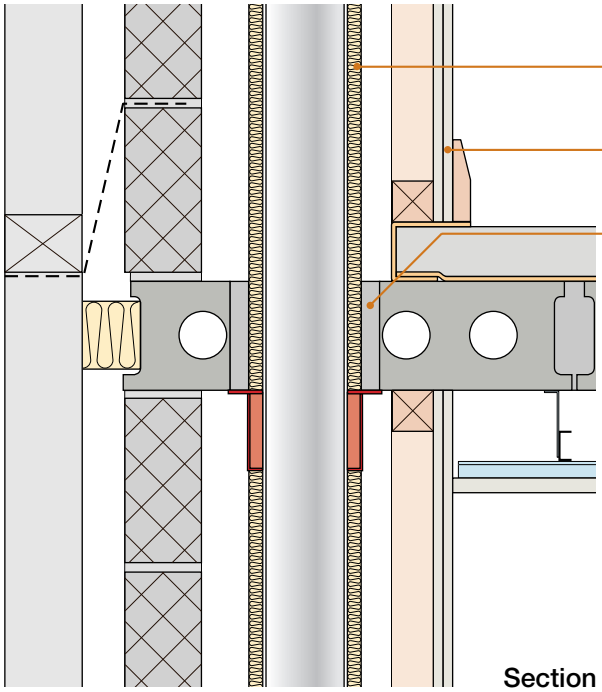
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the InstaLay 65.

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



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 InstaCoustics?			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (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 InstaLay 65 edge strip installed for all room perimeters?			
7.	Are the InstaLay 65 joints overlapped by 50mm and sealed with tape?			
8.	Is the InstaLay 65 layer overlapping the InstaLay 65 edge strip?			
9.	Are the skirting boards isolated from the screed by the InstaLay 65 edge strip?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from InstaCoustics, manufacturer of InstaLay 65 resilient layer system:

Telephone: 0118 973 9560 **Fax:** 0118 973 9547 **E-mail:** sales@instacoustic.co.uk

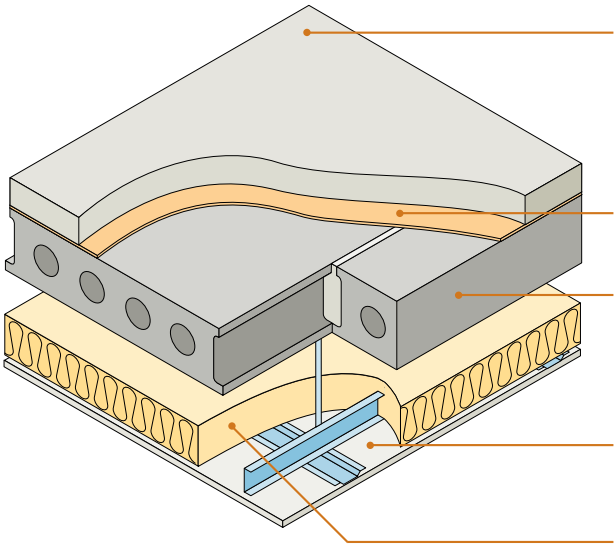
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-14

Precast concrete plank ■
Screed laid on Thermal Economics 6mm Isorubber Base layer ■



Sketch shows CT0 type ceiling treatment

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

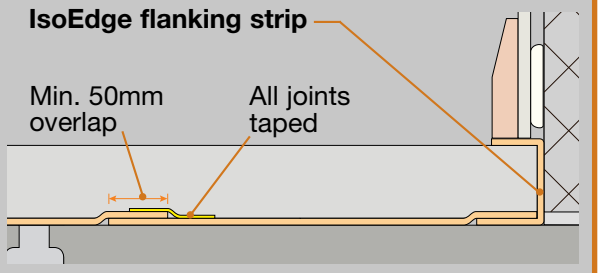
SYSTEM INSTALLATION

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

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

2) **IsoEdge** flanking strip

3) All joints taped



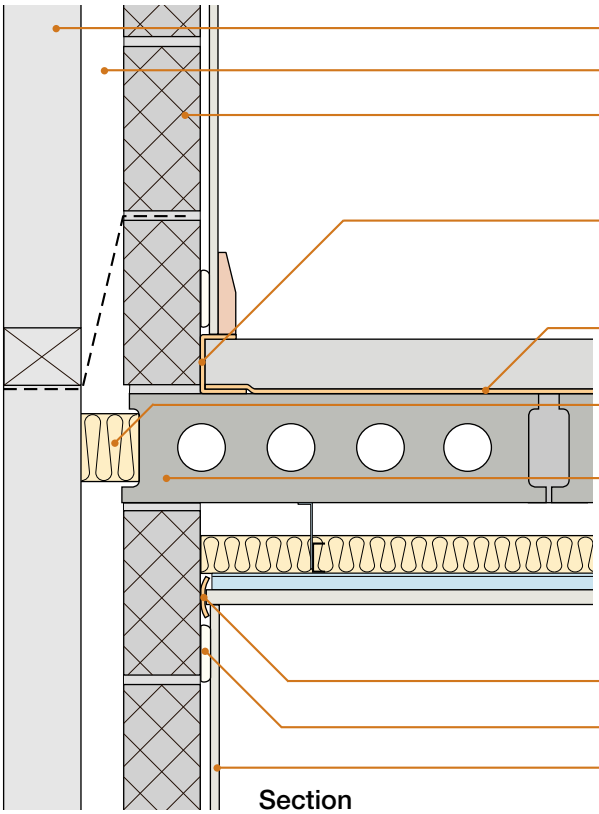
- **IsoEdge** flanking strip to be installed at all room perimeters. See manufacturer's guidance.
- See Section 4 for acceptable installation alternatives for 40mm proprietary screeds

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

DO

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

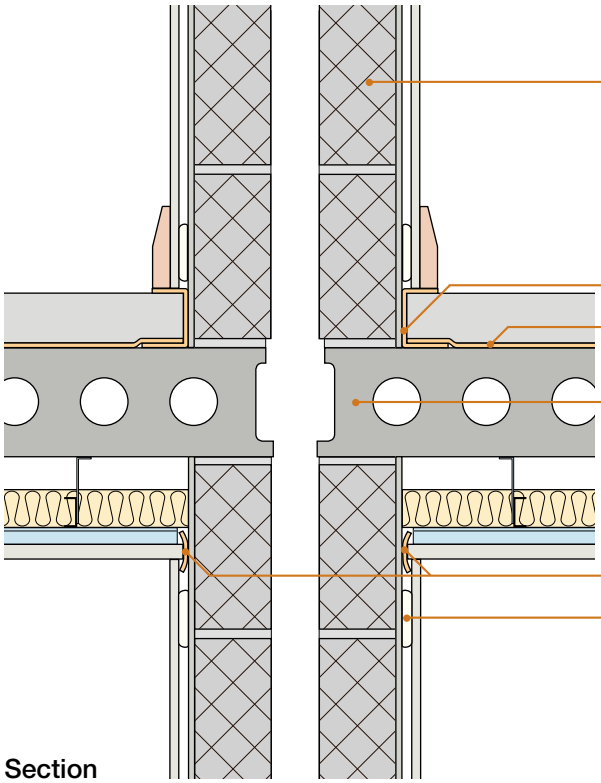
1. External (flanking) wall junction



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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



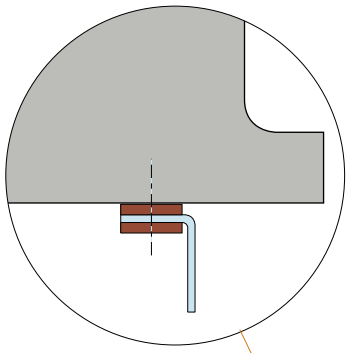
- Separating wall:
  - if using robustdetails® for wall - refer to Table 3a in introduction to select an appropriate Robust Detail separating wall
  - if using wall requiring pre-completion testing – seek specialist advice
- IsoEdge flanking strip
- Isorubber layer to overlap IsoEdge flanking strip
-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

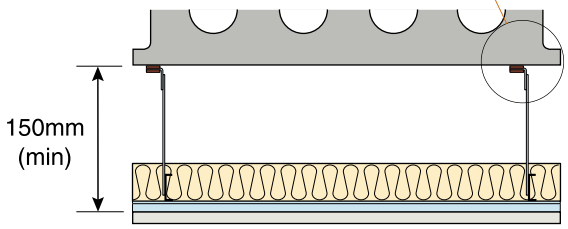
Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-14

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

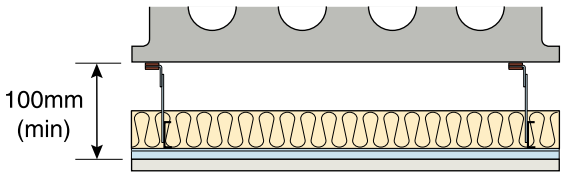
Ensure Isosonic cleats are fitted with the pads against the concrete planks





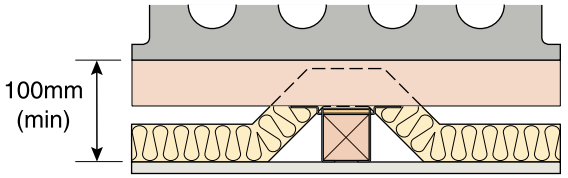
CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling frame, suspended from Isosonic cleats
- 50mm (min) mineral wool quilt insulation 10 kg/m³ (min)
- one layer 15mm (nominal 10 kg/m²) gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling frame, suspended from Isosonic cleats
- 50mm (min) mineral wool quilt insulation 10 kg/m³ (min)
- one layer 15mm (nominal 10 kg/m²) gypsum-based board



CT2 – Timber battens and counterbattens with IsoSonic Hangers Type C. Only to be used for 200mm (min) depth concrete planks

- 50 x 50mm softwood battens
- 50x50mm counterbattens
- Isosonic Hangers Type C
- 50mm (min) mineral wool quilt insulation 10 kg/m³ (min)
- one layer 15mm (nominal 10 kg/m²) gypsum-based board

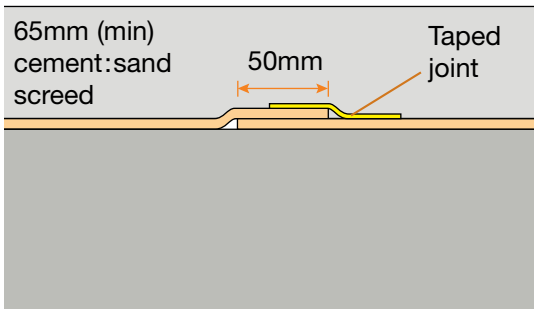
Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0, CT1 or CT2, downlighters or recessed lighting may be installed in the ceiling:

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

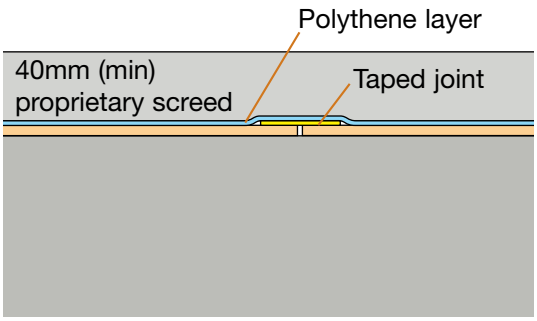
Particular attention should also be paid to Building Regulations Part B - Fire Safety

4. Resilient layer installation for different screed types



SCREED TYPE
65mm (min) cement:sand screed

- Isorubber layer joints to be overlapped by 50mm (min)
- Upper Isorubber layer edge joints to be sealed by tape



SCREED TYPE
40mm (min) proprietary screed

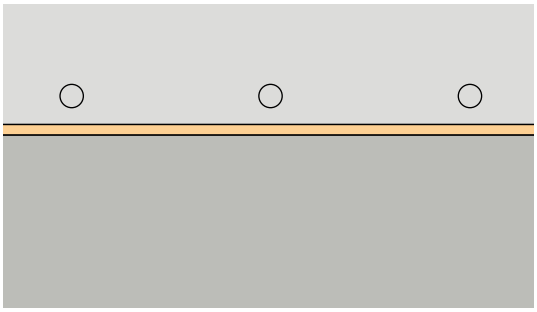
- Isorubber layer joints to be butt jointed
- Isorubber layer joints to be sealed by tape
- Polythene layer to be laid over whole floor overlapping joints

5. Underfloor heating systems within screeds

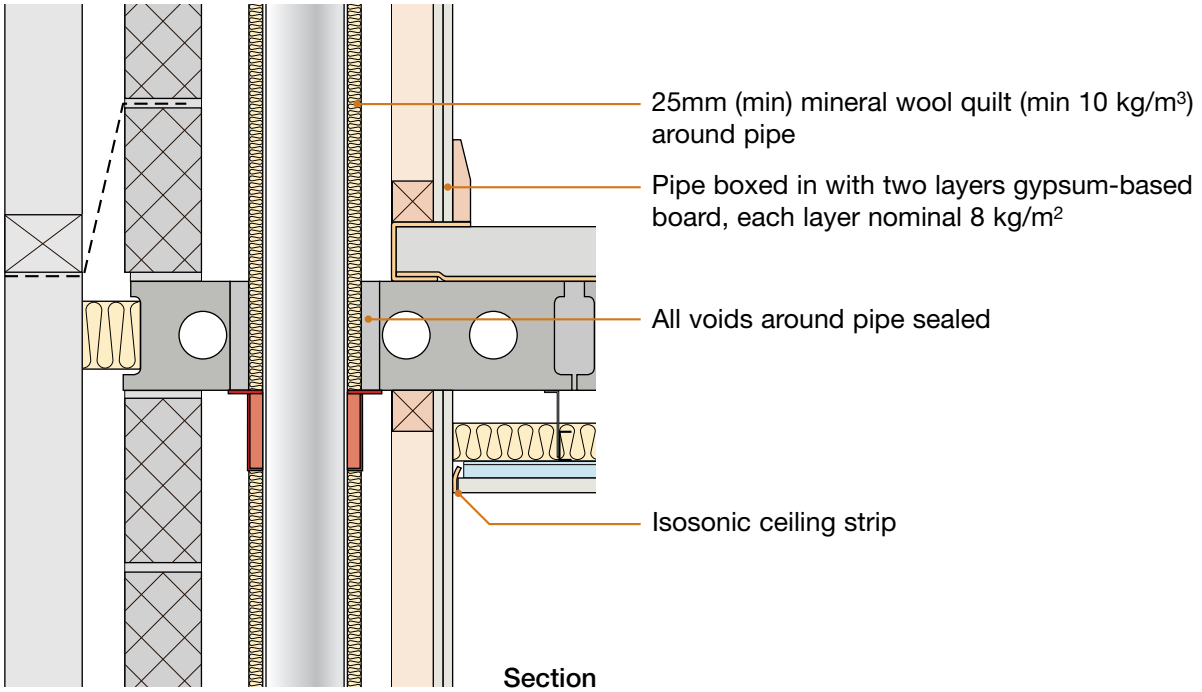
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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

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



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 Thermal Economics?			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (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 IsoEdge flanking strip installed for all room perimeters?			
7.	Are the Isorubber layer joints overlapped by 50mm and sealed with tape?			
8.	Is the Isorubber layer overlapping the IsoEdge flanking strip?			
9.	Are the skirting boards isolated from the screed by the IsoEdge flanking strip?			
10.	Are the Isosonic cleats installed with the pads against the precast planks?			
11.	Is Isosonic ceiling strip installed at ceiling perimeters?			
12.	Is 50mm (min) mineral wool quilt insulation 10 kg/m^3 (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/m^2 gypsum-based board?			
15.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Thermal Economics, manufacturer of Isorubber resilient layer system:

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

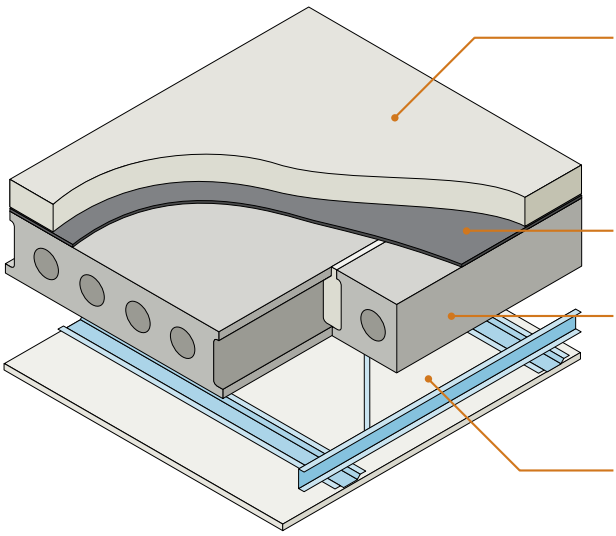
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-15

Precast concrete plank ■
Screed laid on Regupol Quietlay or Tekfloor TekRubber resilient layer ■



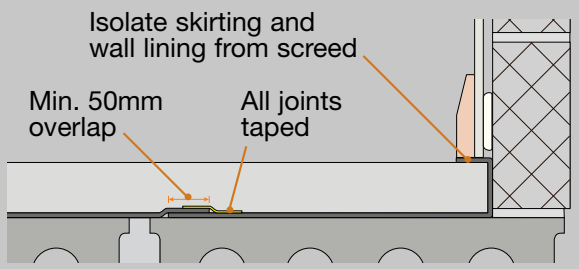
Sketch shows CT0 type ceiling treatment

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

SYSTEM INSTALLATION

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

1) **Regupol Quietlay** or **Tekfloor TekRubber** (resilient layer to be laid over entire floor area)
2) **Regupol Quietlay** or **Tekfloor TekRubber** to be laid with min 100mm upstand at wall (to allow for isolation under wall lining and skirting after screed is poured)
3) All joints taped with Regupol Tape or Tekfloor Tape only

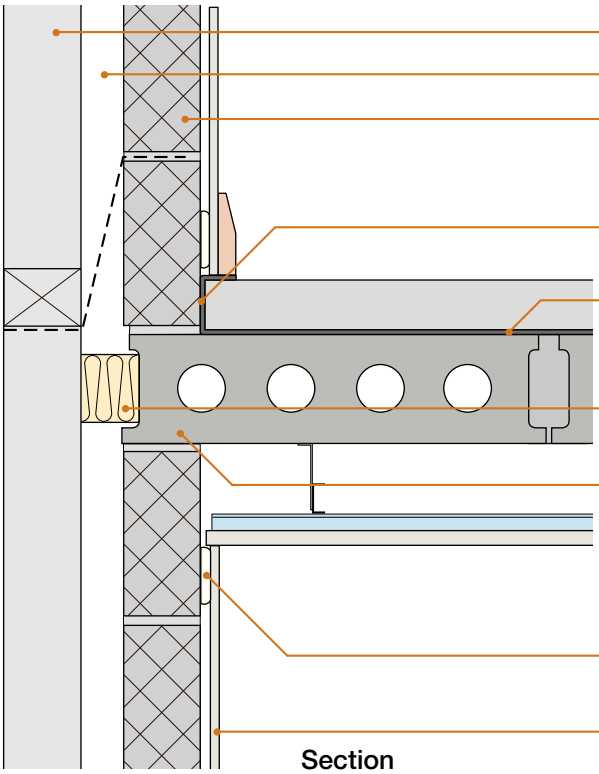


DO

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

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

1. External (flanking) wall junction

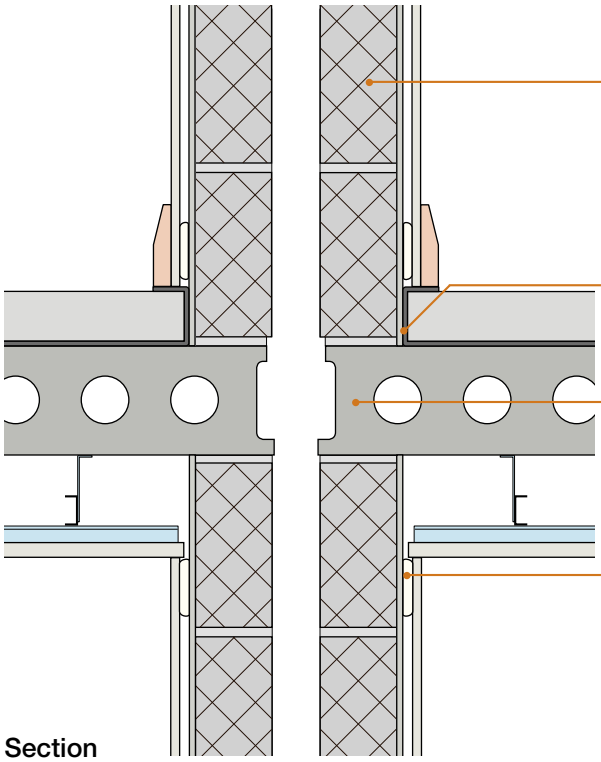


Section

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

Sketch shows CT0 type ceiling treatment

2. Separating wall junction



Section

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

Sketch shows CT0 type ceiling treatment

3. Ceiling treatments for E-FC-15

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

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

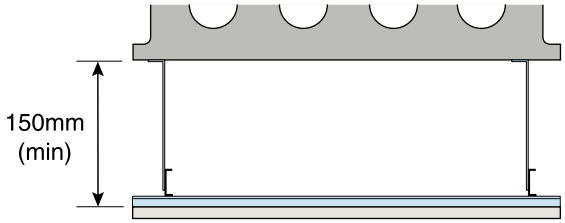
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0 or CT1, downlighters or recessed lighting may be installed in the ceiling:

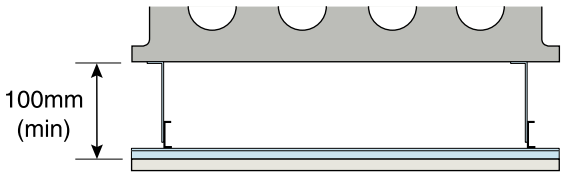
- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

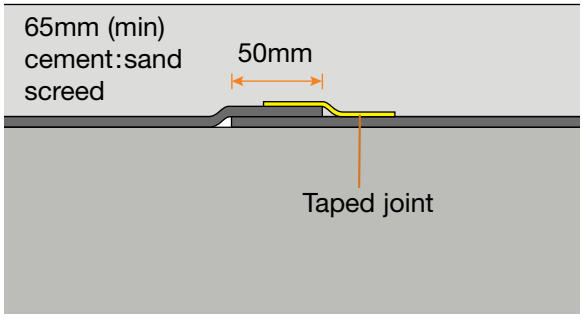
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

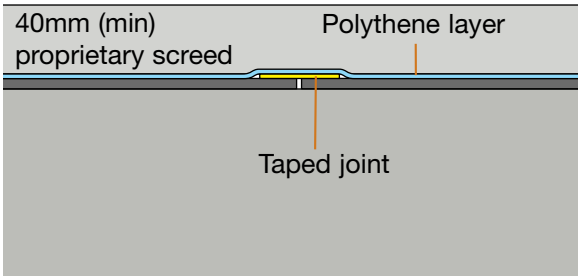
- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m² gypsum-based board

4. Resilient layer installation for different screed types



SCREED TYPE
65mm (min) cement:sand screed

- Resilient layer joints to be overlapped by 50mm (min)
- Resilient layer edge joints to be sealed by tape



SCREED TYPE
40mm (min) proprietary screed

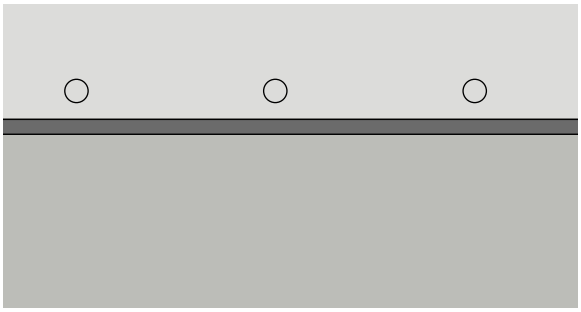
- Resilient layer joints to be butt jointed
- Resilient layer joints to be sealed by tape
- 500 gauge (min) polythene layer to be laid over whole floor overlapping joints

5. Underfloor heating systems within screeds

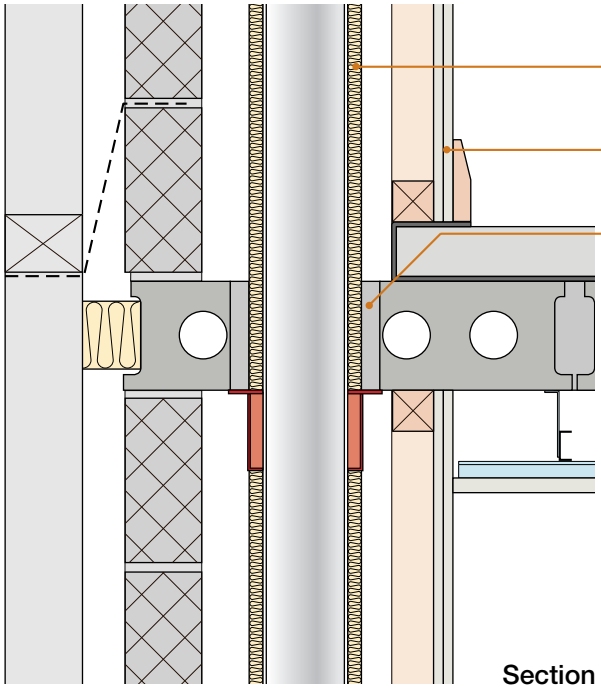
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the Regupol Quietlay or Tekfloor TekRubber.

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



6. Services – Service pipes through separating floor



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

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

All voids around pipe sealed

Section

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 CMS Danskin or Tekfloor Ltd			
2.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m^2 (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 Regupol Quietlay or Tekfloor TekRubber covering the whole floor slab?			
7.	Is the Regupol Quietlay or Tekfloor TekRubber taken min 100mm up the wall?			
8.	Are all joints taped with Regupol Tape or Tekfloor Tape?			
9.	Are the skirting boards and wall linings isolated from the screed by the Regupol Quietlay or Tekfloor TekRubber?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m^2 gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from CMS Danskin, supplier of Regupol Quietlay resilient layer system:

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

Contact details for technical assistance from Tekfloor, supplier of TekRubber resilient layer system:

Telephone: 01709 261007 **Fax:** **E-mail:** info@tekfloor.co.uk

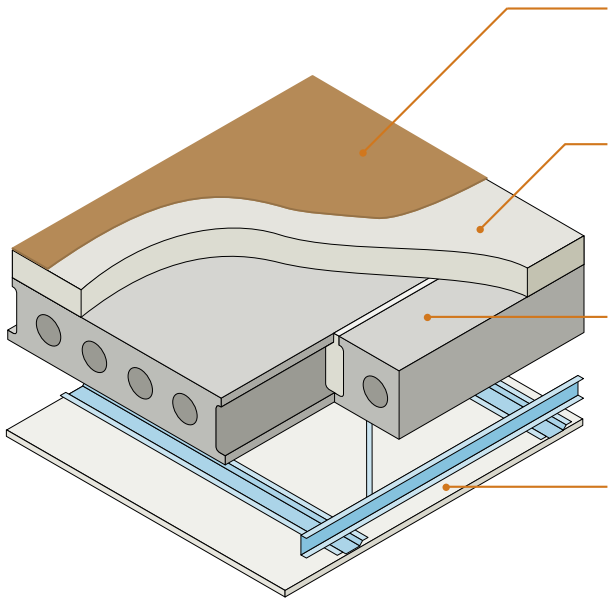
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-16

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

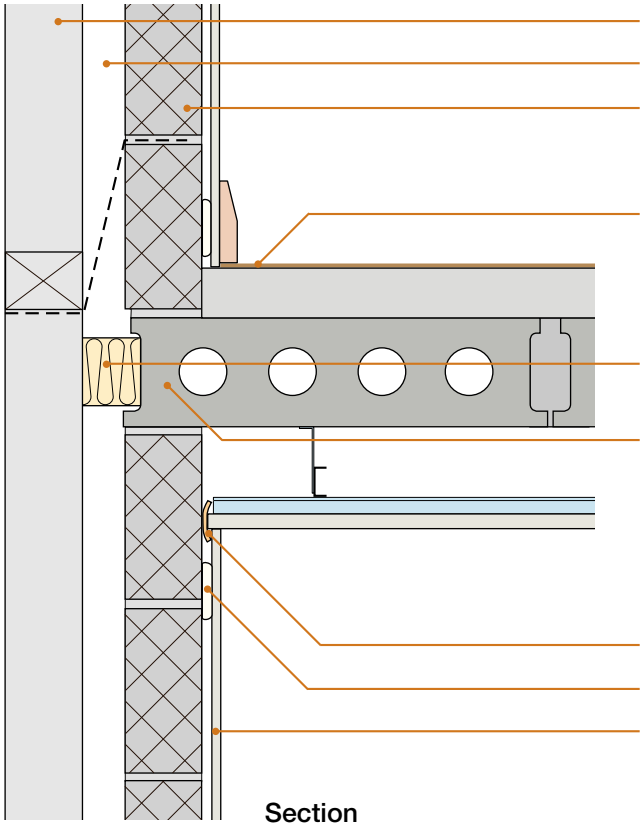


Floor covering	3mm Thermal Economics IsoRubber CC3 (bonded with IsoBond adhesive)
Screed	65mm (min) sand cement screed
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m^2 (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment which is dependent on floor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

DO

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

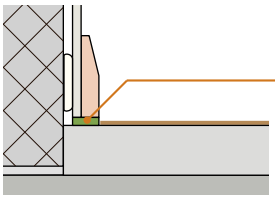
1. External (flanking) wall junction



Section

Sketch shows CT0 type ceiling treatment

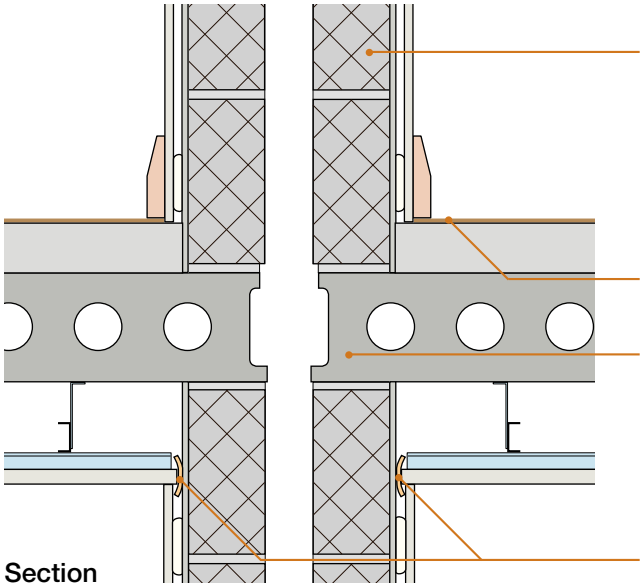
- Masonry outer leaf
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) aggregate concrete block (1350 kg/m³ to 1600 kg/m³) or (1850 - 2300 kg/m³) or aircrete block (600-800 kg/m³)
- 3mm IsoRubber CC3 installed over whole floor area and between skirting and screed (see section 4 for installation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



- Mastic sealant

Alternative detail

2. Separating wall junction



Section

Sketch shows CT0 type ceiling treatment

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

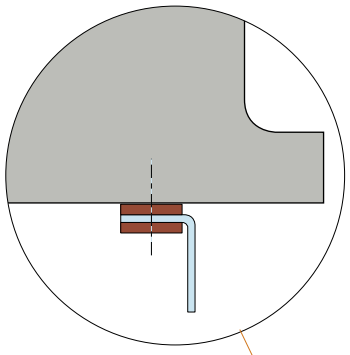
3. Ceiling treatments for E-FC-16

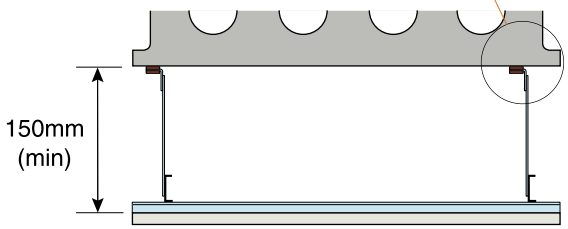
All ceiling treatments must be installed in accordance with the manufacturer's instructions. All ceiling joints should be sealed with tape or caulked with sealant.

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

- 25mm (min.) mineral fibre quilt is placed in the ceiling void.

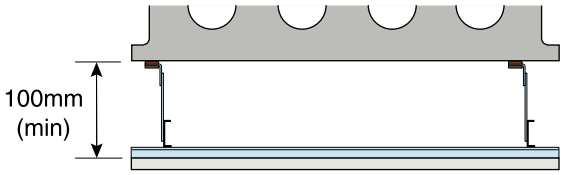
Ensure Isosonic cleats are fitted with the pads against the concrete planks





CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling frame, suspended from Isosonic cleats
- one layer of nominal 9.8 kg/m² gypsum-based board



CT1 – Metal ceiling system – 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling frame, suspended from Isosonic cleats
- one layer of nominal 9.8 kg/m² gypsum-based board

Downlighters and recessed lighting

Provided there is a minimum ceiling void, as stated below for CT0 and CT1, downlighters or recessed lighting may be installed in the ceiling:

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

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

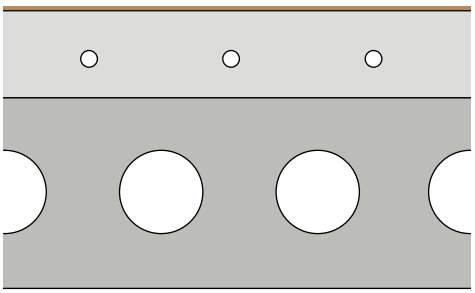
4. Underfloor heating systems within screeds

Underfloor heating systems may be installed within the screed.

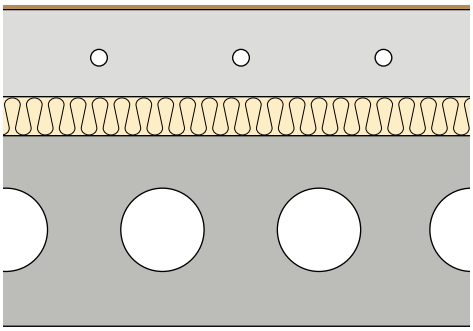
Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.

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

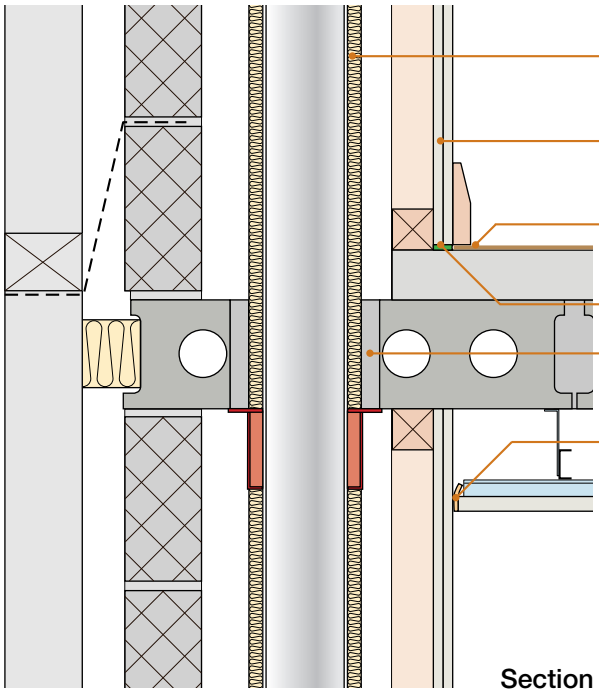
OPTION A



OPTION B



5. Services – Service pipes through separating floor



Section

25mm (min) mineral wool quilt (min 10kg/m³) around pipe

Pipe boxed in with two layers gypsum-based board, each layer nominal 8 kg/m²

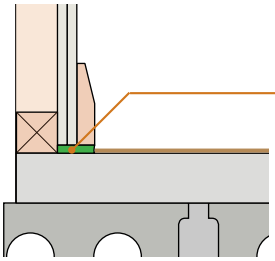
3mm IsoRubber CC3 installed over whole floor area and between skirting and screed

Remaining gap may be sealed with mastic

All voids around pipe sealed

IsoSonic ceiling strip

Alternative detail



Mastic sealant

Sketch shows CT0 type ceiling treatment

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See overleaf for checklist

CHECKLIST (to be completed by site manager /supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m² (min)?			
2.	Are joints between precast concrete planks grouted and sealed?			
3.	Are precast concrete planks built into the masonry walls?			
4.	Is IsoBond adhesive being used?			
5.	Is the IsoRubber CC3 fully covering and fully bonded to the screed?			
6.	Are the skirting boards isolated from the screed by the resilient floor cover or flexible sealant?			
7.	Is the correct ceiling type being used for precast concrete plank thickness?			
8.	Are the Isosonic cleats installed with the pads against the precast planks?			
9.	Is Isosonic ceiling strip installed at all ceiling perimeters?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Thermal Economics, manufacturer of IsoRubber CC3:

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

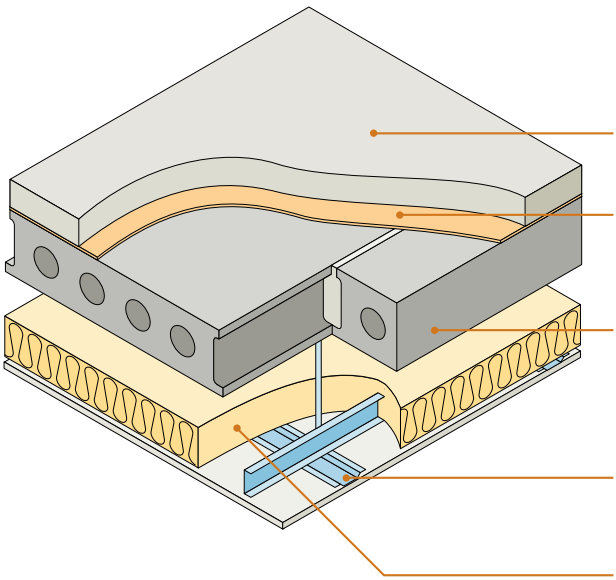
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-17

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



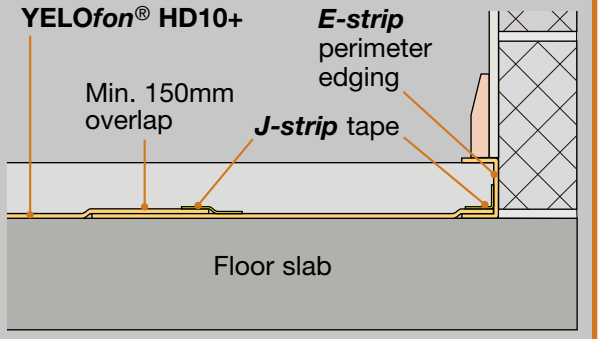
Sketch shows CT0 type ceiling treatment

Screed	65mm (min) cement:sand screed
Resilient layer	**YELO*fon*® HD10+** with *E-strip* perimeter edging and *J-strip* tape for jointing
Structural floor	Precast concrete plank of 150mm (min) thickness and 300 kg/m² (min) mass per unit area
Ceiling	See section 3 for suitable ceiling treatment
Absorbent material	50mm (min) **FIBRE*fon*® MICRO 50** or 100mm (min) mineral wool, 10 kg/m³ (min)

SYSTEM INSTALLATION:

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

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



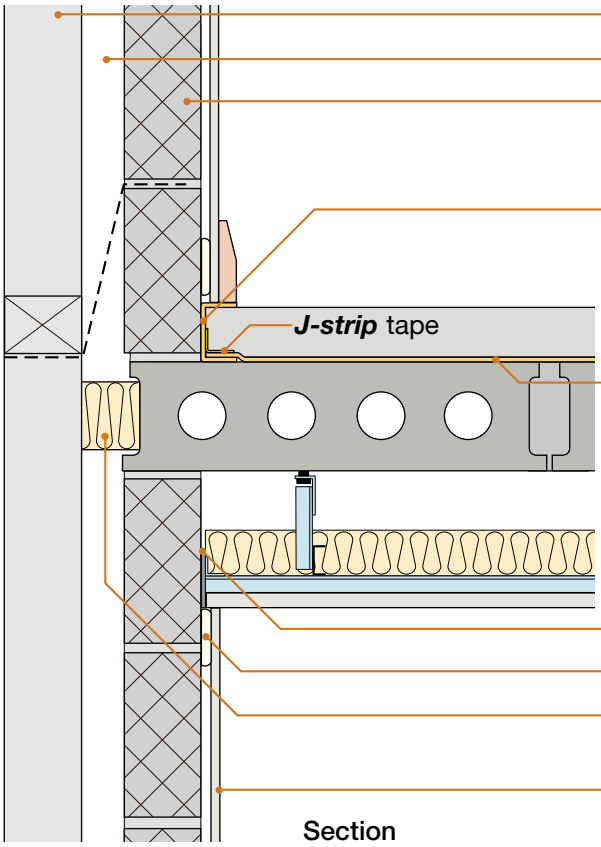
- ***E-strip*** perimeter edging to be installed at all room perimeters. See manufacturer's guidance.
- **YELO*fon*® HD10+** may also be foil faced.

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

DO

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

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

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

Cellecta® ***C-strip***

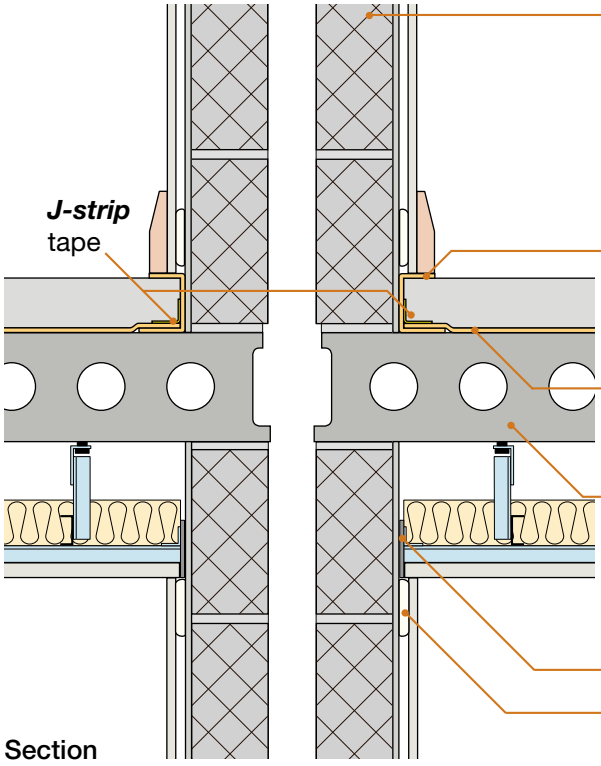
Continuous horizontal ribbon of adhesive

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

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

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

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

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

Cellecta® ***C-strip***

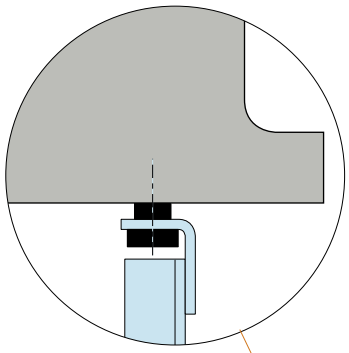
Continuous horizontal ribbon of adhesive

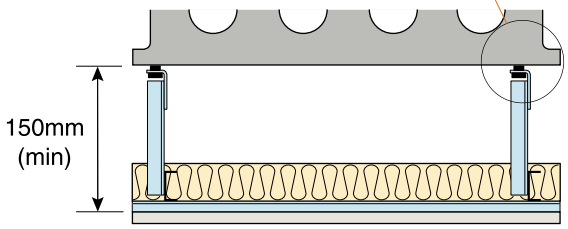
Sketch shows CT0 type ceiling treatment

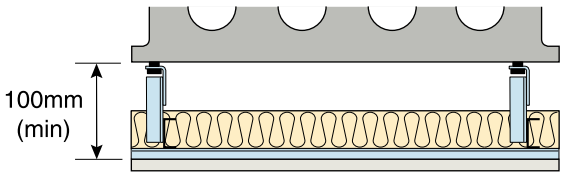
3. Ceiling treatments for E-FC-17

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

Ensure *Cellecta*® **AH50** hangers are fitted with the rubber insert against the concrete planks







Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0 or CT1, downlighters or recessed lighting may be installed in the ceiling:

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

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

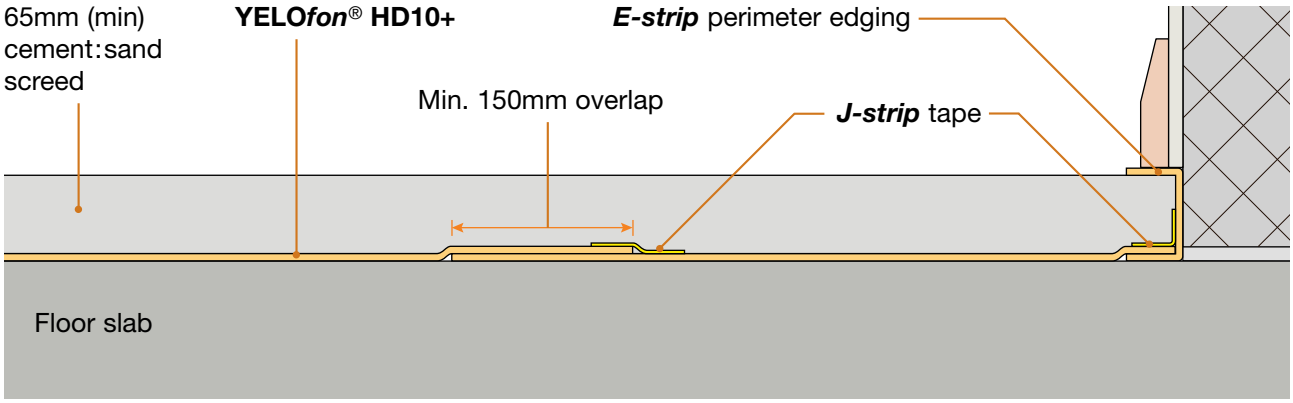
CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

- any metal ceiling frame, suspended from *Cellecta*® **AH50** hangers
- 50mm (min) **FIBRE*fon*® MICRO 50** or 100mm (min) mineral wool, 10 kg/m³ (min)
- one layer 15mm (nominal 10 kg/m²) gypsum-based board

CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling frame, suspended from *Cellecta*® **AH50** hangers
- 50mm (min) **FIBRE*fon*® MICRO 50** or 100mm (min) mineral wool, 10 kg/m³ (min)
- one layer 15mm (nominal 10 kg/m²) gypsum-based board

4. Resilient layer installation



SCREED TYPE
65mm (min) cement:sand screed

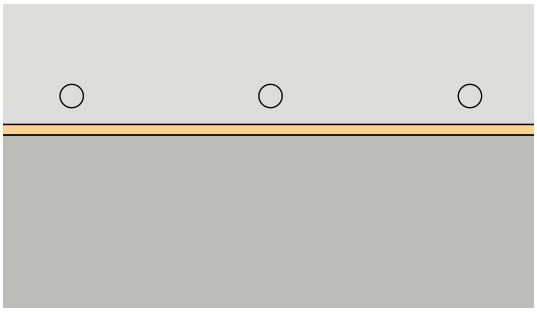
- **YELO*fon*® HD10+** resilient layer must have 150mm (min) overlapped joints and be sealed with ***J-strip*** tape
- ***E-strip*** perimeter edging must be overlapped by **YELO*fon*® HD10+** resilient layer with joints sealed with ***J-strip*** tape to isolate screed from perimeter walls and skirtings
- ***E-strip*** perimeter edging to be installed at all perimeter walls (including door openings, wall recesses) and service pipes. See manufacturer's guidance

5. Underfloor heating systems within screeds

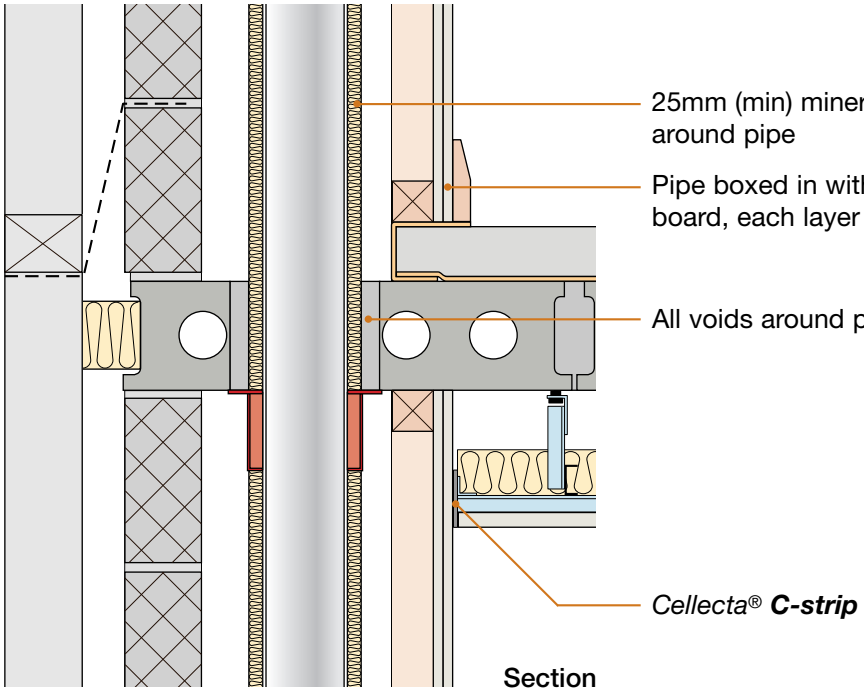
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the **YELO*fon*® HD10+** resilient layer.

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



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 and appropriate for precast concrete plank thickness and ceiling treatment?			
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)

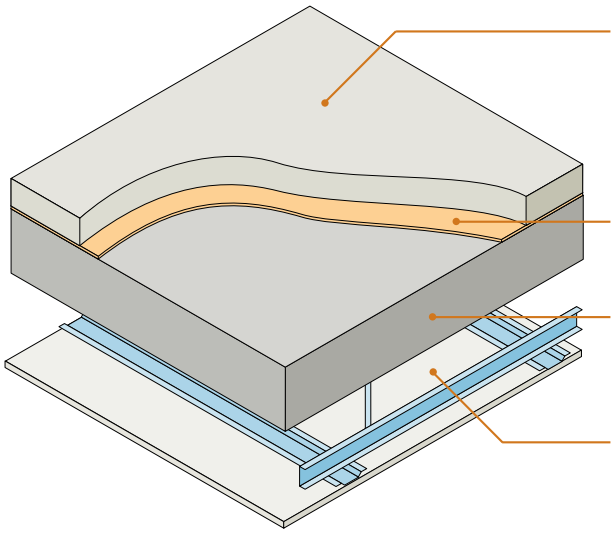
Site manager/supervisor signature . . . . . .

® UK registered trade mark no. 2291665

Separating Floor – Concrete

E-FC-18

Insitu concrete slab with flat soffit ■
For use in reinforced concrete frame construction ■
Bonded resilient floor covering, or floating screed laid on resilient layer system ■



Floating screed	65mm (min) cement:sand screed or 40mm (min) proprietary screed of nominal 80 kg/m² mass per unit area
Resilient layer	See list below and section 7, or see section 8 for bonded resilient floor coverings
Structural floor	225mm (min) insitu concrete floor slab, 2400 kg/m³ (min) density without screed
Ceiling	See section 9 for suitable ceiling treatment

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

Storey height glazing units and external insulated cladding panels are an acceptable alternative to the cavity walls illustrated provided:

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

Under-screed Resilient Layer systems

Only the following under-screed Resilient Layer systems may be used on E-FC-18 (see also Section 7):

- Thermal Economics Isorubber Base and IsoEdge Flanking Strip
- *Cellecta*® YELO*fon*® HD10+ and E-strip
- Icopal-MONARFLOOR® TRANQUILT® system
- Thermal Economics Isorubber HP3 and IsoEdge Flanking Strip
- InstaCoustic InstaLay 65
- Regupol Quietlay
- *Cellecta*® RUBBER*fon*® Impact 6 and RUBBER*fon*® Edge Strip

When using under-screed resilient layer systems:

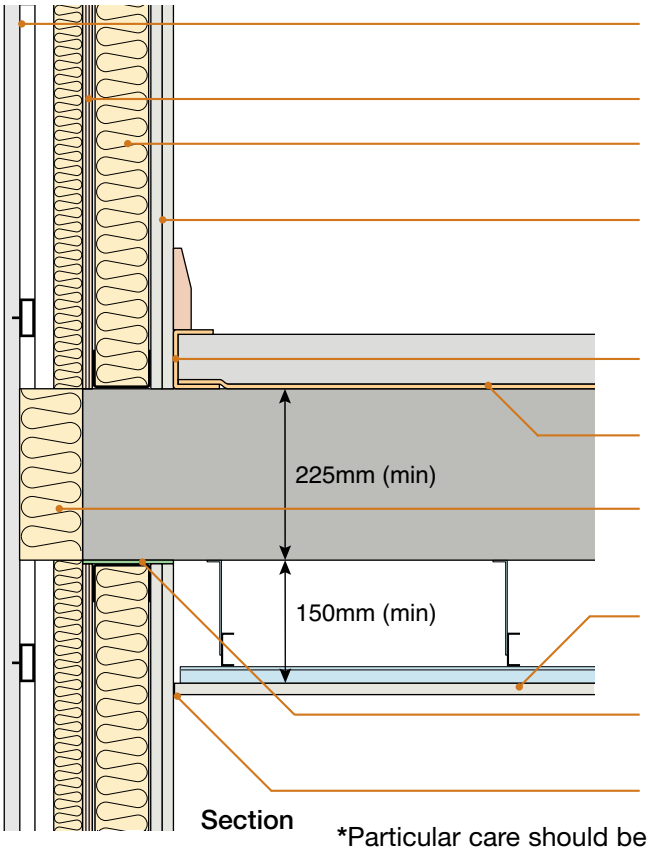
- Ensure resilient layer is laid over the entire floor surface and has overlapped joints appropriately sealed with tape
- Ensure resilient layer overlaps with flanking strip and is taped and sealed at joints. On no account should the floating screed come into contact with the floor slab or perimeter walls
- Ensure the flanking strip isolates the skirting and wall linings. On no account should the floating screed come into contact with the wall lining and skirting
- Refer to Section 7 for details of installation, and requirements for proprietary screeds
- Refer to Appendix A

Bonded Resilient floor coverings

Bonded resilient floor coverings can be applied over a levelling screed, or direct to the structural slab.

Refer to Section 8 for bonded resilient floor covering requirements.

1. External (flanking) wall junction – lightweight external

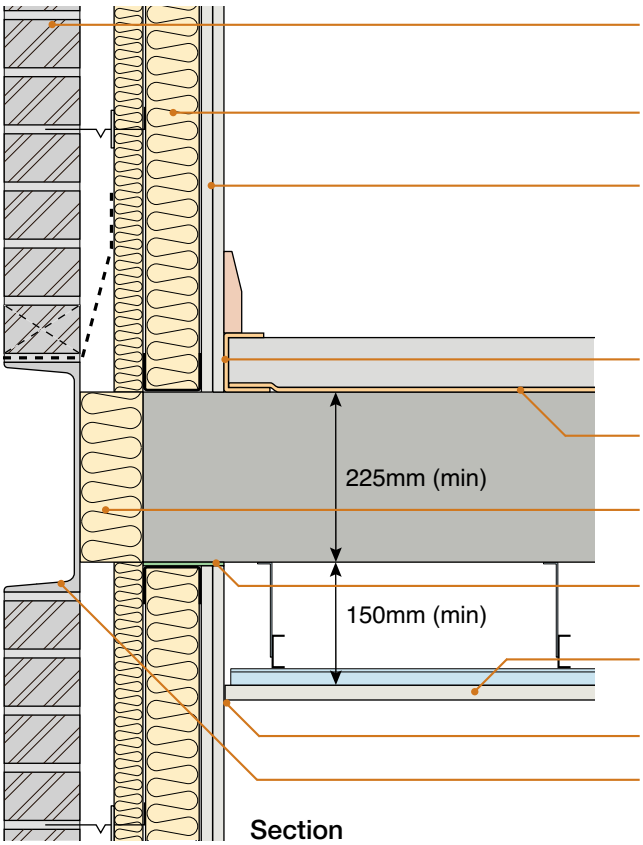


Section

- Glazing, render board or cladding system* spaced off inner leaf
- Cavity sheathing board
- Inner leaf – 75mm (min) metal stud with min 50mm mineral wool min 10 kg/m³
- 2 or more layers of gypsum-based board combined nominal mass per unit area 20 kg/m² all joints staggered
- Flanking strip must overlap with resilient layer and isolate screed from perimeter walls and skirtings
- Resilient layer must have appropriately overlapped joints and be sealed with tape (see Section 7)
- For the purposes of limiting flanking sound transmission, cavity closers whether full or partial are acceptable
- Ceiling lining minimum 1 layer nominal 10 kg/m² gypsum-based board
- All voids between slab and inner leaf filled with flexible closer or sealant
- Seal all perimeter joints with tape or caulk with sealant

*Particular care should be taken in respect of Buiding Regulations Part B Fire

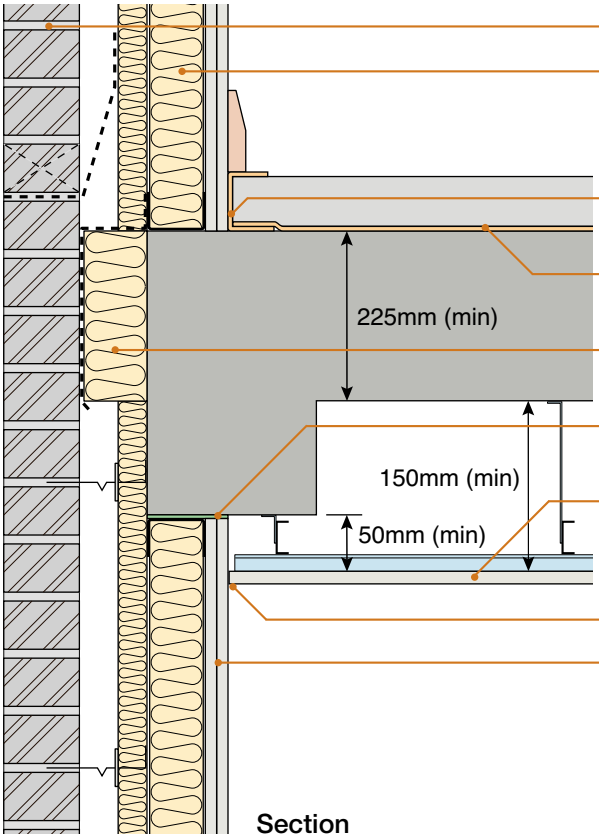
2. External (flanking) wall junction – masonry outer leaf



Section

- Masonry outer leaf or precast panels
- Inner leaf – 75mm (min) metal stud with min 50mm mineral wool min 10 kg/m³
- 2 or more layers of gypsum-based board combined nominal mass per unit area 20 kg/m² all joints staggered
- Flanking strip must overlap with resilient layer and isolate screed from perimeter walls and skirtings
- Resilient layer must have appropriately overlapped joints and be sealed with tape (see Section 7)
- Cavity barrier MUST close off the void
- All voids between slab and inner leaf filled with flexible closer or sealant
- Ceiling lining minimum 1 layer nominal 10 kg/m² gypsum-based board
- Seal all perimeter joints with tape or caulk with sealant
- Optional steel ‘feature channel’

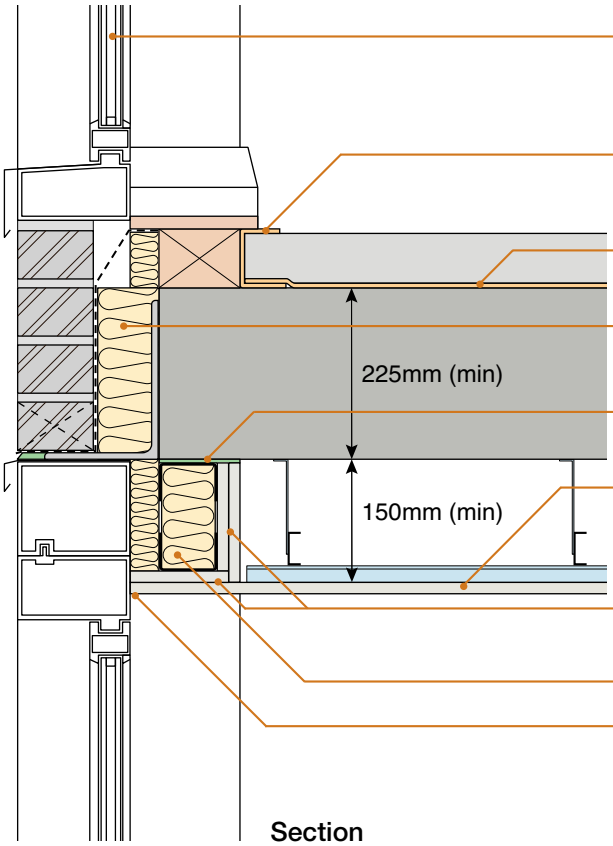
3. External (flanking) wall junction – with concrete downstand beam



Section

- Masonry outer leaf or precast panels
- Inner leaf – 75mm (min) metal stud with min 50mm mineral wool min 10 kg/m³
- Flanking strip must overlap with resilient layer and isolate screed from perimeter walls and skirtings
- Resilient layer must have appropriately overlapped joints and be sealed with tape (see Section 7)
- Cavity barrier MUST close off the void
- All voids between slab and inner leaf filled with flexible closer or sealant
- Ceiling lining minimum 1 layer nominal 10 kg/m² gypsum-based board
- Seal all perimeter joints with tape or caulk with sealant
- 2 or more layers of gypsum-based board combined nominal mass per unit area 20 kg/m² all joints staggered

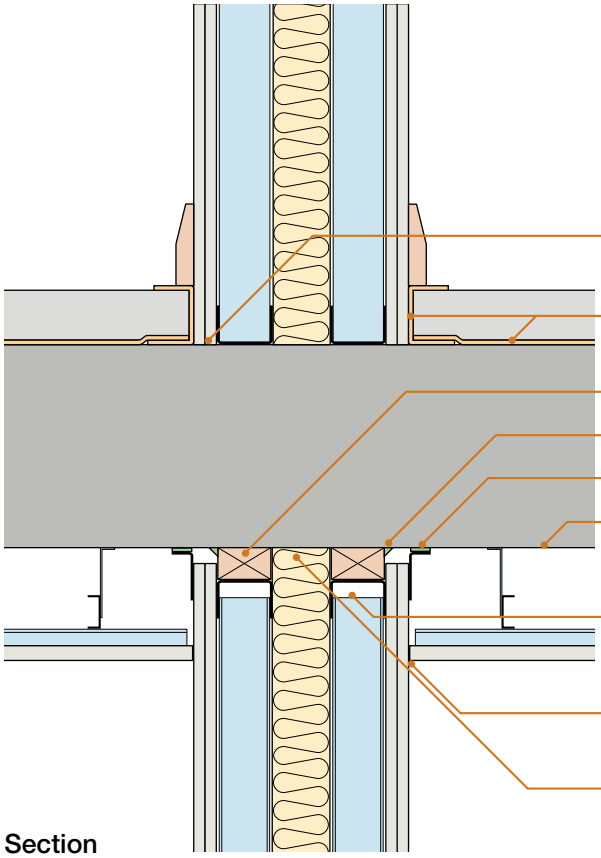
4. External (flanking) wall junction – storey-height glazing



Section

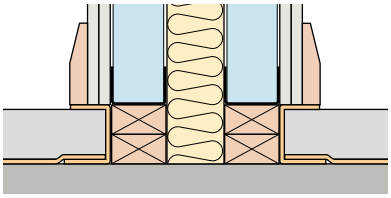
- Storey-height glazing
- Flanking strip must overlap with resilient layer and isolate screed from perimeter walls and skirtings
- Resilient layer must have appropriately overlapped joints and be sealed with tape (see Section 7)
- Cavity barrier MUST close off the void
- All voids between slab and inner leaf filled with flexible closer or sealant
- Ceiling lining minimum 1 layer nominal 10 kg/m² gypsum-based board
- Two layers of gypsum-based board total 20 kg/m² (min)
- Min 50mm mineral wool min 10 kg/m³
- Seal all perimeter joints with tape or caulk with sealant

5. Separating wall junction



Section

Alternative detail with timber sole plates



Where specified within the proprietary drywall system, apply additional sealing at this position

Flanking strip and resilient layer to isolate screed from metal frame/lining and concrete floor

Timber batten

Continuous bead of flexible sealant

Steel angle to seal void

Insitu slab to have flat soffit – profiled-deck permanent shutter must not be used

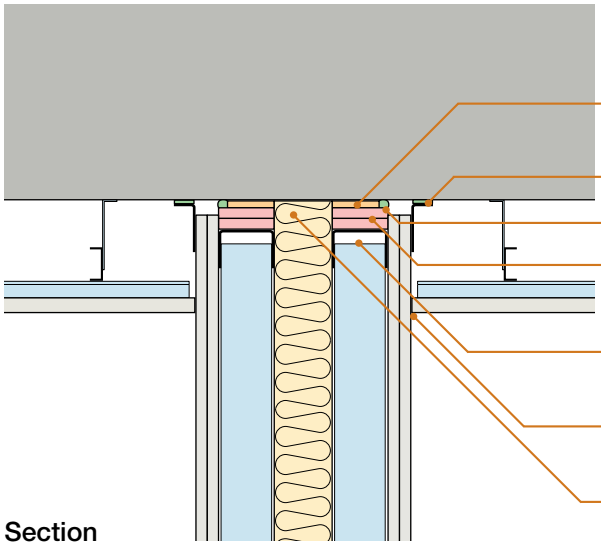
Junction to allow for deflection of slab where required

Seal all perimeter joints with tape or caulk with sealant

Quilt must be taken up to underside of slab, no gaps to remain

An alternative deflection head detail is shown below

6. Slab junction (with alternative deflection head detail)



Section

20mm mineral fibre or 5mm foamed polyethylene resilient strip

Steel angle must seal void

Flexible or acoustic sealant

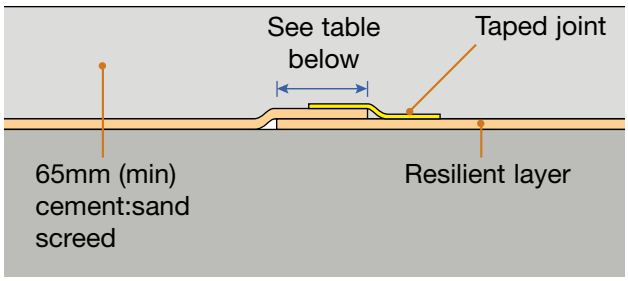
Gypsum board packers

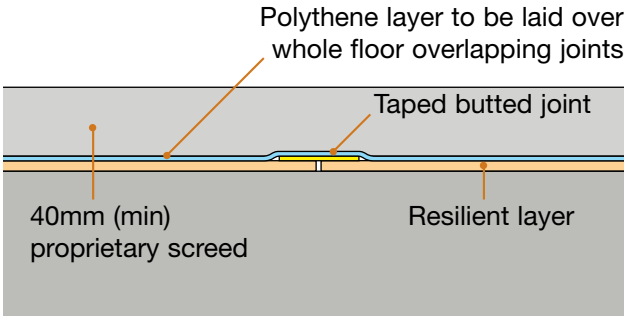
Junction to allow for deflection of slab where required

Seal all perimeter joints with tape or caulk with sealant

Mineral wool quilt must be taken up to underside of slab, no gaps to remain

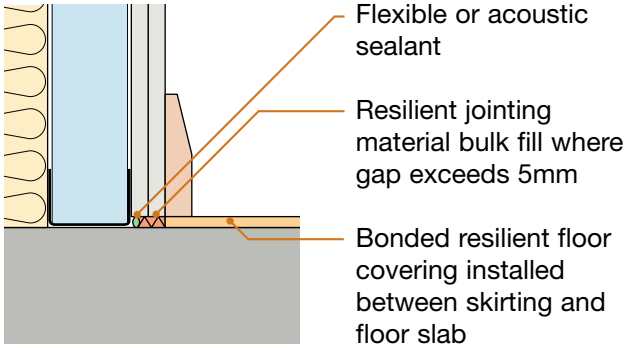
7. Resilient layer installation and floating screed types



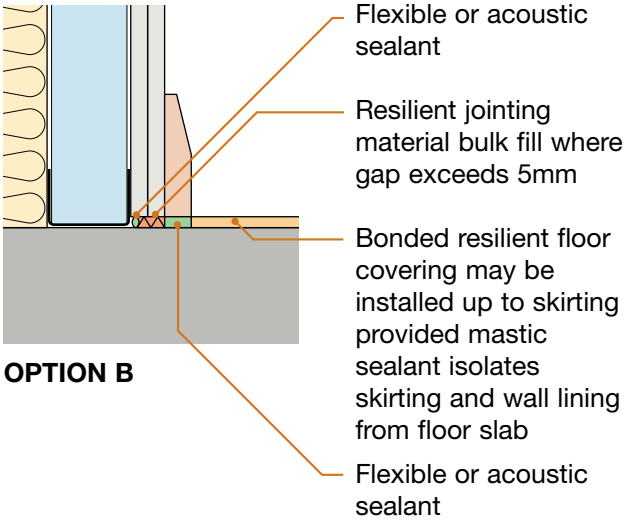


Resilient layer system	Minimum overlap	Jointing method
Thermal Economics 6mm Iso Rubber & IsoEdge	50mm	Generic tape
Cellecta® YELO*fon*® HD10+ and E-strip	150mm	J-strip
Icopal-MONARFLOOR® TRANQUILT® system	Integrated	Monarfloor Acoustic Adhesive
Thermal Economics IsoRubber Base HP3 & IsoEdge	50mm	Generic tape
InstaCoustic InstaLay 65	50mm	Generic tape
Thermal Economics Iso Rubber Code & IsoEdge 6/260	50mm	Generic tape
Regupol Quietlay	50mm	Regupol tape
Cellecta® RUBBER*fon*® Impact 6 and RUBBER*fon*® Edge Strip	50mm	*Cellecta*® HG Tape

8. Bonded resilient floor covering - installed over levelling screed, or direct to slab



OPTION A



OPTION B

IMPORTANT

If using robustdetails® separating walls, refer to Table 3c in the Handbook Introduction.

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

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

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

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

Bonded resilient floor cover

- min 4.5mm thickness and must be bonded
- must be capable of supporting carpet and wood finishes in habitable rooms
- ***Laboratory testing performance must be undertaken directly on the resilient cover, and with a wood floor finish as outlined in Appendix G (minΔL_w 17 dB without timber board overlay; min rdΔL_w 17 dB with timber board overlay)***

9. Ceiling treatments for E-FC-18

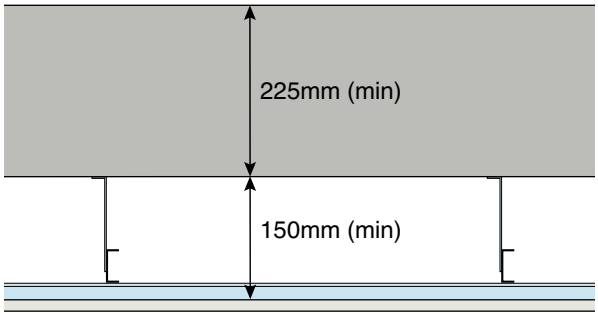
Ceiling treatments must be installed in accordance with the manufacturer's instructions.

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

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

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

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



Downlighters and recessed lighting

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

- in accordance with the manufacturer's instructions
- into openings not exceeding 100mm diameter or 100x100mm

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

Any ceiling system – 150mm (min) void

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

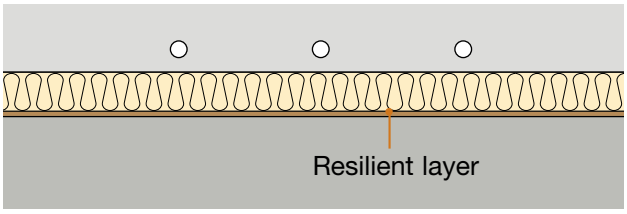
10. Underfloor heating systems within screeds

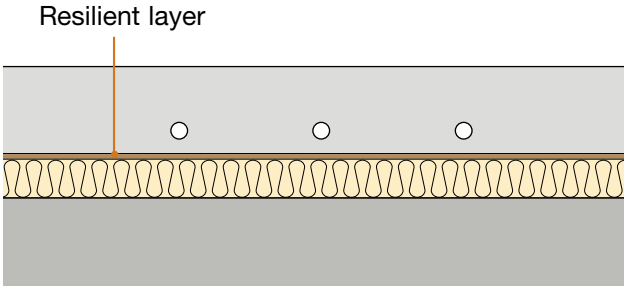
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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

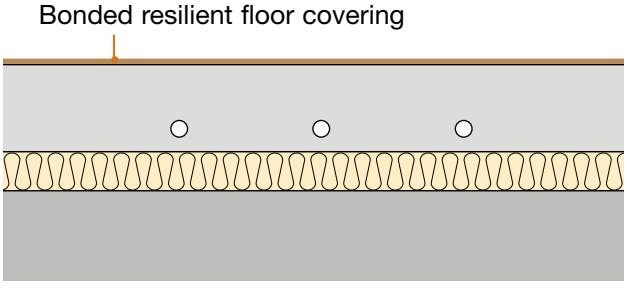
An insulation layer may be positioned on top of, or beneath, the resilient layer.

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

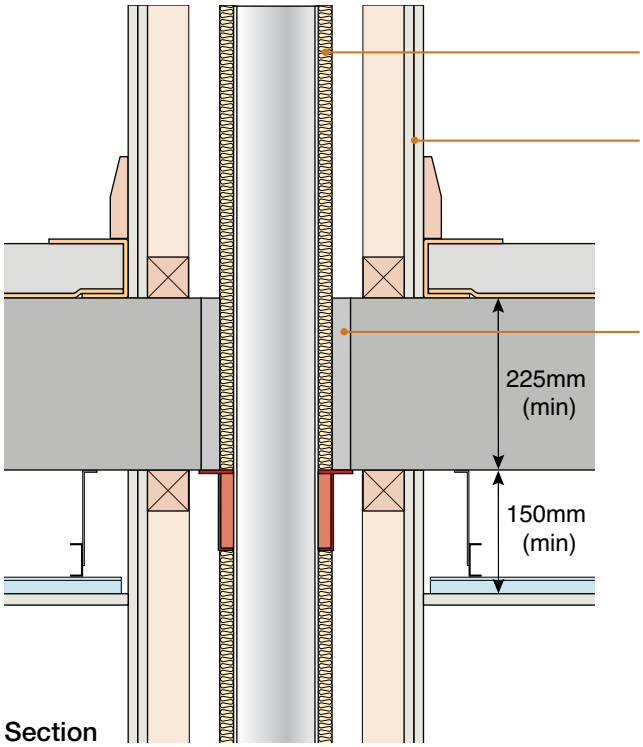




A bonded resilient floor covering can be applied to the top of the screed instead of the under-screed resilient layer shown here. Refer to section 8.



11. Services – service pipes through separating floor



Section

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is concrete slab 225mm (min) thick?			
2.	Is concrete slab density 2400 kg/m^3 (min)?			
3.	Is inner leaf discontinuous (or broken) between storeys?			
4.	If used, are glazing units or cladding panels discontinuous (or broken) between storeys			
5.	Has ceiling system been installed in accordance with the manufacturer's instructions (where applicable)?			
6.	Is there a minimum ceiling void of 150mm?			
7.	Are all ceiling board joints sealed with tape or caulked with sealant?			
8.	Has resilient floor treatment been installed in accordance with the manufacturer's instructions?			
9.	Have all resilient flanking strips been fitted?			
10.	Are service pipes wrapped in quilt and boxed in with two layers of gypsum-based board, nominal 8 kg/m^2 each layer?			
11.	Is separating floor satisfactorily complete?			

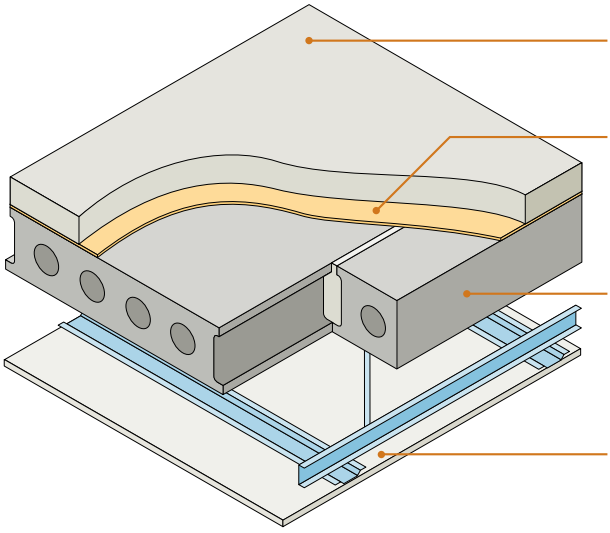
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-19

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



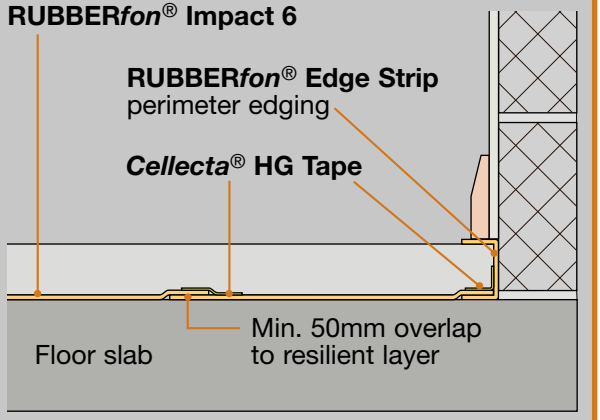
Sketch shows CT0 type ceiling treatment

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 which is dependent on floor plank depth and block type used in supporting walls

SYSTEM INSTALLATION:

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

1) **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**



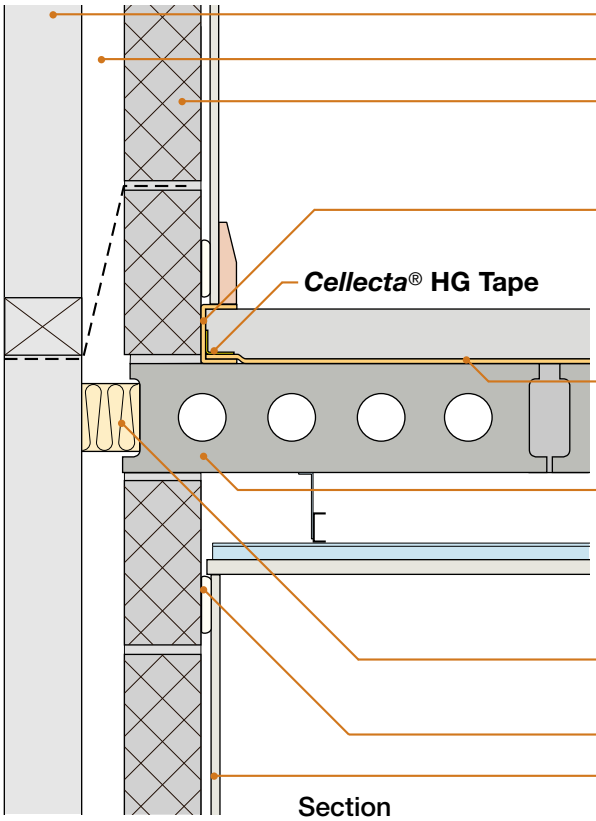
- **RUBBER*fon*® Edge Strip** to be installed at all room perimeters. See manufacturer's guidance.

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

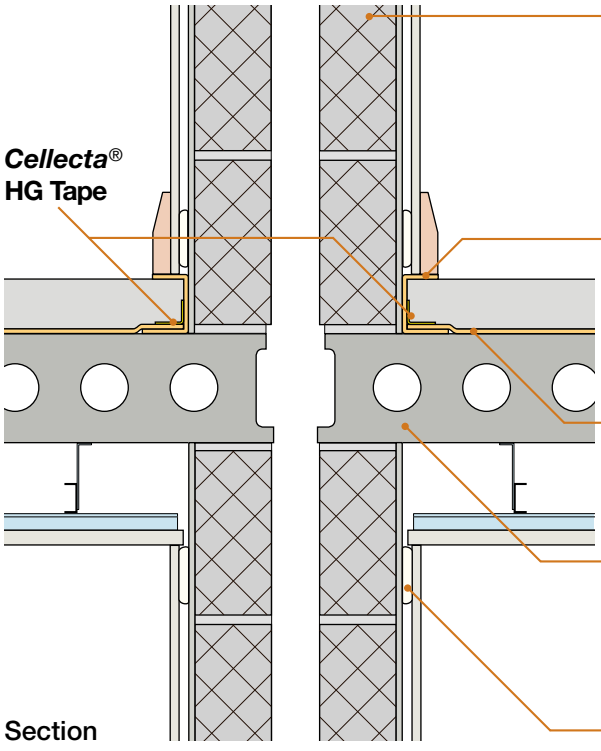
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

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

3. Ceiling treatments for E-FC-19

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

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

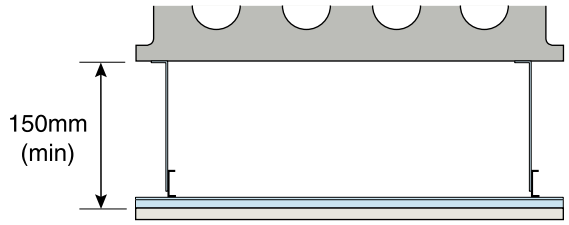
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

Downlighters and recessed lighting

Provided there is a minimum ceiling void as stated below for CT0 or CT1, downlighters or recessed lighting may be installed in the ceiling:

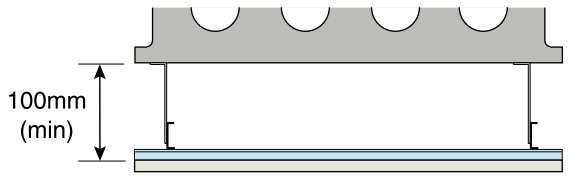
- in accordance with the manufacturer's instructions
- at no more than one light per 2m^2 of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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



CT0 – Metal ceiling system - 150mm void
To be used for 150mm (min) depth concrete planks

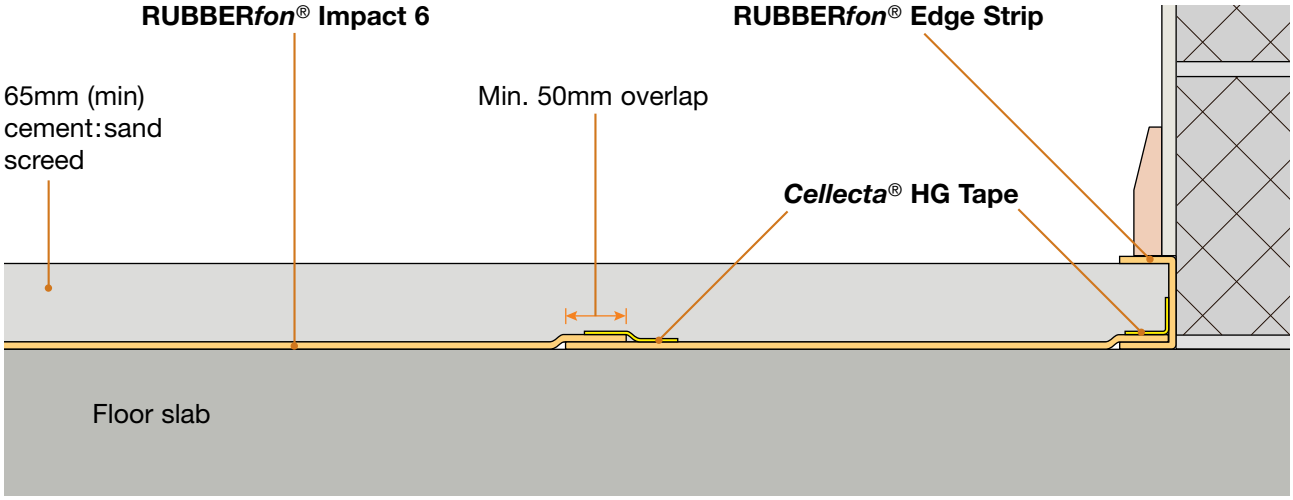
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m^2 gypsum-based board



CT1 – Metal ceiling system - 100mm void
Only to be used for 200mm (min) depth concrete planks

- any metal ceiling system providing 100mm (min) ceiling void
- one layer of nominal 8 kg/m^2 gypsum-based board

4. Resilient layer installation for screed floor



SCREED TYPE
65mm (min) cement:sand screed

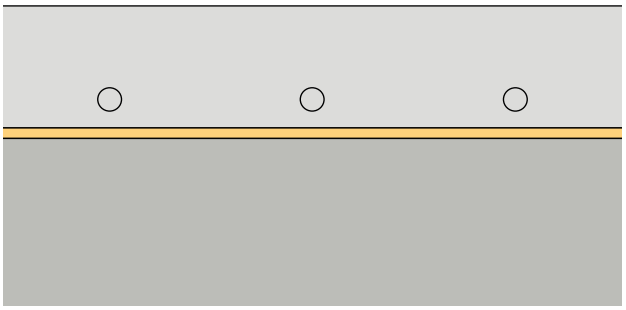
- **RUBBER*fon*® Impact 6** resilient layer must have 150mm (min) overlapped joints and be sealed with ***Cellecta*® HG Tape**.
- **RUBBER*fon*® Edge Strip** must be overlapped by **RUBBER*fon*® Impact 6** resilient layer with joints sealed with ***Cellecta*® HG Tape** to isolate screed from perimeter walls and skirtings.
- **RUBBER*fon*® Edge Strip** perimeter edging to be installed at all perimeter walls (including door openings, wall recesses) and service pipes. See manufacturer's guidance.

5. Underfloor heating systems within screed

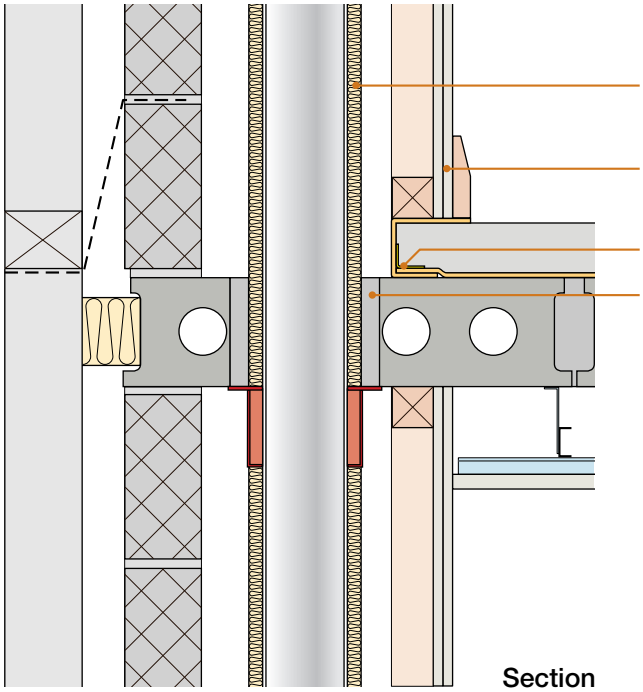
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the **RUBBER*fon*® Impact 6**.

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



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 **RUBBER*fon*® Edge Strip** installed around all room perimeter walls (including door openings, cupboards, across thresholds and into wall recesses) and service pipes and joints sealed with ***Cellecta*® HG Tape**?			
7.	Are **RUBBER*fon*® Impact 6** resilient layer joints formed as described in Section 4 and sealed with ***Cellecta*® HG Tape**?			
8.	Is **RUBBER*fon*® Impact 6** resilient layer overlapping the **RUBBER*fon*® Edge Strip** and joints sealed with ***Cellecta*® HG Tape**?			
9.	Are the skirting boards isolated from the screed by the **RUBBER*fon*® Edge Strip**?			
10.	Are all ceiling board joints sealed with tape or caulked with sealant?			
11.	Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from *Cellecta*®, manufacturer of RUBBER*fon*® Impact 6 system:

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

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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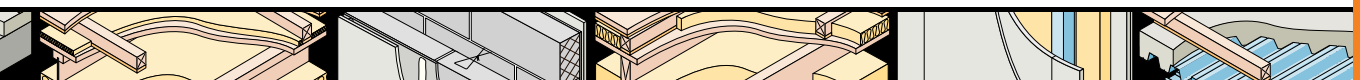
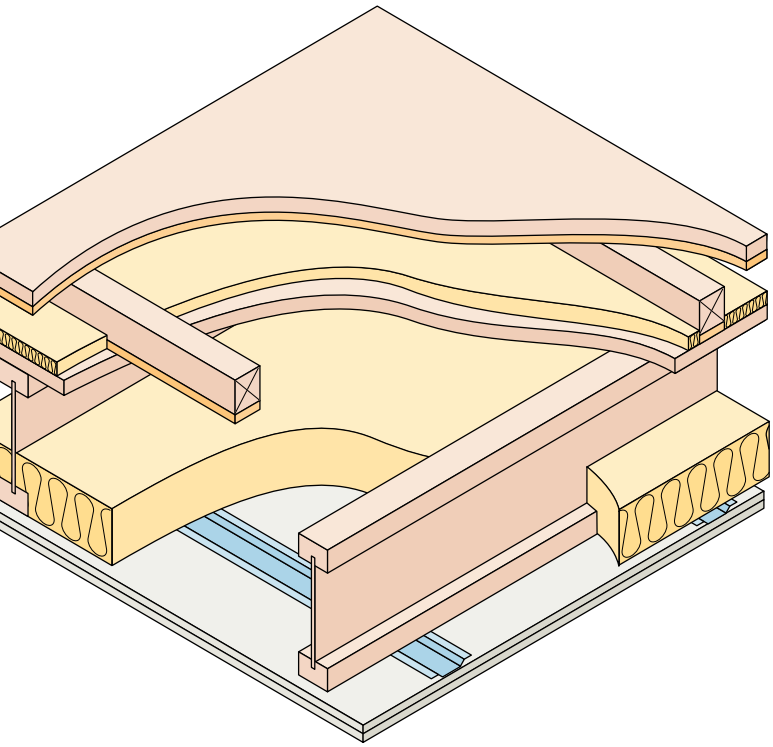
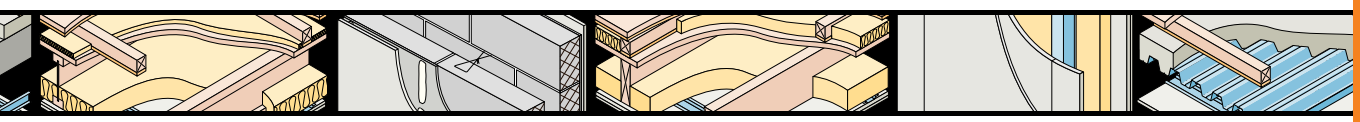




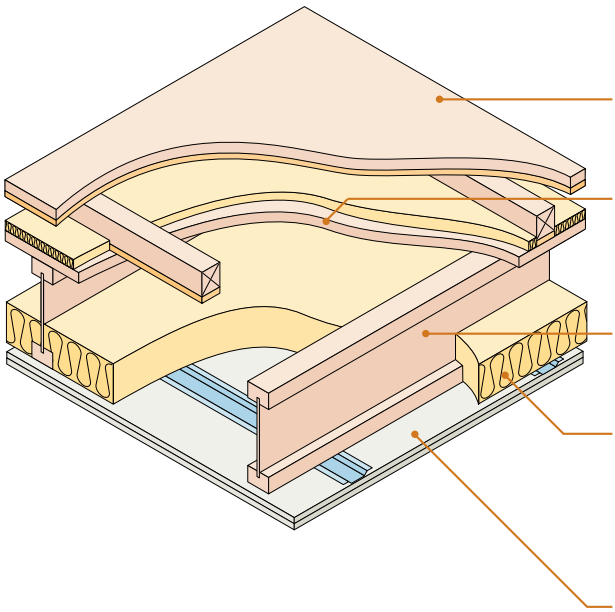
TIMBER



Separating Floor – Timber I-Joists

E-FT-1

Timber I-Joists ■
Use with timber frame walls only ■



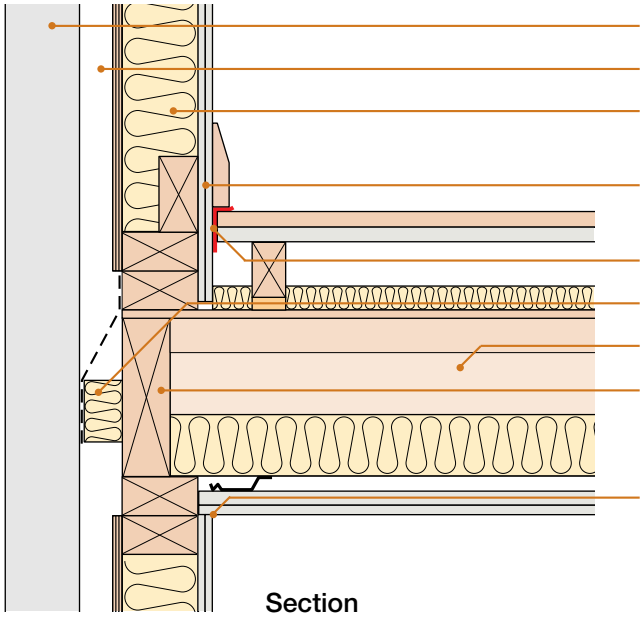
Floating floor	See section 6 for suitable floating floor treatment
Floor decking	15mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	235mm (min) timber I-Joists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or Cellecta MICRO 50 between joists
Ceiling	See section 5 for suitable 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.

DO

- Lay quilt between all joists, including doubled up I-joists, ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure quilt is laid between and not under flooring battens
- Install 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 either CT1, CT2 or CT3 and is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

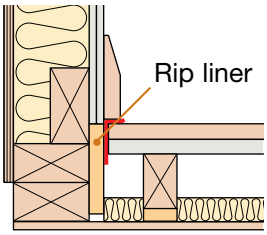
1. External (flanking) wall junction



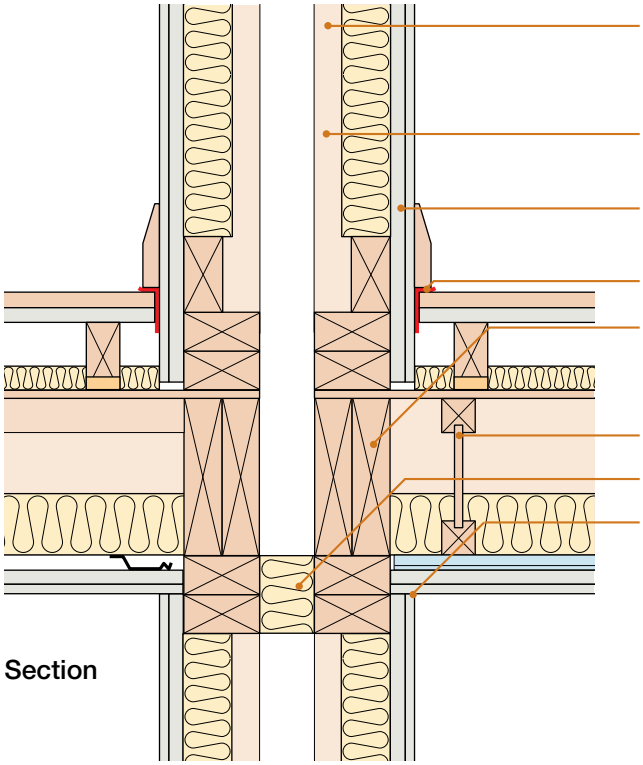
Section

- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min); 70mm (min) EPS or foil faced PIR with no gaps
- 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
- 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

Alternative detail



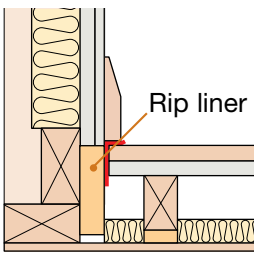
2. Separating wall junction



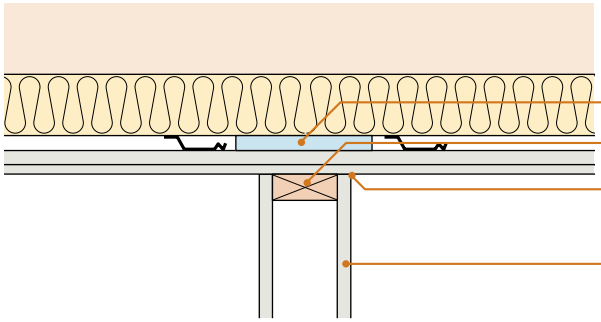
Section

- 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)
- Seal all perimeter joints with tape or caulk with sealant

Alternative detail



3. Internal wall junction (non loadbearing)

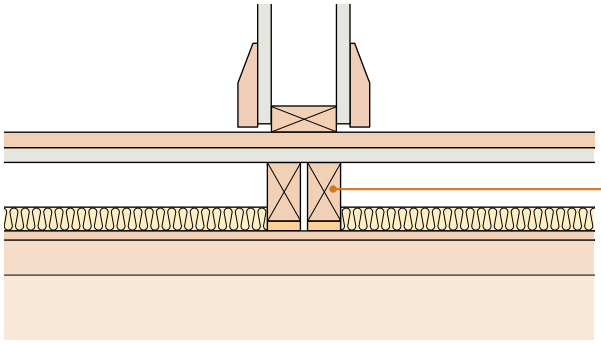


Resilient bar nogging

Headplate fixed to resilient bar nogging

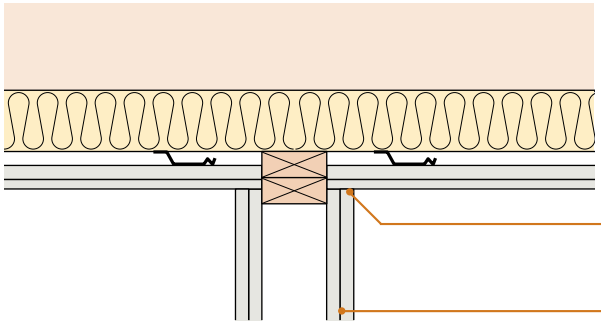
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



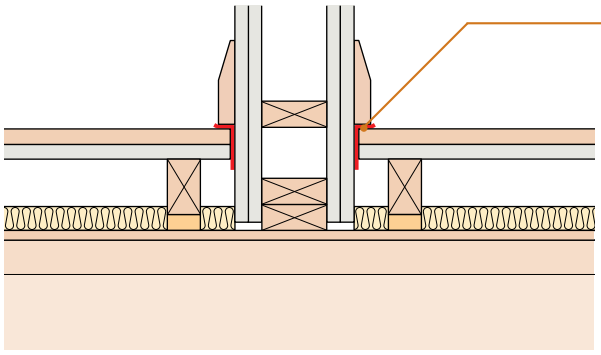
Additional support to partition (see Appendix A)

4. Internal wall junction (loadbearing)

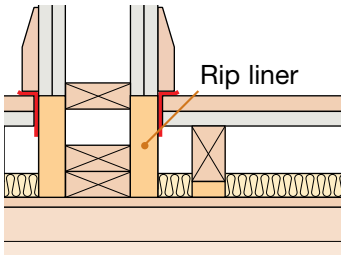


Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



5mm (min) resilient flanking strip



Rip liner

Alternative detail

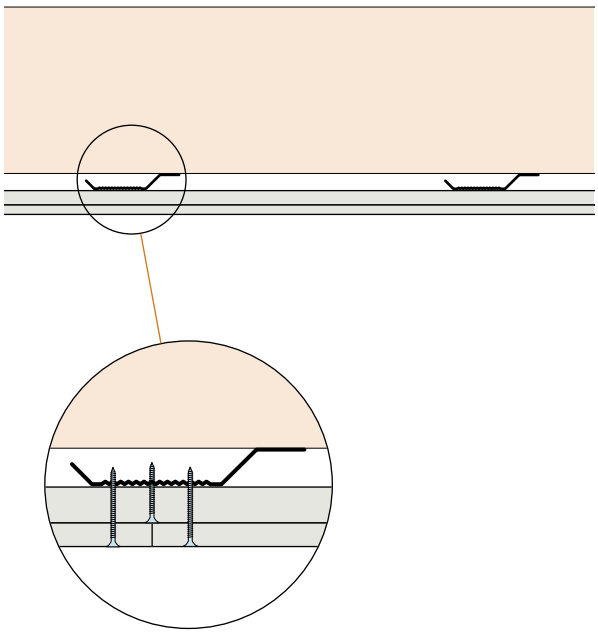
5. Ceiling treatment for E-FT-1

Timber floor ceiling treatment must be either CT1, CT2 or CT3 (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 2m^2 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/m^2) fixed with 32mm screws, and 12.5mm (nominal 10 kg/m^2) fixed with 42 mm screws

Ceiling treatment CT2

Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m^2) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m^2) fixed with 42mm screws

25mm (min) resilient bars with CT3

25mm (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 CT3

Two layers of gypsum-based board, composed of 10mm (nominal 12kg/m^2) fixed with 30mm screws and second layer of 10mm (nominal 12kg/m^2) fixed with 30mm screws

6. Floating floor treatment for E-FT-1

Floating floor treatment:

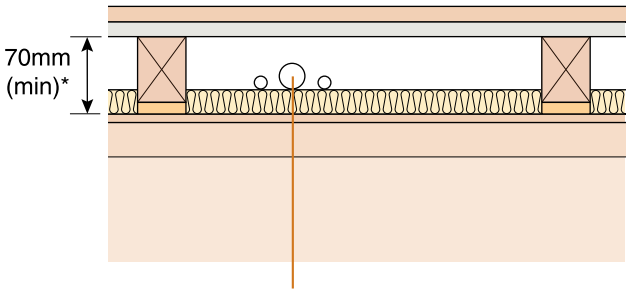
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB and rd $\Delta L_w = 15$dB - see Appendix C.

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

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

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

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

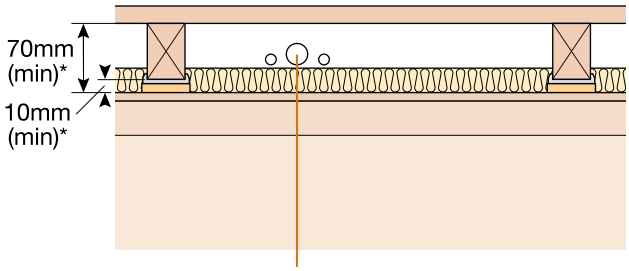


FFT1 – Resilient composite deep batten system for E-FT-1

- 18 mm (min) t&g flooring board
- gypsum-based board nominal 13.5 kg/m^2
- FFT1 resilient composite deep battens
- resilient layer must be continuous and pre-bonded to batten
- battens may have the resilient layer at the top or the bottom
- 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



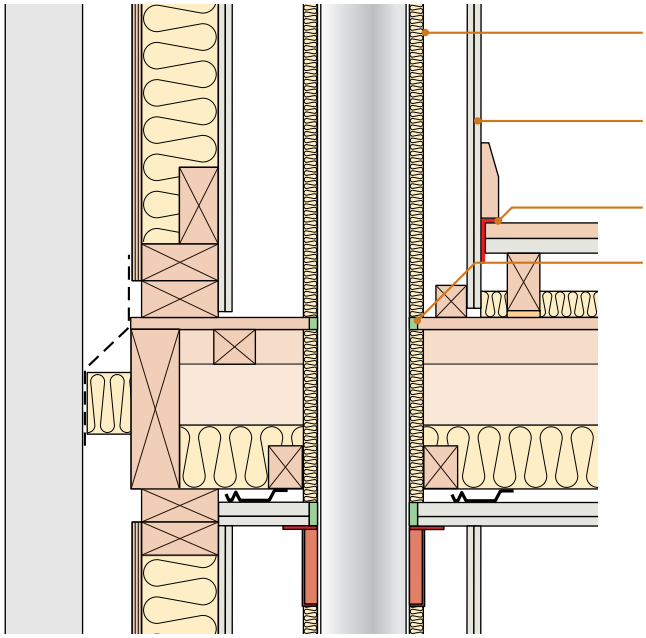
FFT2 – Resilient cradle and batten system for E-FT-1
Ensure cradles are aligned over joist positions

- 18 mm (min) t&g flooring board
- cradle and batten
- 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

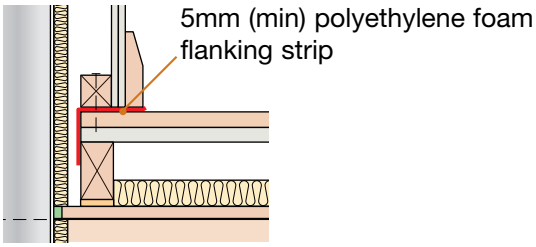
Cellecta HiDECK Structural system

- refer to Appendix A3

7. Services – pipes through separating floor



Section



Alternative detail

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

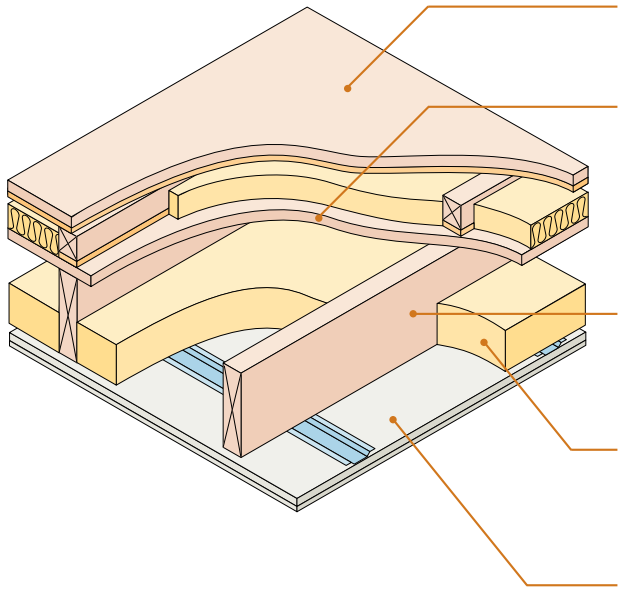
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are timber I-Joists at least 235mm deep?			
2.	Has the specified quilt been fitted between the joists?			
3.	Are resilient ceiling bars fitted at right angles to the joists?			
4.	Has ceiling system been fitted in accordance with the manufacturer's 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 CT1, CT2 or CT3 fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
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 16 kg/m^2?			
10.	Have all resilient flanking strips been fitted?			
11.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Timber Solid Joists E-FT-2

Timber Solid Joists ■
Use with timber frame walls only ■



Floating floor	See section 6 for suitable floating floor treatment
Floor decking	11mm thick (min) wood based board, density 600 kg/m³ (min) or Walker Timber perforated deck system
Joists	220mm (min) solid timber joists at maximum 400mm centres
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or Cellecta MICRO 50 between joists
Ceiling	See section 5 for suitable ceiling treatment

For wider joist centres

Joist spacings may be increased to maximum 600mm centres provided:

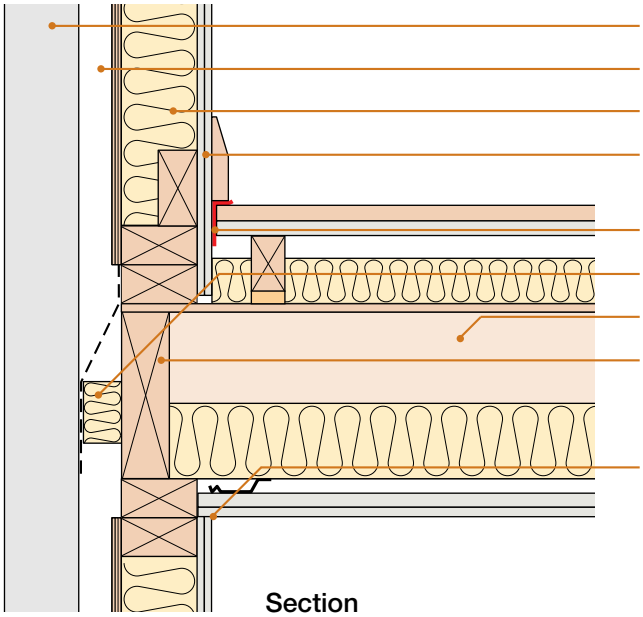
- joist depth is 240mm (min) and
- floor decking is minimum 15mm thick

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.

DO

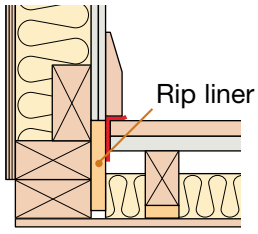
- Lay quilt between joists ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure sub-deck quilt is laid between and not under flooring battens
- Install flanking strips around the perimeter of the flooring board 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 either CT1, CT2 or CT3 and is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction



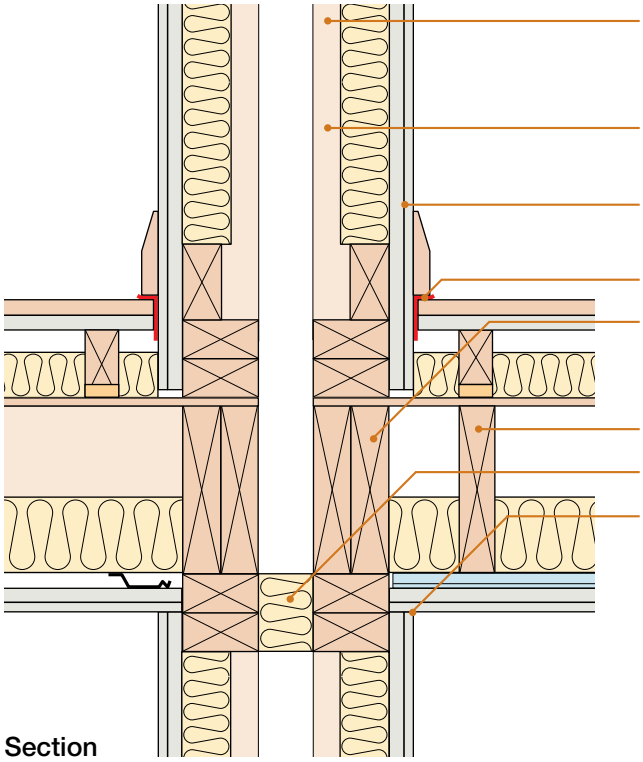
Section

- 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
- 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



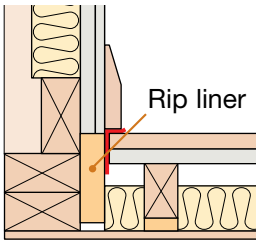
Alternative detail

2. Separating wall junction



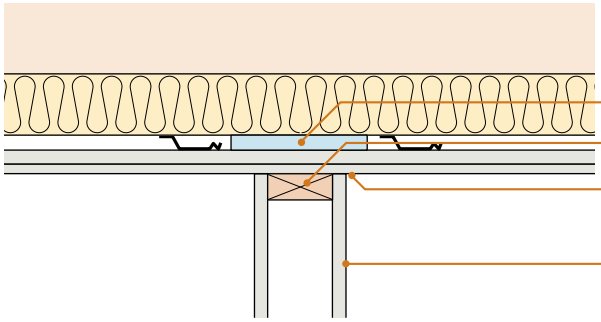
Section

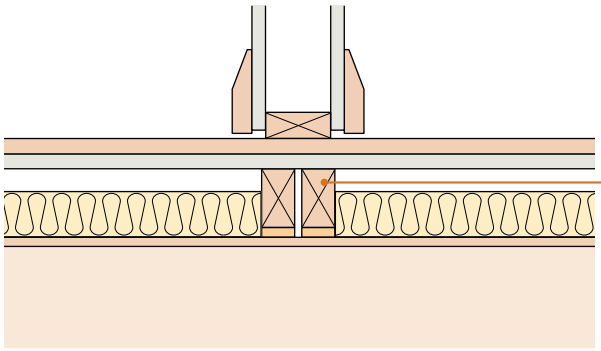
- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- 5mm (min) resilient 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)
- Seal all perimeter joints with tape or caulk with sealant



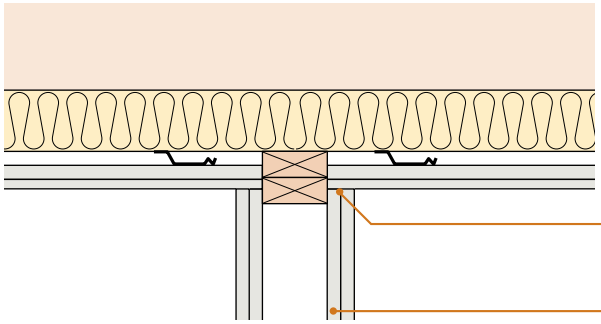
Alternative detail

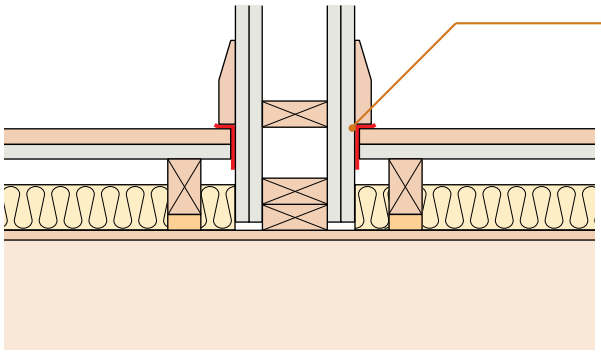
3. Internal wall junction (non loadbearing)





4. Internal wall junction (loadbearing)





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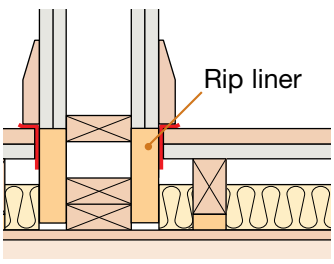


5. Ceiling treatment for E-FT-2

Timber floor ceiling treatment must be either CT1, CT2 or CT3 (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)

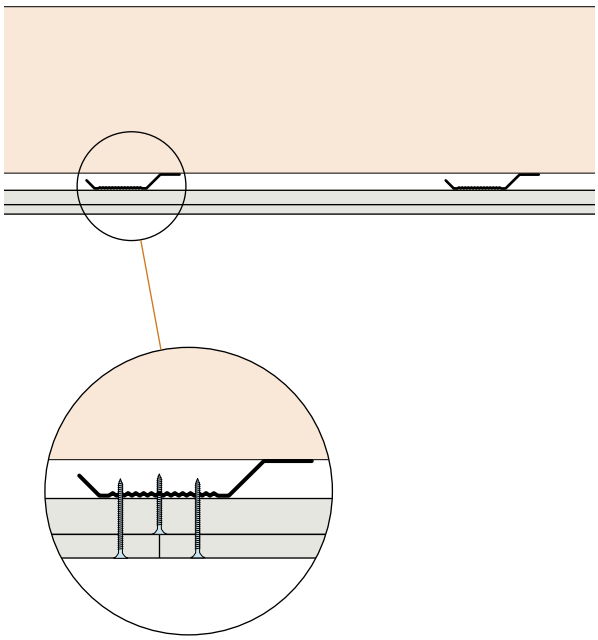
Downlighters and recessed lighting

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 8 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

25mm (min) resilient bars with CT3

25mm (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 CT3

Two layers of gypsum-based board, composed of 10mm (nominal 12 kg/m²) fixed with 30mm screws and second layer of 10mm (nominal 12 kg/m²) fixed with 30mm screws

6. Floating floor treatment for E-FT-2

Floating floor treatment:

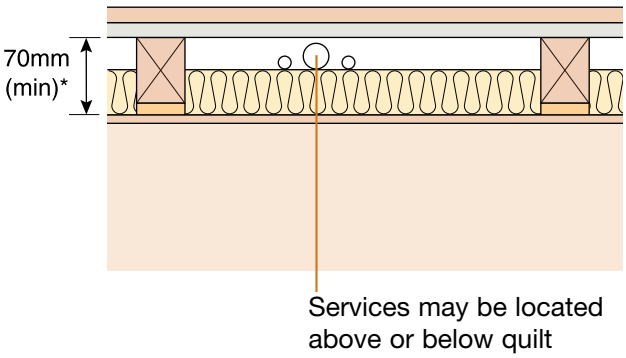
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB and rd $\Delta L_w = 15$dB - see Appendix C.

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

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

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

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



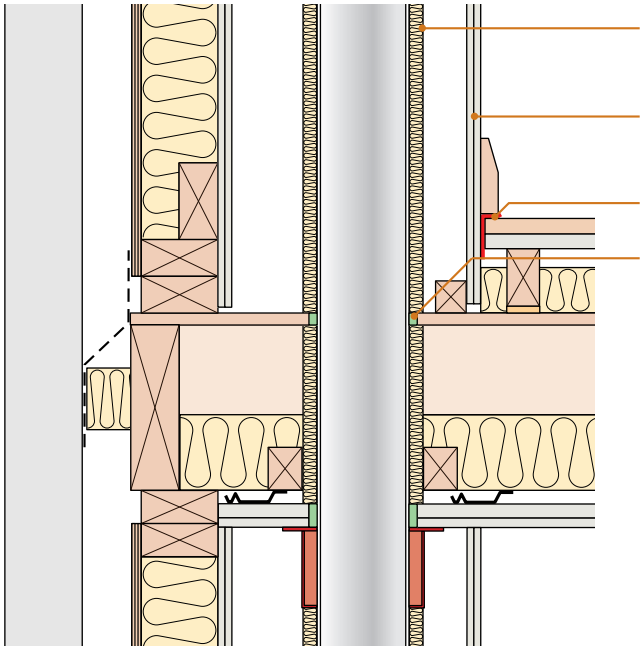
FFT1 – Resilient composite deep batten system for E-FT-2

- 18 mm (min) t&g flooring board
- gypsum-based board nominal 13.5 kg/m^2
- FFT-1 resilient composite deep battens
- resilient layer must be continuous and pre-bonded to batten
- battens may have the resilient layer at the top or the bottom
- 60mm (min) 10-36 kg/m^3 mineral wool quilt laid between battens
- ensure any services do not bridge the resilient layer

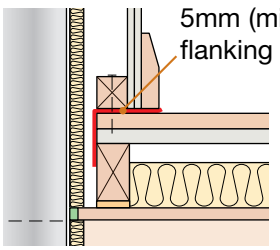
Cellecta HiDECK Structural system

- refer to Appendix A3

7. Services – pipes through separating floor



Section



Alternative detail

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

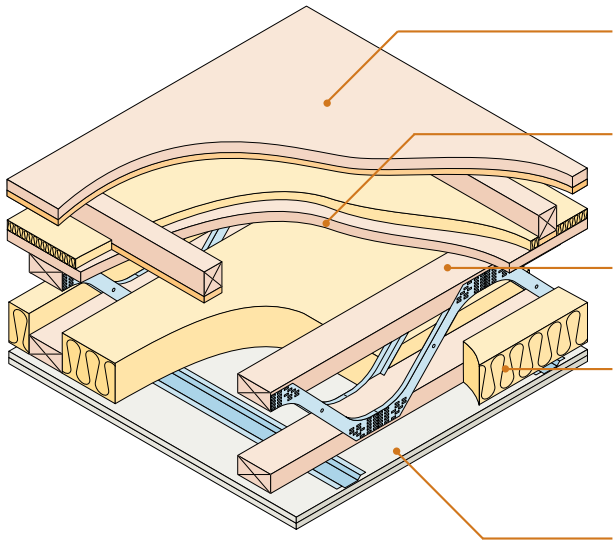
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are solid timber joists at least 220mm deep, or at least 240mm deep if joists installed at greater than 400mm centres?			
2.	Has the specified quilt been fitted between the joists?			
3.	Are resilient ceiling bars fitted at right angles to the joists?			
4.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
5.	Is floor decking 11mm thick (min); or 15mm thick (min) if joists at greater than 400mm centres?			
6.	Has floating floor treatment been fitted in accordance with the manufacturer's instructions?			
7.	Has the specified quilt been fitted between the floor battens?			
8.	Is ceiling treatment CT1, CT2 or CT3 fixed to the resilient bars with correct screws such that the screws do not touch or penetrate the joists?			
9.	Are all joints sealed with tape or caulked with sealant?			
10.	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?			
11.	Have all resilient flanking strips been fitted?			
12.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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
- Prestoplan PresWeb
- WOLF easi-joist
- ITW Gang-Nail Ecojoist
- ITW Alpine SpaceJoist

Notes:

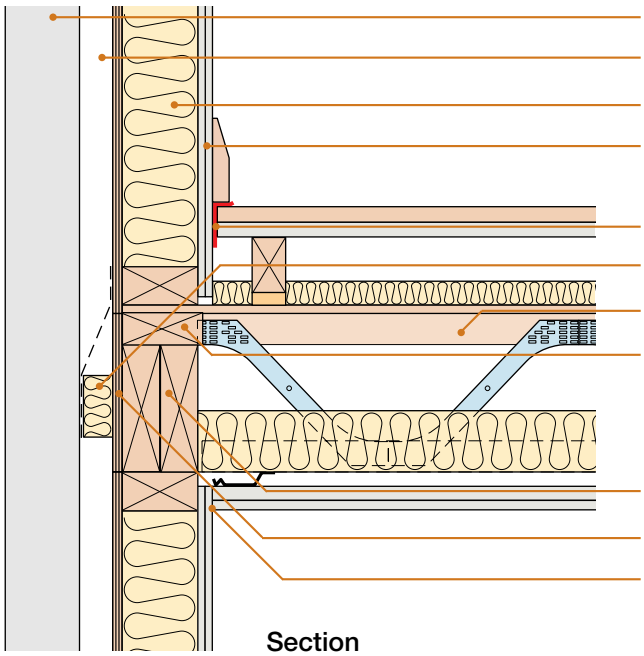
Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

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

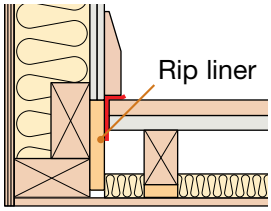
1. External (flanking) wall junction (top chord supported)



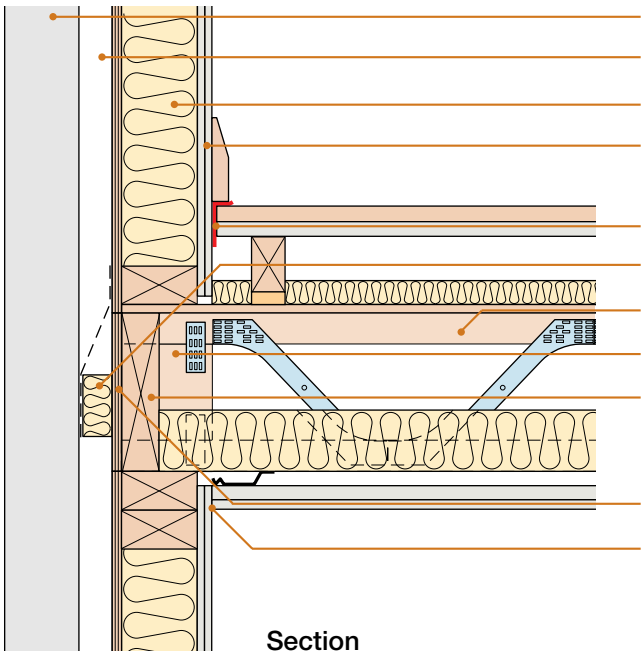
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Softwood timber infill 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



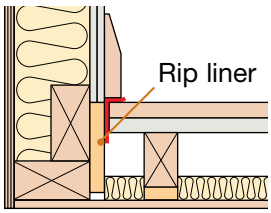
2. External (flanking) wall junction (fully built-in)



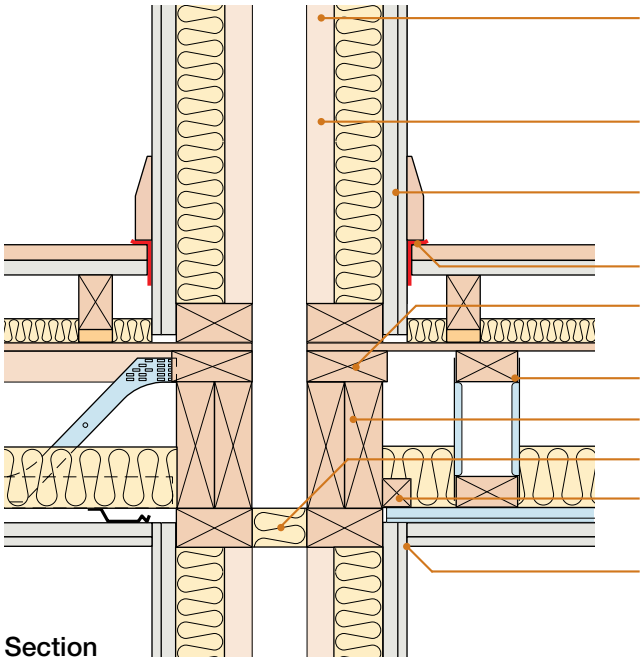
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Trimmable blocking 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

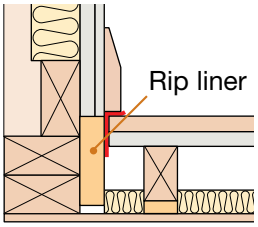


3. Separating wall junction (top chord supported)



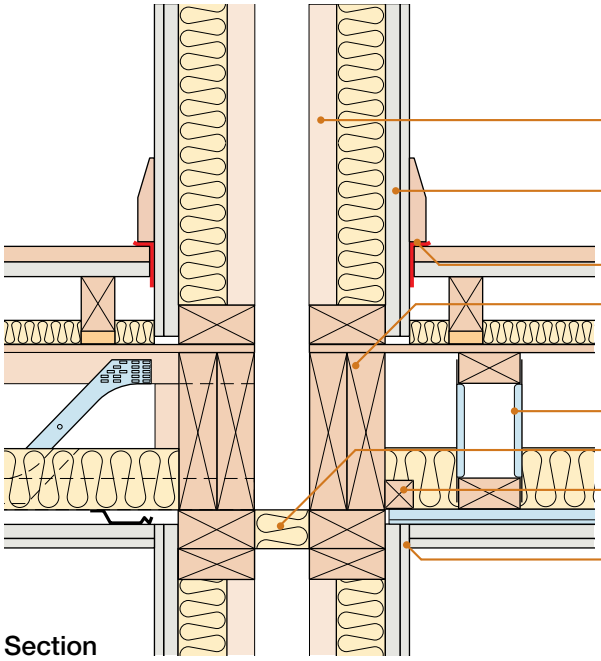
Section

- 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



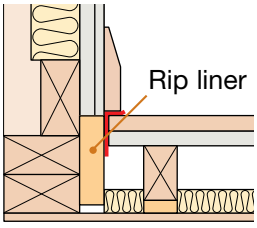
Alternative detail

4. Separating wall junction (fully built-in)



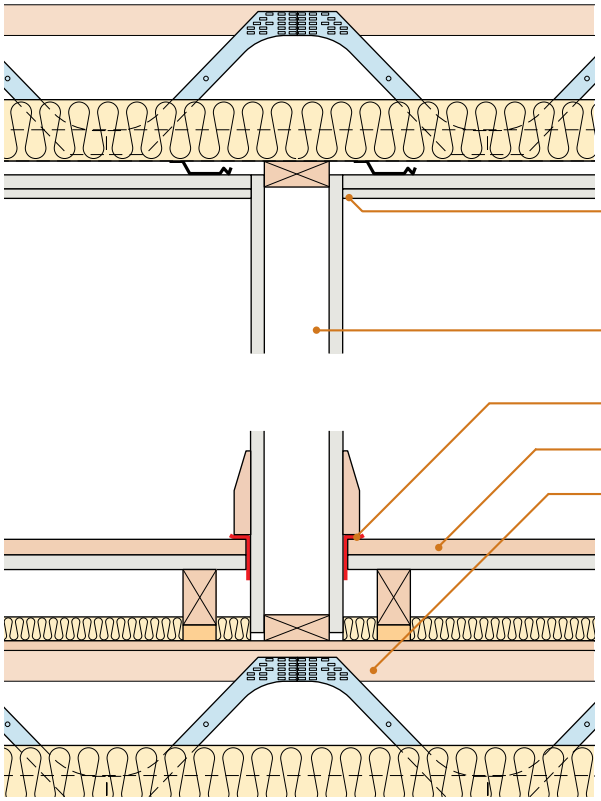
Section

- 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



Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2

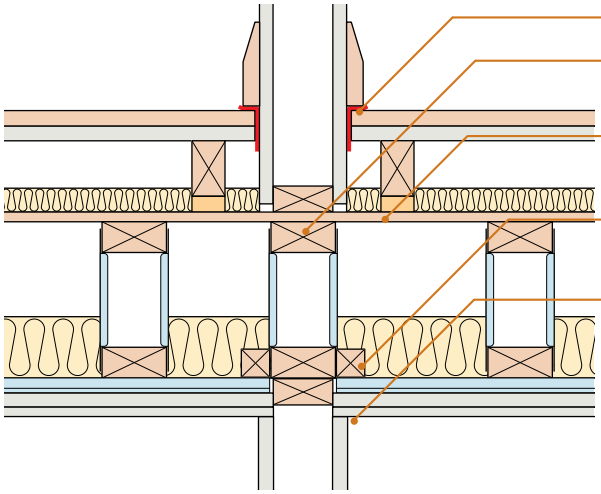
5mm (min) resilient flanking strip

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

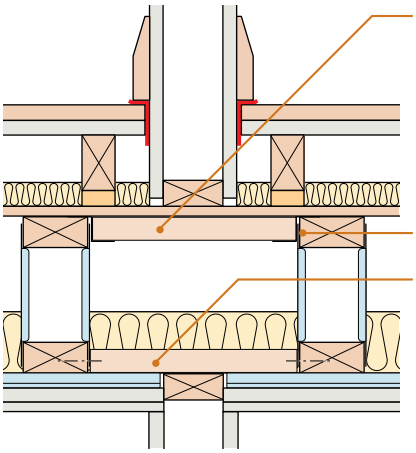
Floor decking

Softwood timber noggings for resilient bar support (leave a small gap at end of resilient bar)

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

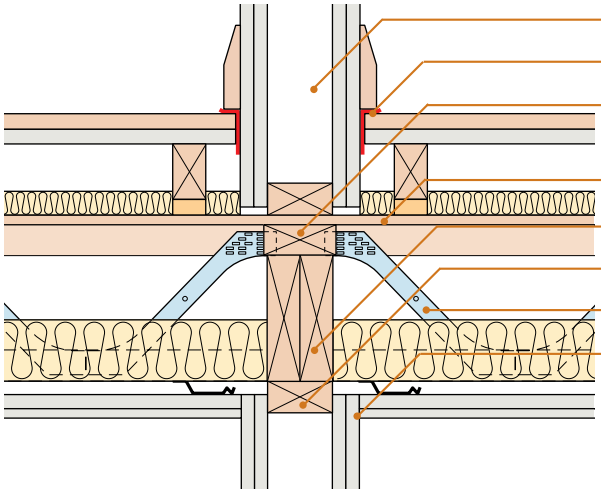


89 x 38mm (min) noggings hung on Z Clips at each end at 600mm c/c (max)

Z Clip

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

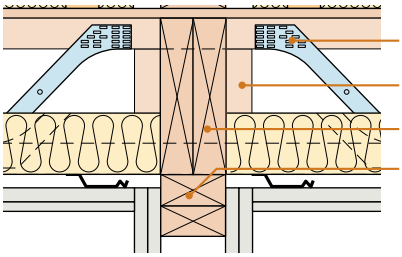
7. Loadbearing internal wall perpendicular to joists



- 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

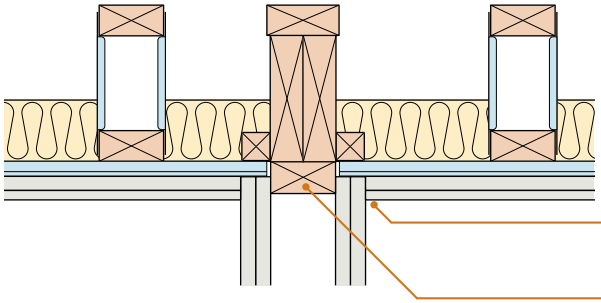
Note: Detail shows top chord/flange supported

Alternative detail

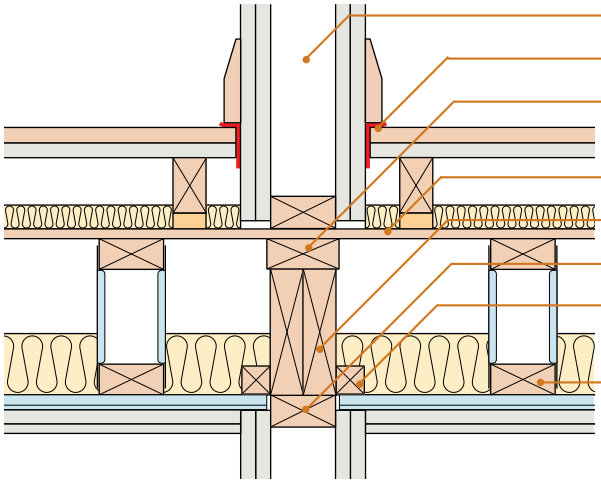


- Metal web joist (see joist type, page 1)
- Timber blocking to joist
- Internal wall beam
- Headplate fixed to internal wall beams

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

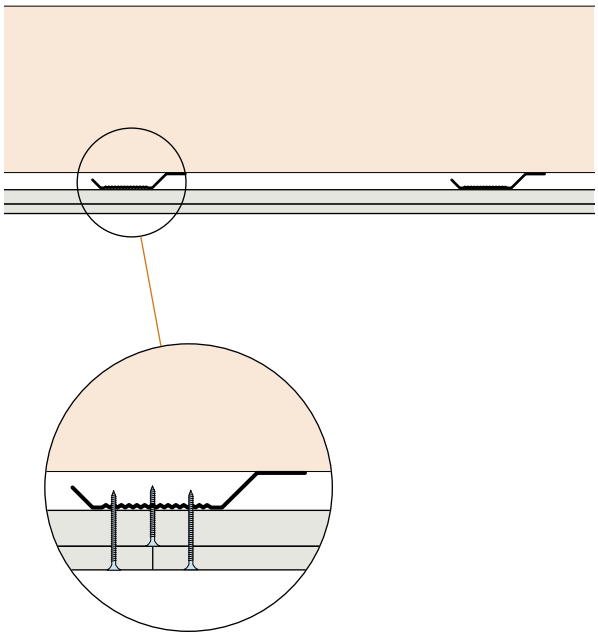
9. Ceiling treatment for E-FT-3

Timber floor ceiling treatment must be either CT1, CT2 or CT3 (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

25mm (min) resilient bars with CT3

25mm (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 CT3

Two layers of gypsum-based board, composed of 10mm (nominal 12kg/m²) fixed with 30mm screws and second layer of 10mm (nominal 12kg/m²) fixed with 30mm screws

10. Floating floor treatment for E-FT-3

Floating floor treatment:

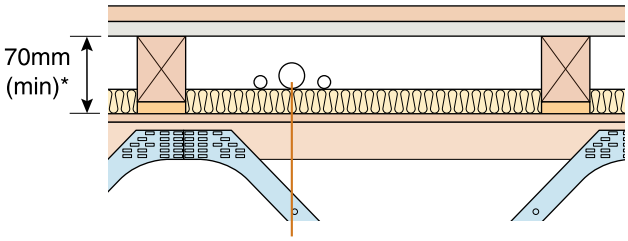
a) Must achieve a minimum laboratory performance of rd$\Delta R_w + C_{tr}$ = 13dB and rdΔL_w = 15dB - see Appendix C.

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

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

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

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



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

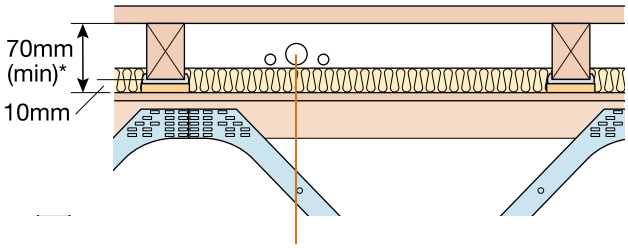
FFT1 – Resilient composite deep batten system for E-FT-3

- 18 mm (min) t&g flooring board
- gypsum-based board nominal 13.5 kg/m^2
- FFT1 resilient composite deep battens
- battens may have the resilient layer at the top or the bottom
- 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

* Note - Services may run within the floor zone (see Appendix A)

Cellecta HiDECK Structural system

- refer to Appendix A3



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

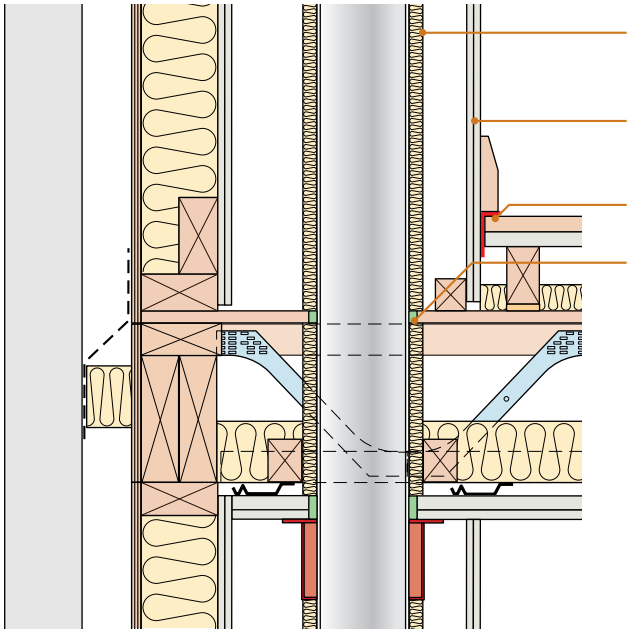
FFT2 – Resilient cradle and batten system for E-FT-3
Ensure cradles are aligned over joist positions

- 18 mm (min) t&g flooring board
- cradle and batten
- 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

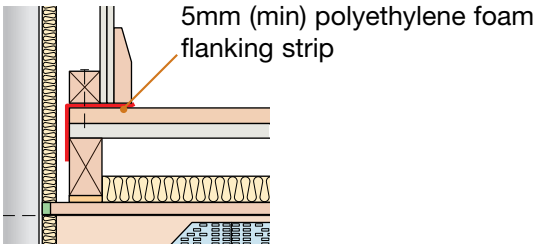
- refer to Appendix A3

11. Services – pipes through separating floor



Section

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



Alternative detail

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

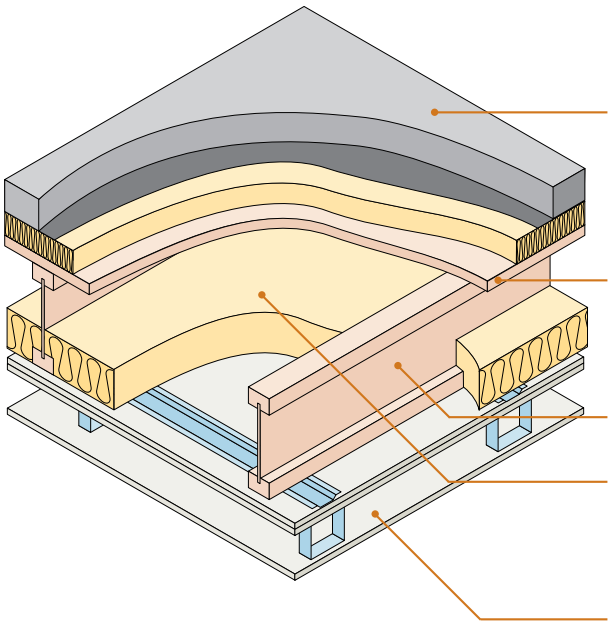
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are correct metal web joists being used (see page 1 of Robust Detail)?			
2.	Which of the permitted metal web joist types are being used?			
3.	Are joists at least 253mm deep?			
4.	Has the specified quilt been fitted between the joists?			
5.	Are resilient ceiling bars fitted at right angles to the joists?			
6.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
7.	Has floating floor treatment been fitted in accordance with the manufacturer's instructions?			
8.	Has the specified quilt been fitted between the floor battens?			
9.	Is ceiling treatment CT1, CT2 or CT3 fixed to the resilient bars with correct screws such that the screws do not touch or penetrate the joists?			
10.	Are all joints to gypsum-based boards sealed with tape or caulked with sealant?			
11.	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?			
12.	Have all resilient flanking strips been fitted?			
13.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Timber I-Joists E-FT-4

Finnforest SoundBar Systems ■
Use with timber frame walls only ■



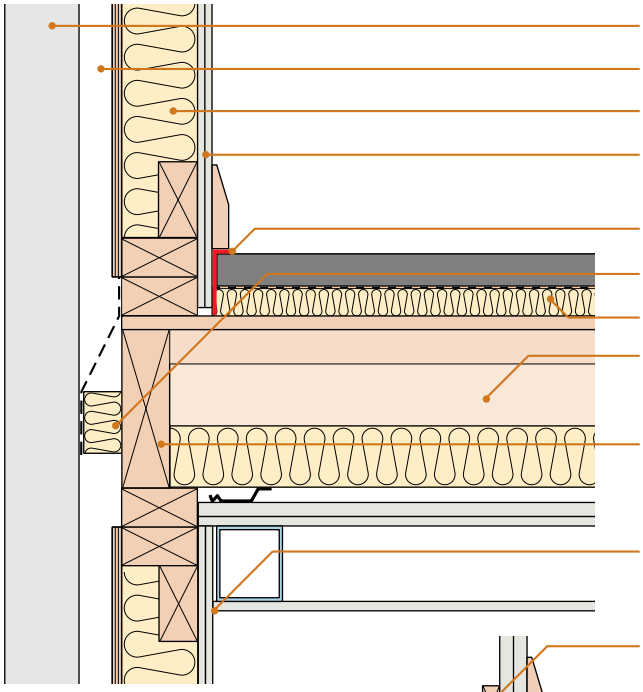
Floating floor	40mm Gyvlon SoundBar screed on minimum 500 gauge polythene on 34mm Finnforest SoundBar Board
Floor decking	15mm thick (min) wood based board, density 600 kg/m^3 (min)
Joists	220mm (min) Finnjoists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m^3) between joists
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.

DO

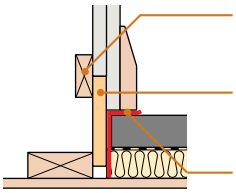
- Lay quilt (min 100mm thick) between all joists, including doubled up Finnjoists, ensuring no gaps remain
- Ensure Finnforest floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure 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
SoundBar perimeter edge strip
Close cavity with a cavity stop (see Appendix A)
Finnforest SoundBar Board
Finnjoists 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

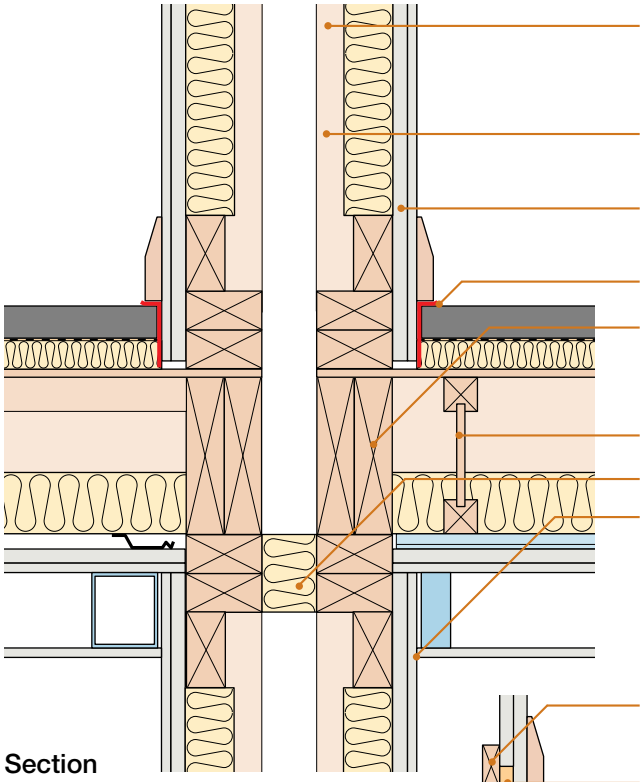
Section



Timber batten to support joint. Alternatively, proprietary metal strap can be used
Gypsum-based board rip liner (thickness as first layer of main wall lining)
SoundBar perimeter edge strip

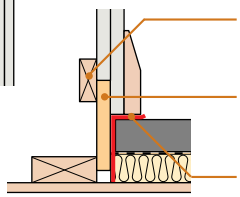
Alternative detail

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
SoundBar perimeter edge strip
Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall
Finnjoists may span in either direction
Close cavity with a cavity stop (see Appendix A)
Seal all perimeter joints with tape or caulk with sealant

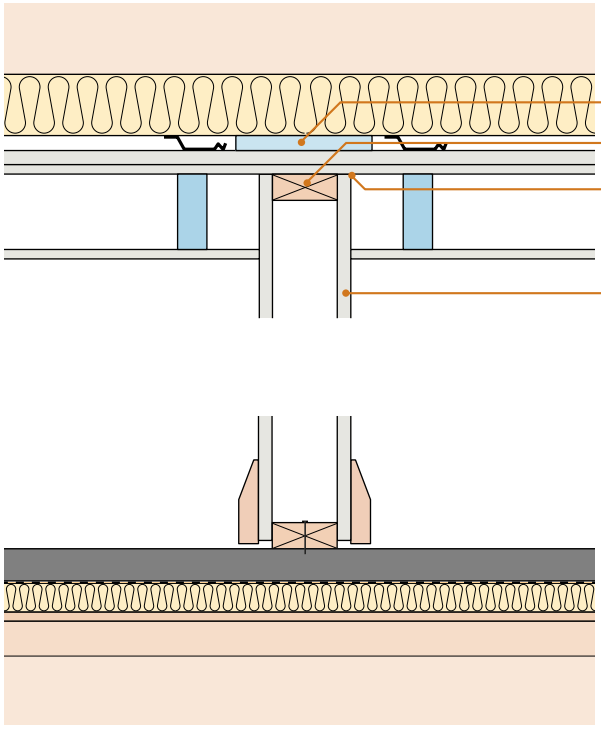
Section



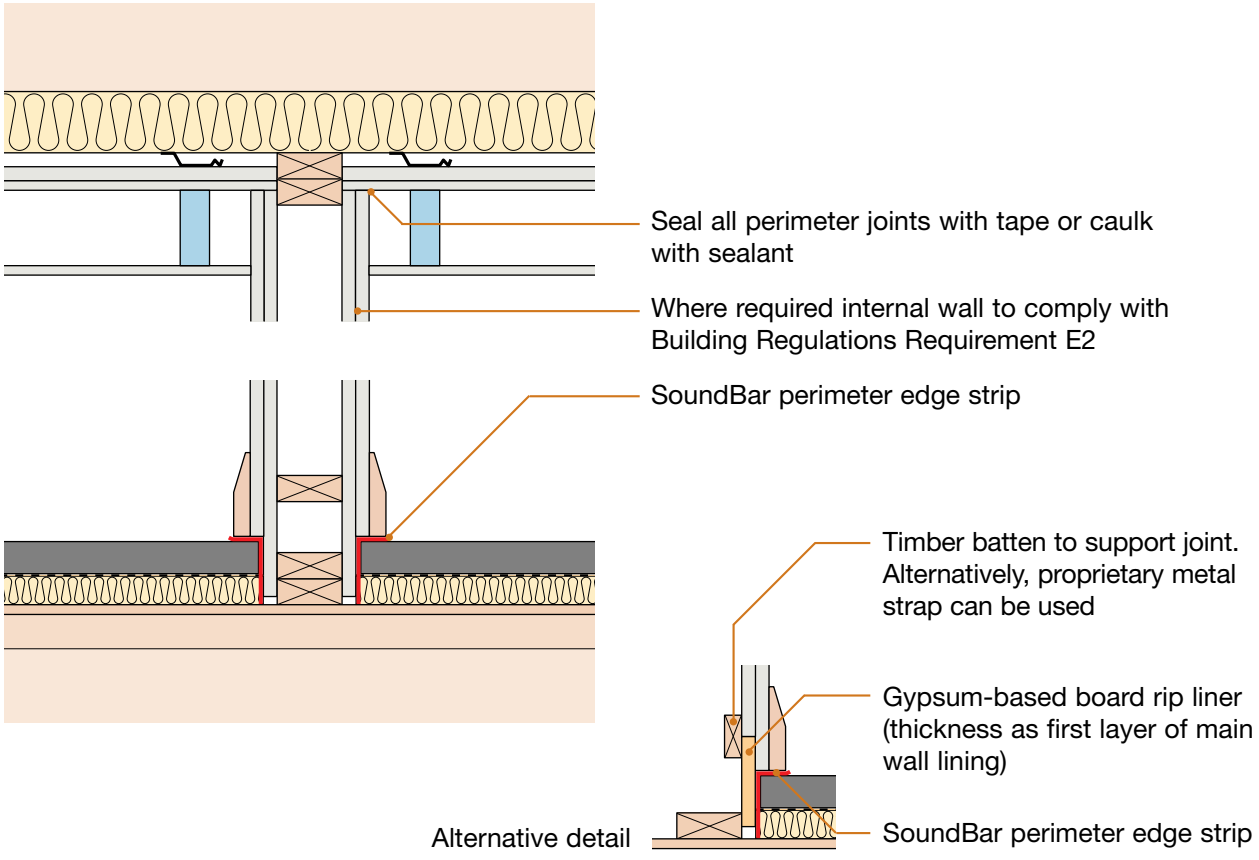
Timber batten to support joint. Alternatively, proprietary metal strap can be used
Gypsum-based board rip liner (thickness as first layer of main wall lining)
SoundBar perimeter edge strip

Alternative detail

3. Internal wall junction (non loadbearing)



4. Internal wall junction (loadbearing)



5. Ceiling treatment for E-FT-4

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

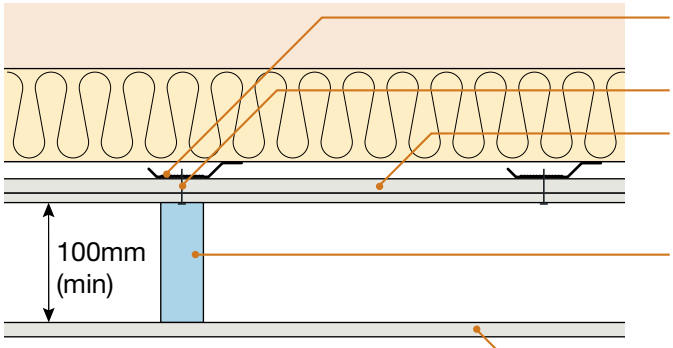
Ensure ceiling layers have staggered joints.

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

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



Min 16mm resilient bars at 400mm centres, mounted at right angles to joists

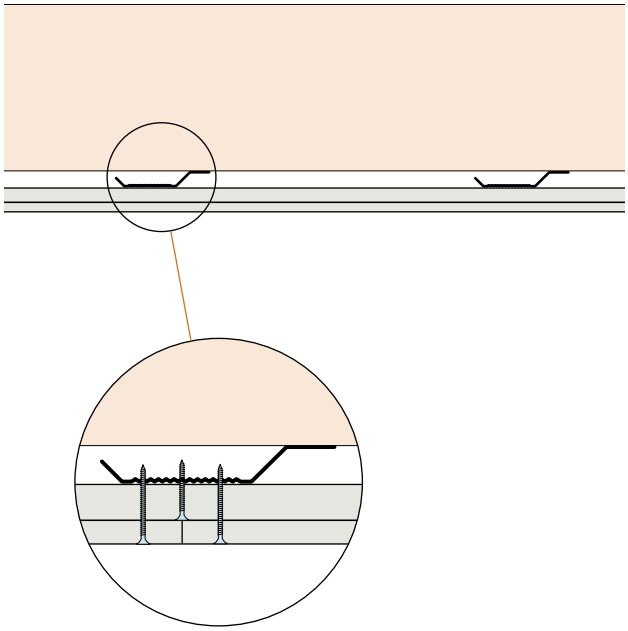
See detail CT2

Two layers gypsum-based board nominal mass per unit area 12.5 kg/m^2 per layer (see below)

100mm (min) metal frame suspended service ceiling supported from resilient bars only according to manufacturer's instructions. See Appendix A

12.5mm ceiling board (nominal 8 kg/m^2)

*Note - Ensure that there is no contact between screws and joists



Ceiling treatment CT2

Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m^2) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m^2) fixed with 42mm screws

16mm (min) resilient bars with 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

6. Floating floor treatment for E-FT-4

Floating floor treatment:

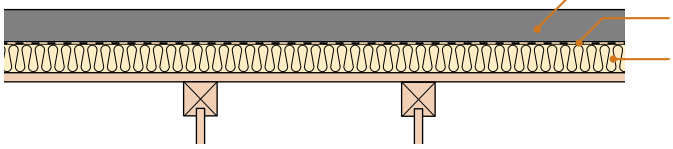
a) Must be installed in accordance with the manufacturer's instructions.

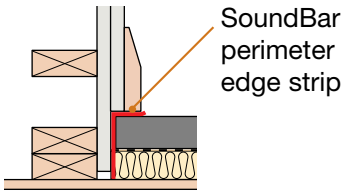
b) Require 10mm SoundBar resilient flanking strips around perimeter.

c) Isolate the screed at all abutments with walls, columns, bases, etc., to full depth of screed using 10mm SoundBar resilient flanking strip.

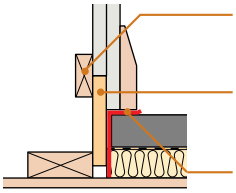
d) Flanking strip to extend a minimum 130mm above structural deck.

e) Lay separating polythene slip layer (min. 500 gauge) over SoundBar board, lapping 100mm at joints and taping all joints.

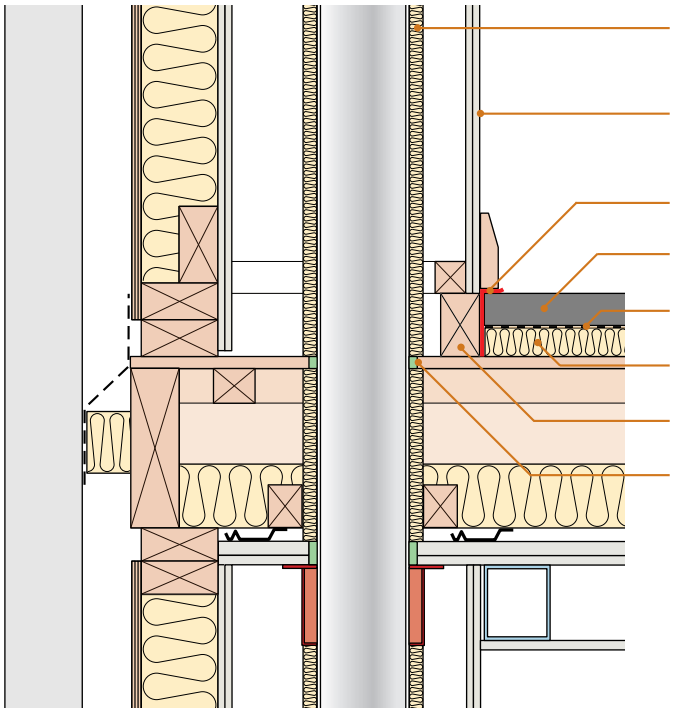




Alternative detail



7. Services – pipes through separating floor



Section

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are timber Finnjoists at least 220mm deep?			
2.	Where used, is rip detail correct?			
3.	Are SoundBar perimeter edge strips installed correctly?			
4.	Has the SoundBar floating floor treatment been fitted in accordance with the manufacturer's instructions?			
5.	Are resilient ceiling bars fitted at right angles to the joists?			
6.	Has quilt (min 100mm thick) been fitted between the joists?			
7.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
8.	Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
9.	Is service void minimum 100mm?			
10.	Are all joints sealed with tape or caulked with sealant?			
11.	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?			
12.	Is separating floor satisfactorily complete?			

Contact details for technical assistance from Finnforest, manufacturer of SoundBar floor system:

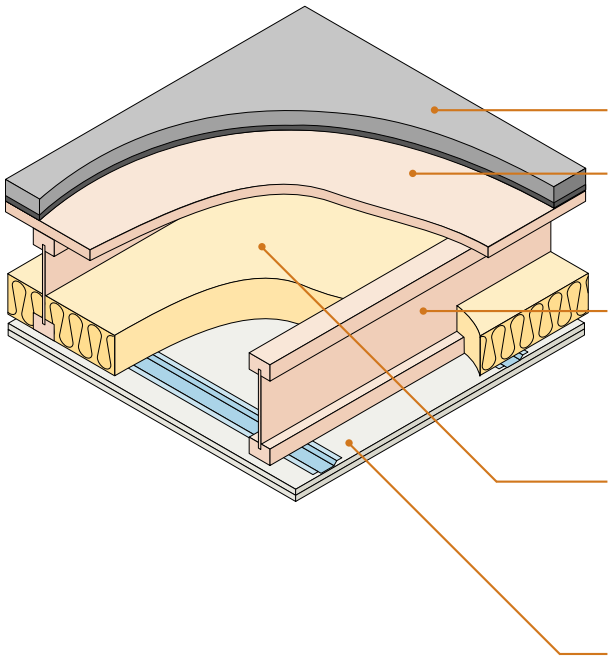
Telephone: 01205 883835 **Fax:** 01205 362519 **E-mail:** soundbar@finnforest.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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

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



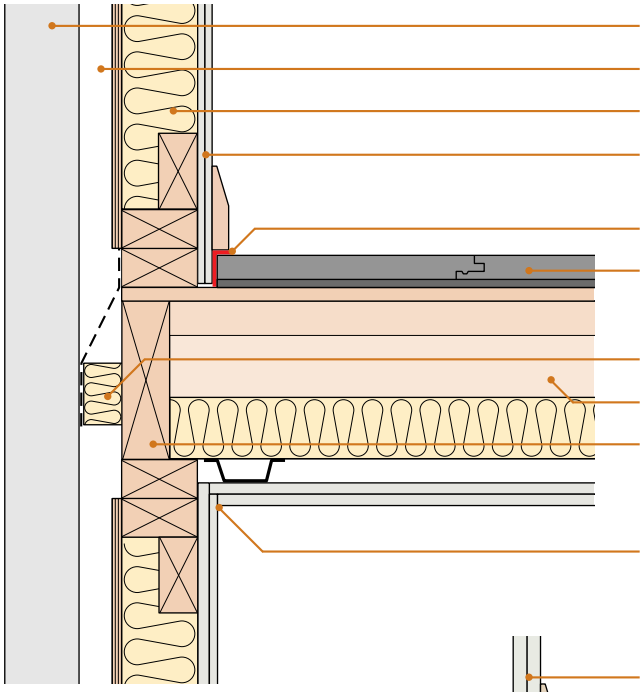
Floating floor	*Cellecta*® ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	235mm (min) timber I-joist, 240mm (min) where no second ceiling is included. See section 5
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or *Cellecta*®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

DO

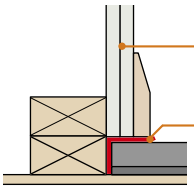
- Lay quilt (min 100mm thick) or *Cellecta*® MICRO 50 between all joists, including doubled up timber I-joists, ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all *Cellecta*® ScreedBoard® 28 decking joints
- Install *Cellecta*® YELO*fon*® FS50 flanking angle around the perimeter of the *Cellecta*® 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

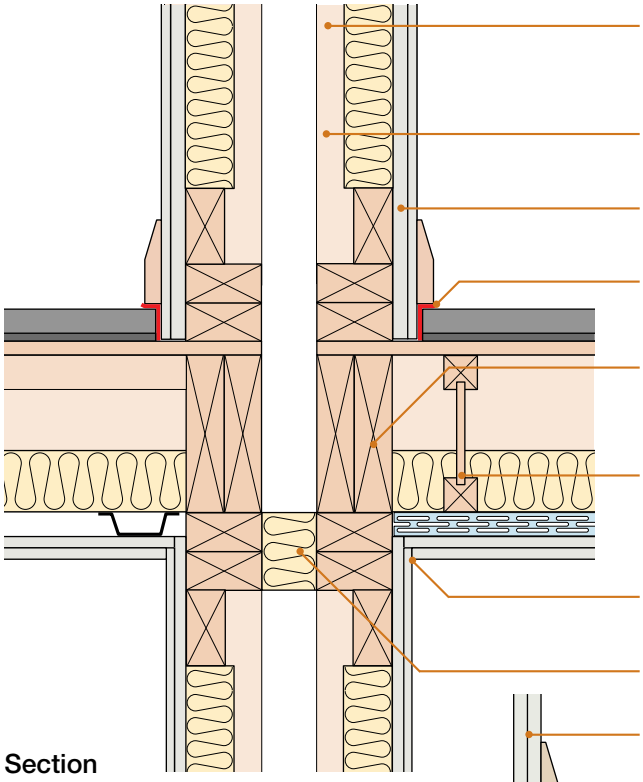
Section



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

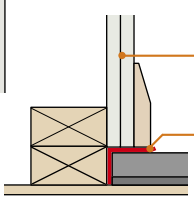
Alternative detail

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)

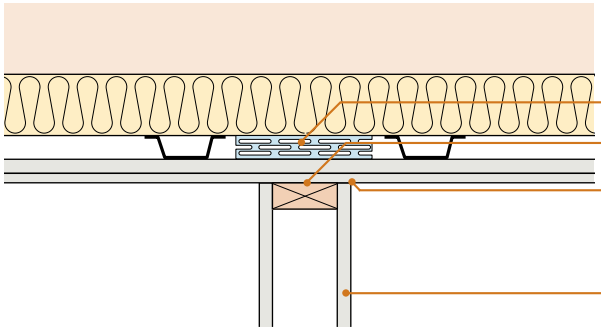
Section



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

Alternative detail

3. Internal wall junction (non loadbearing)

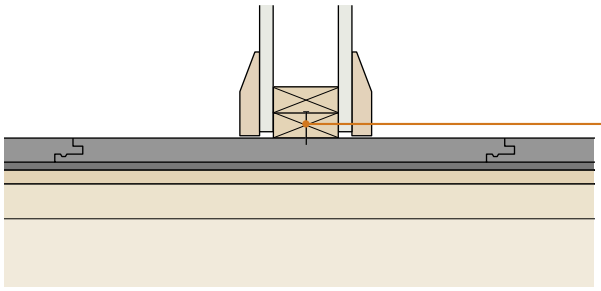


Resilient bar nogging

Headplate fixed to resilient bar nogging

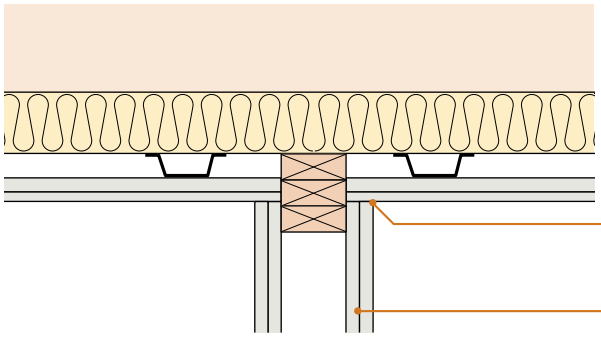
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



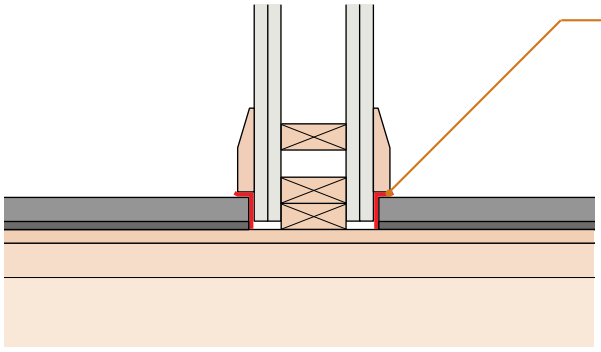
Ensure fixings do not penetrate the resilient layer

4. Internal wall junction (loadbearing)

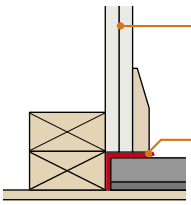


Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



YELO*fon*® FS50 flanking angle



Two layers gypsum-based board nominal 8 kg/m² each layer

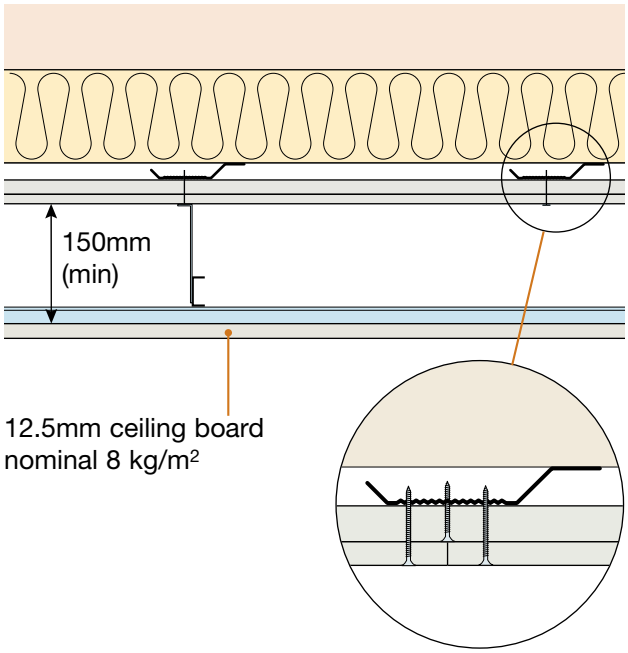
YELO*fon*® FS50 flanking angle

Alternative detail

5. Ceiling treatment for E-FT-5

- 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

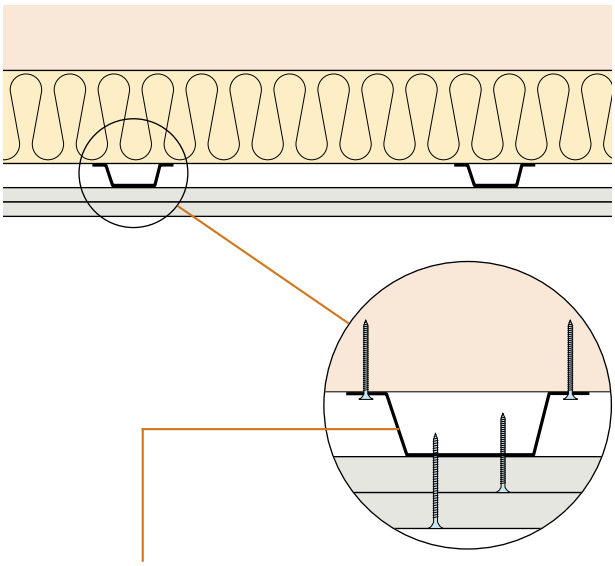
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

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 – min. 240mm Joists. Second ceiling optional



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

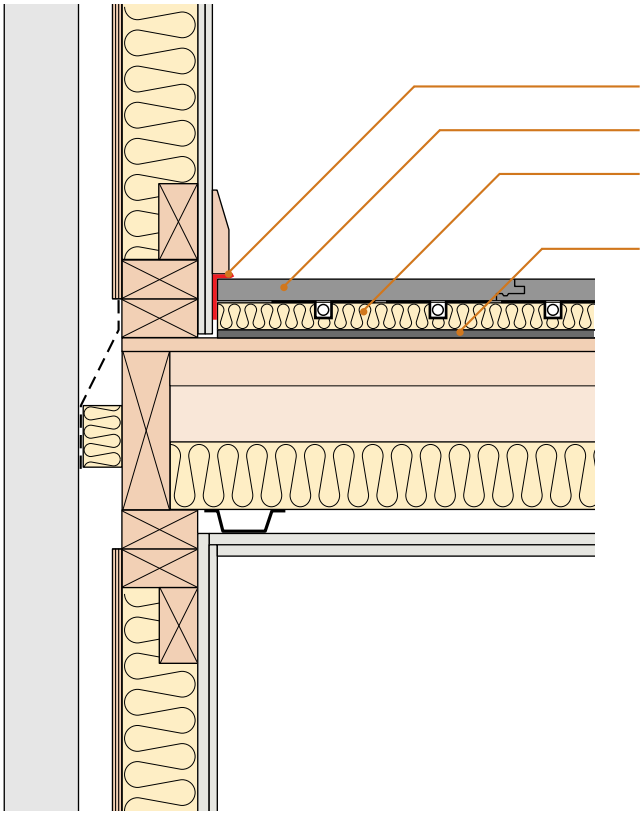
Downlighters or recessed lighting may be installed in the primary ceiling:

- 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.

6. Underfloor heating systems below ScreedBoard®

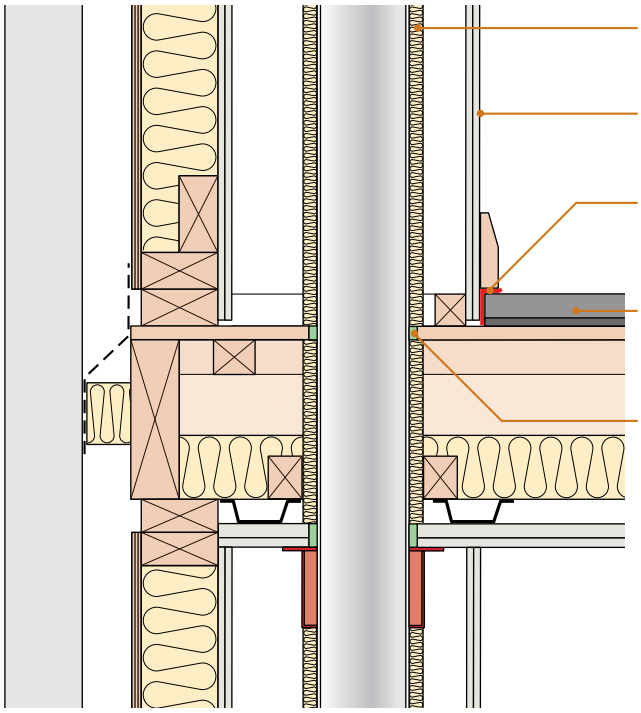


Cellecta® Mojave® S1-8 or S2-8 system;
or use the following components:

- 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.	Are timber I-joists minimum 235mm deep? (see also point 6 below)			
2.	Is sub-deck minimum 18mm, 600 kg/m^3?			
3.	Are YELO*fon*® FS50 flanking angles installed correctly?			
4.	Has the ScreedBoard® 28 floating floor treatment been fitted in accordance with the manufacturer's instructions?			
5.	Where underfloor heating is used, is FIBRE*fon*® 8 installed in addition to the ScreedBoard® 20?			
6.	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)?			
7.	Has the specified quilt been fitted between the joists?			
8.	Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
9.	For CT1 or CT2 is secondary ceiling void minimum 150mm?			
10.	Are all joints sealed with tape or caulked with sealant?			
11.	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?			
12.	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

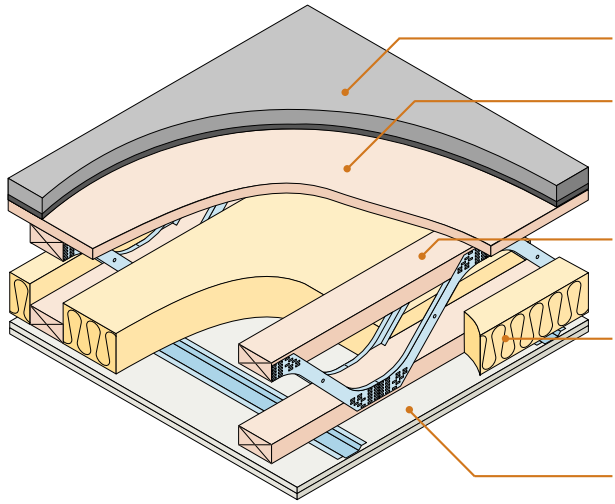
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

® UK registered trade mark no. 2291665

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
- Prestoplan PresWeb
- WOLF easi-joist
- ITW Gang-Nail Ecojoist
- ITW Alpine SpaceJoist

Notes:

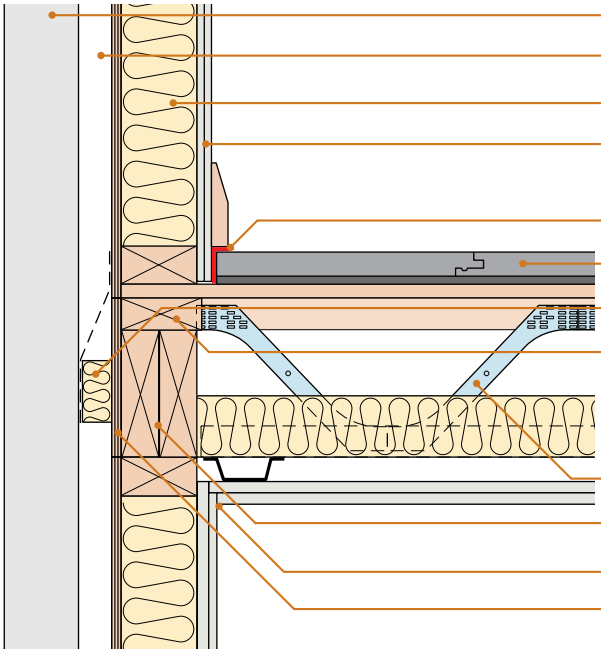
Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

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

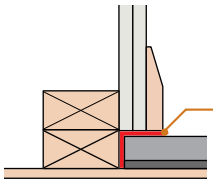
- Ensure correct metal web joists are being used (see joist type)
- Lay quilt (min 100mm thick) between joists ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all ScreedBoard® 28 decking joints
- Install *Cellecta*® YELO*fon*® FS50 flanking angle around the perimeter of the ScreedBoard® 28 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

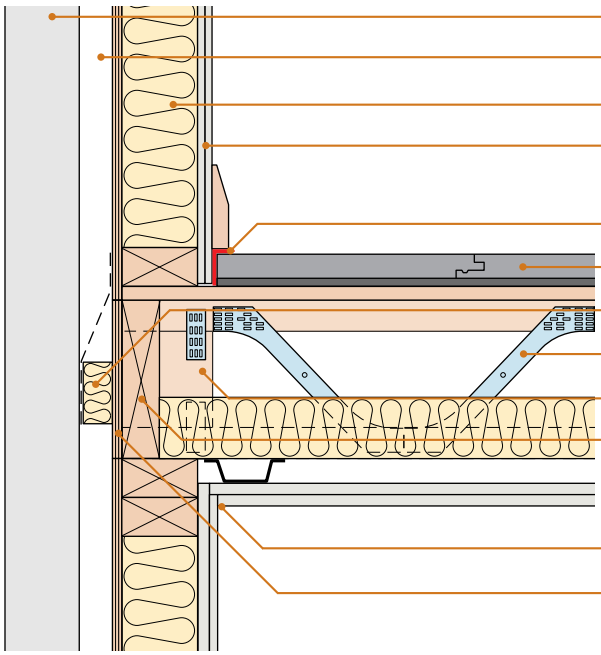
Section



- YELO*fon*® FS50 flanking angle

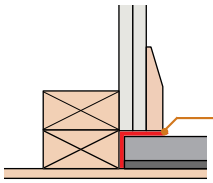
Alternative detail

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

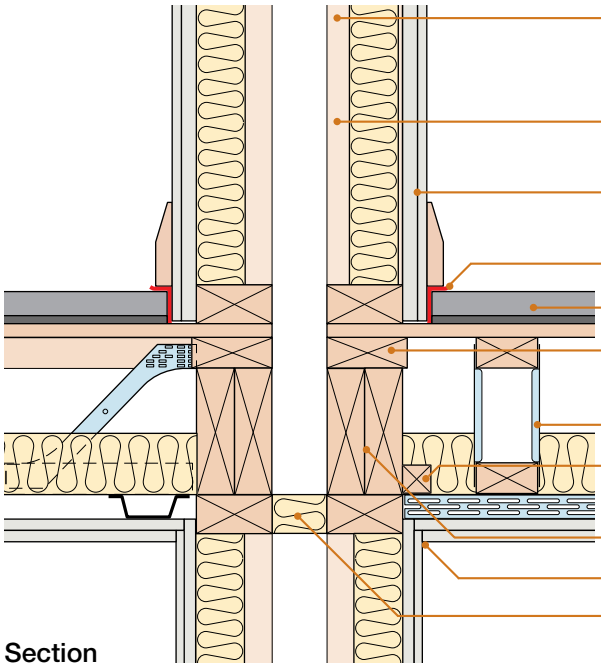
Section



- YELO*fon*® FS50 flanking angle

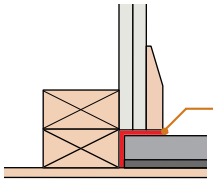
Alternative detail

3. Separating wall junction (top chord supported)



Section

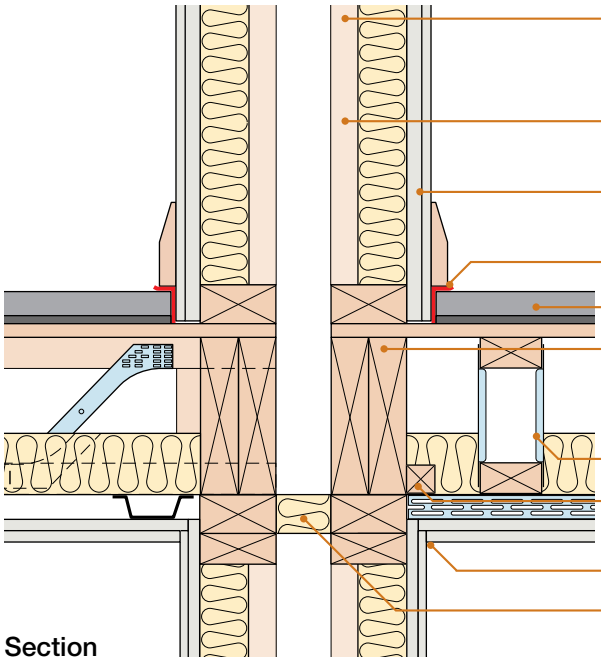
- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- YELO*fon*® FS50 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

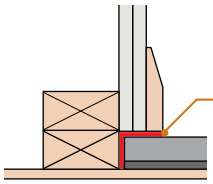
- YELO*fon*® FS50 flanking angle

4. Separating wall junction (fully built-in)



Section

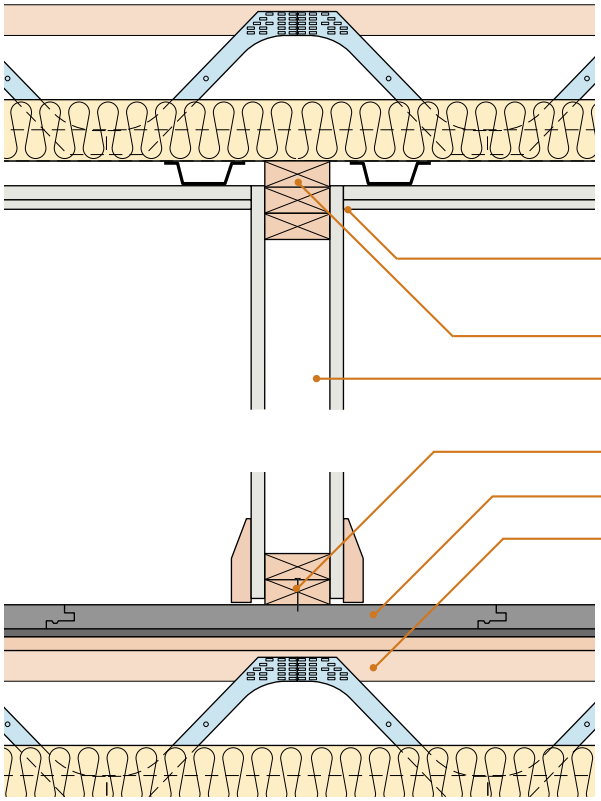
- If using robustdetails® for wall - refer to Table 3b in introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Two layers gypsum-based board total nominal mass per unit area 22 kg/m² both sides
- YELO*fon*® FS50 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



Seal all perimeter joints with tape or caulk with sealant

Headplate fixed to joist

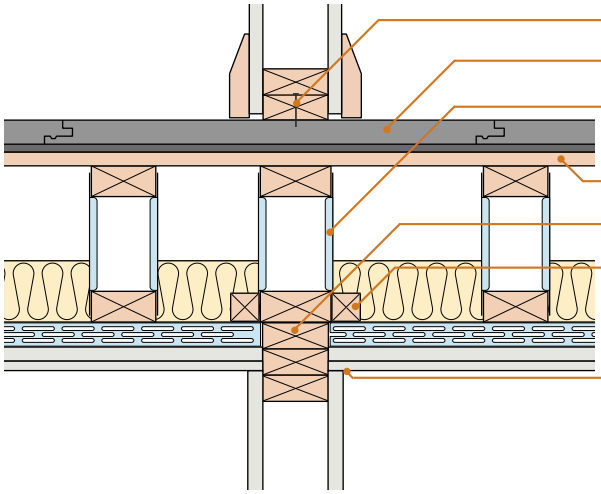
Where required internal wall to comply with Building Regulations Requirement E2

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

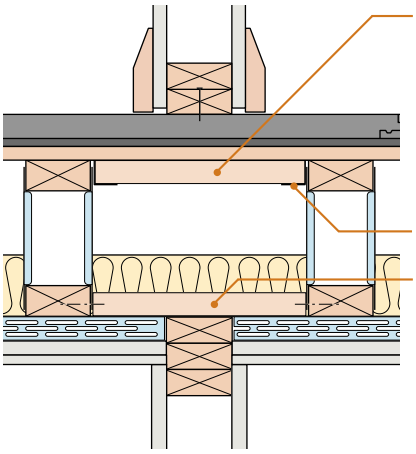
Extra metal web joist (see joist type, page 1) under internal wall

Floor decking

Headplate fixed to joist

Softwood timber noggings for resilient bar support (leave a small gap at end of resilient bar)

Seal all perimeter joints with tape or caulk with sealant



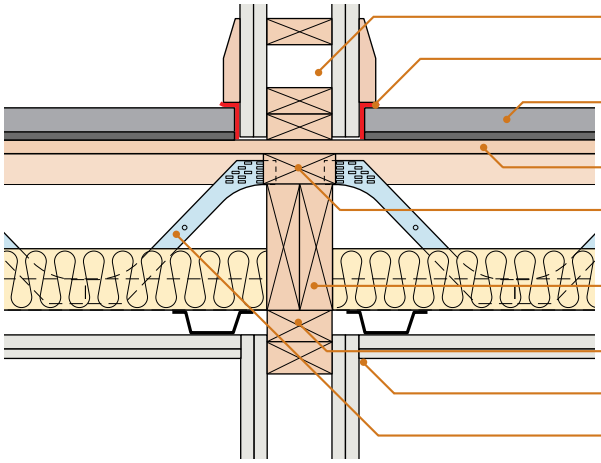
89 x 38mm (min) noggings hung on Z Clips at each end at 600mm c/c (max)

Z Clip

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

Alternative detail

7. Loadbearing internal wall perpendicular to joists

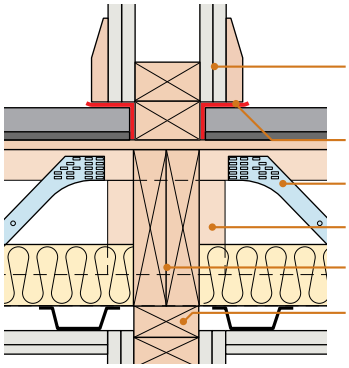


- Internal loadbearing wall
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Floor decking
- Softwood timber infill between supporting top chords/flanges where required
- Internal wall beams
- Headplate fixed to internal wall beams
- Seal all perimeter joints with tape or caulk with sealant
- Metal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

Note:

Main detail shows top chord/flange supported

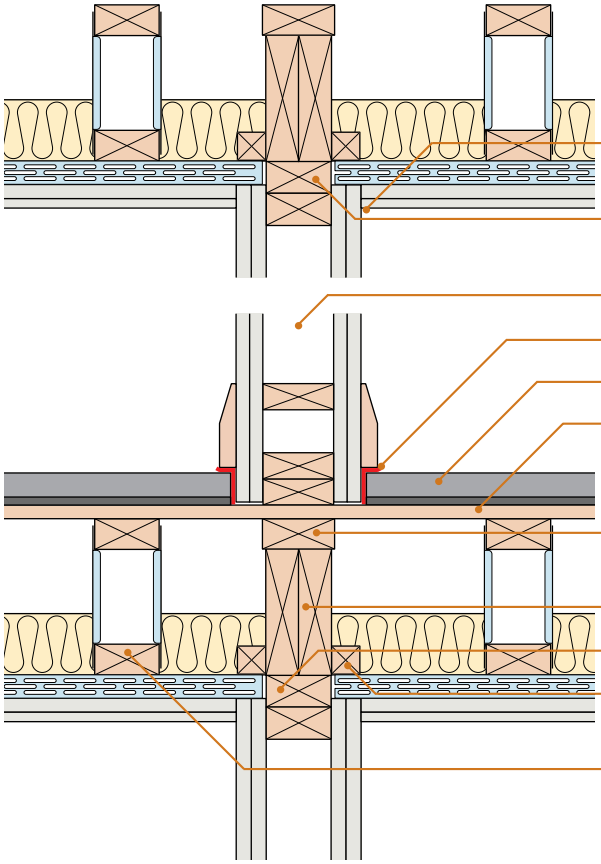
Alternative detail shows bottom chord supported



Alternative detail

- Two layers gypsum-based board nominal 8 kg/m² 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



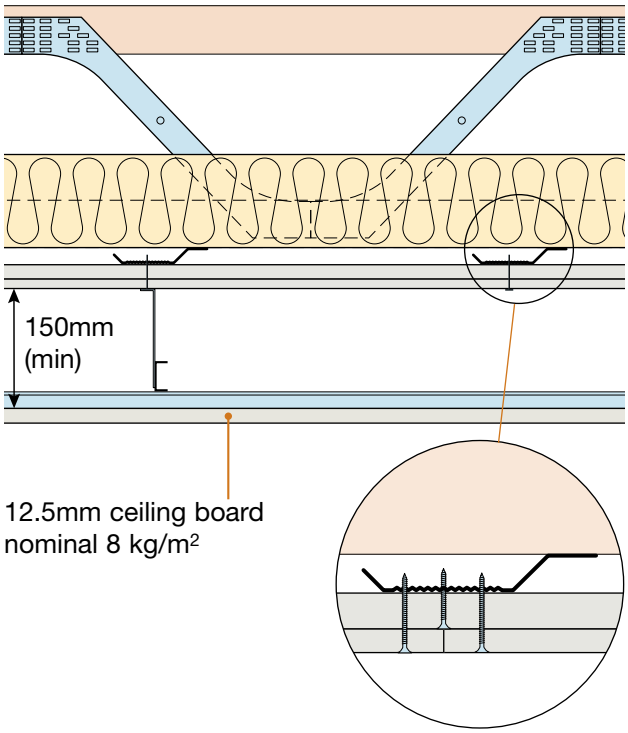
- Seal all perimeter joints with tape or caulk with sealant
- Headplate fixed to internal wall beams
- Internal loadbearing wall
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- Floor decking
- Softwood timber infill between supporting top chords/flanges where required
- Internal wall beams
- Headplate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

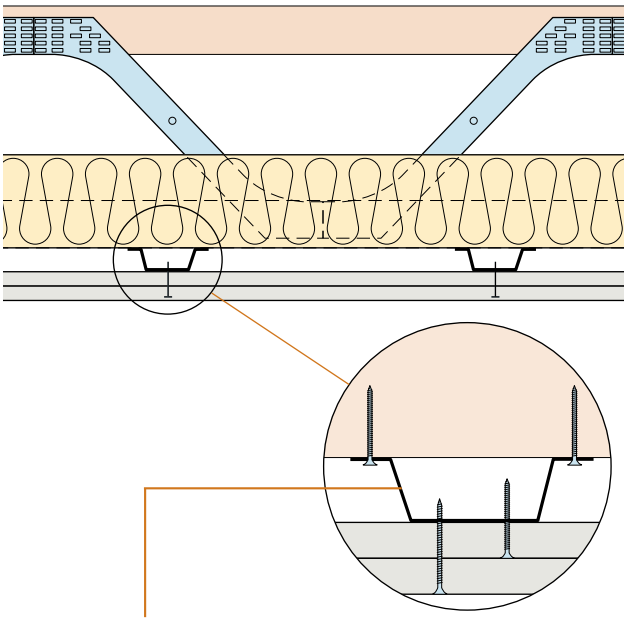
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

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

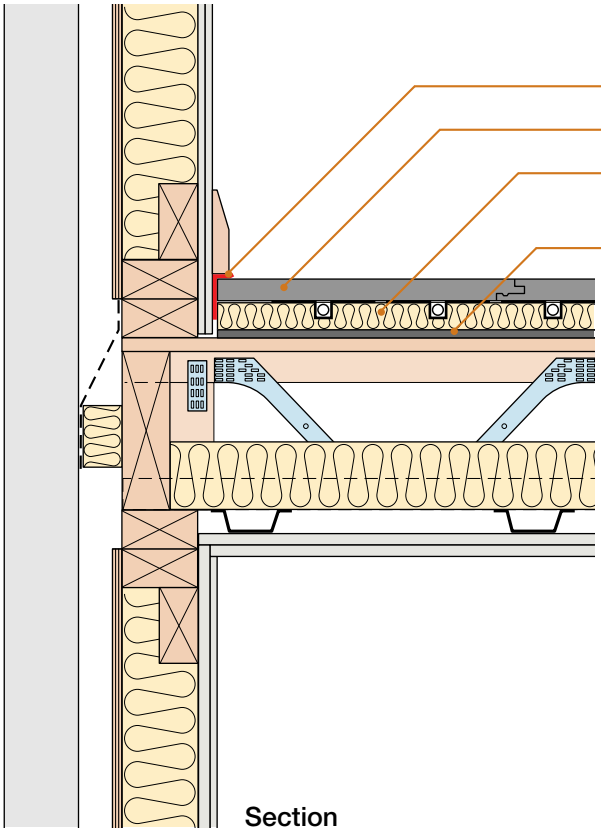
Downlighters or recessed lighting may be installed in the primary ceiling:

- 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®

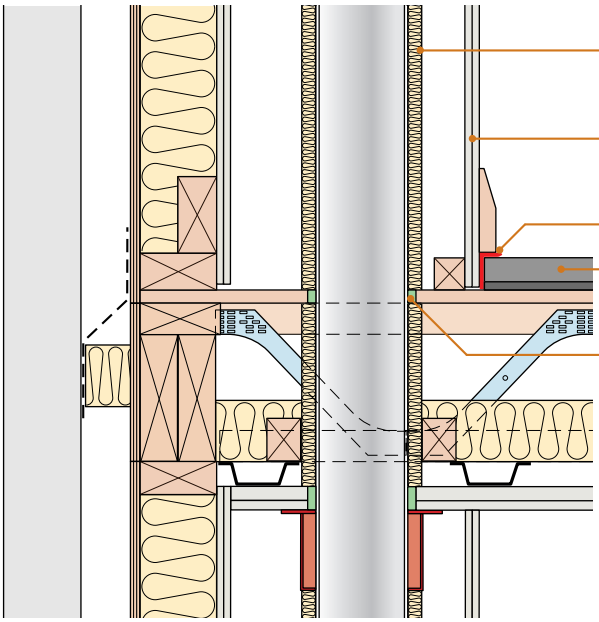


Cellecta® Mojave® S1-8 or S2-8 system;
or use the following components:

- 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

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
- YELO*fon*® FS50 flanking angle
- ScreedBoard® 28
- All voids around pipe sealed

Section

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.	Are correct metal web joists being used (see page 1 of Robust Detail)?			
2.	Which of the permitted metal web joist types are being used?			
3.	Are joists at least 253mm deep?			
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 must be used if second ceiling is not included)?			
8.	Has quilt (min 100mm thick) 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:

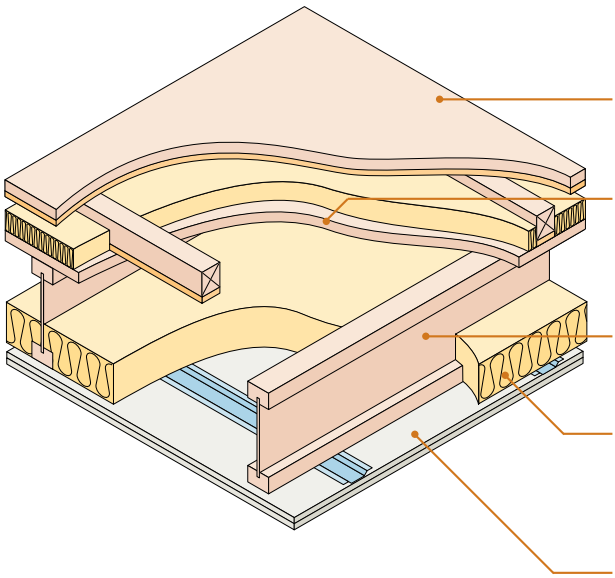
Telephone: 01634 296677 **Fax:** 01634 226630 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Timber I-Joists E-FT-7

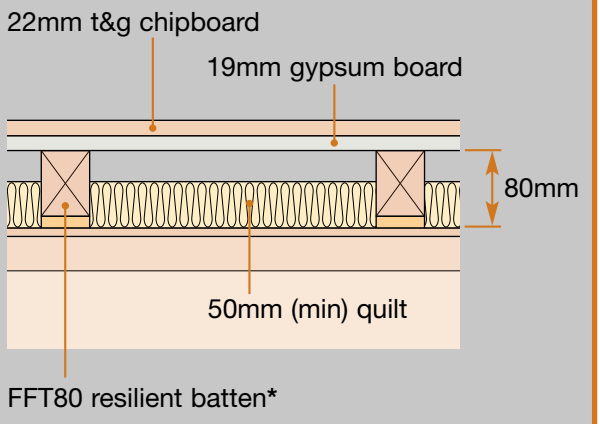
Timber I-Joists ■
Use with timber frame walls only ■



Floating floor	See page 5 for suitable floating floor treatment
Floor decking	15mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	240mm (min) timber I-Joists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) between joists
Ceiling	See page 4 for suitable 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.

FLOATING FLOOR

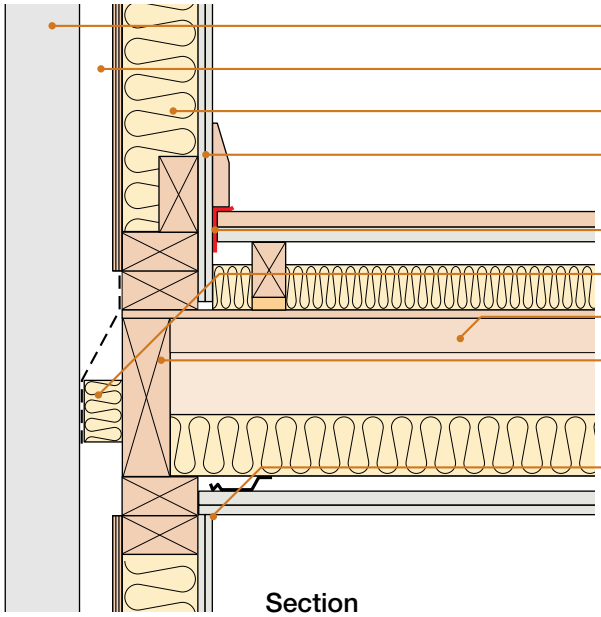


* FFT80 resilient batten must comply with laboratory performance requirements detailed on page 5

DO

- Lay quilt (min 100mm thick) between all joists, including doubled up I-joists, ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure quilt is laid between and not under flooring battens
- Install 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 CT1 and is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

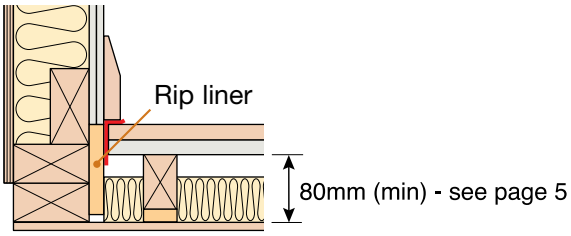
1. External (flanking) wall junction



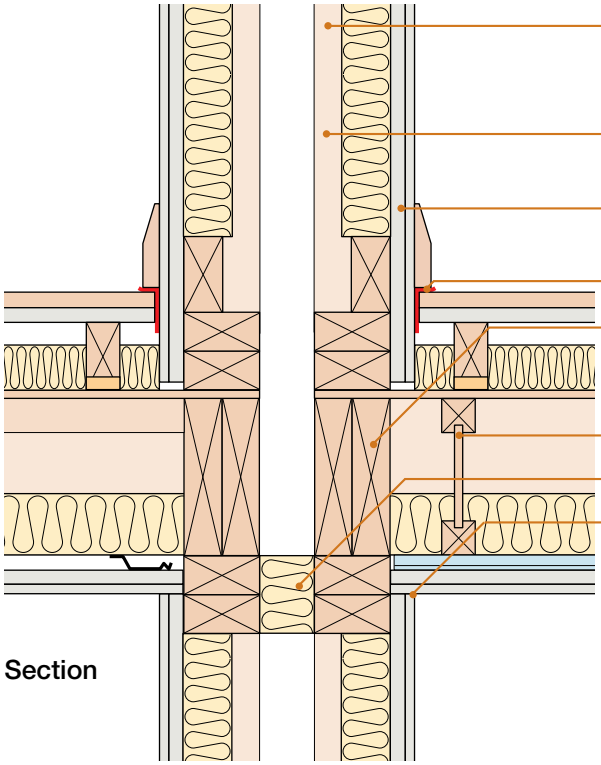
Section

- Masonry outer leaf (min 100mm)
- 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
- 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

Alternative detail



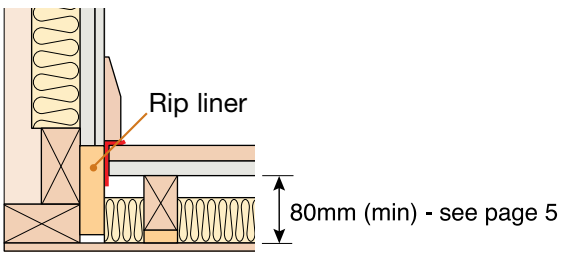
2. Separating wall junction



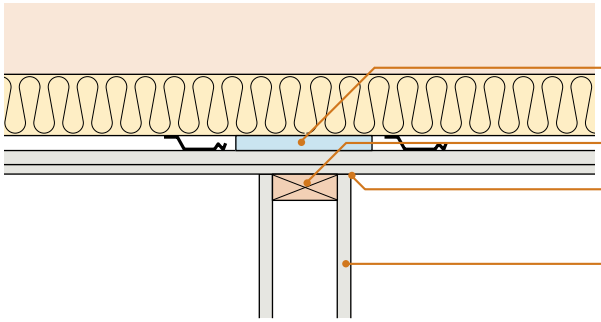
Section

- 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)
- Seal all perimeter joints with tape or caulk with sealant

Alternative detail



3. Internal wall junction (non loadbearing)

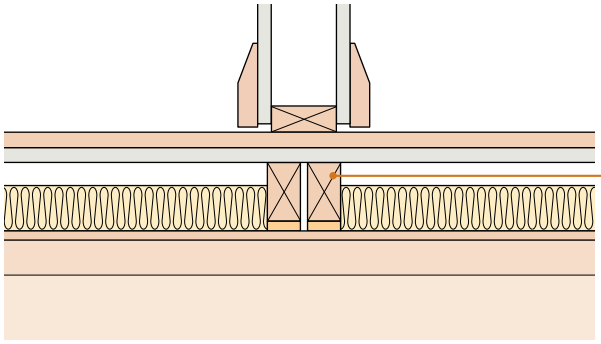


Resilient bar nogging (must not touch other resilient bars)

Headplate fixed to resilient bar nogging

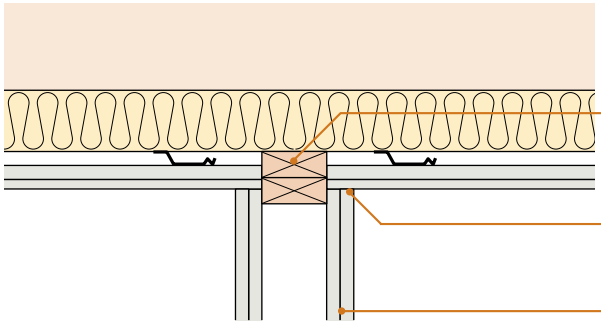
Seal all perimeter joints with tape or caulk with sealant

Where required, internal wall to comply with Building Regulations Requirement E2



Additional support to partition (see Appendix A)

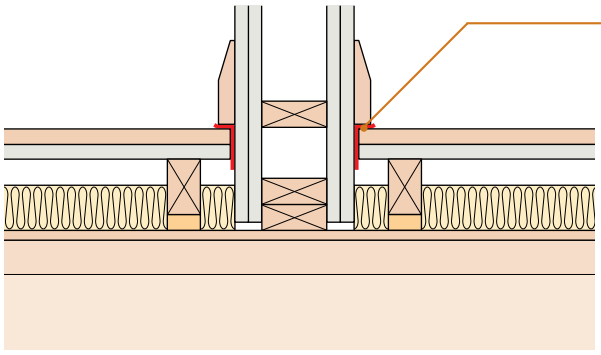
4. Internal wall junction (loadbearing)



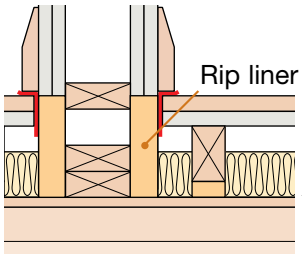
Partition frame must not touch resilient bars

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



Alternative detail

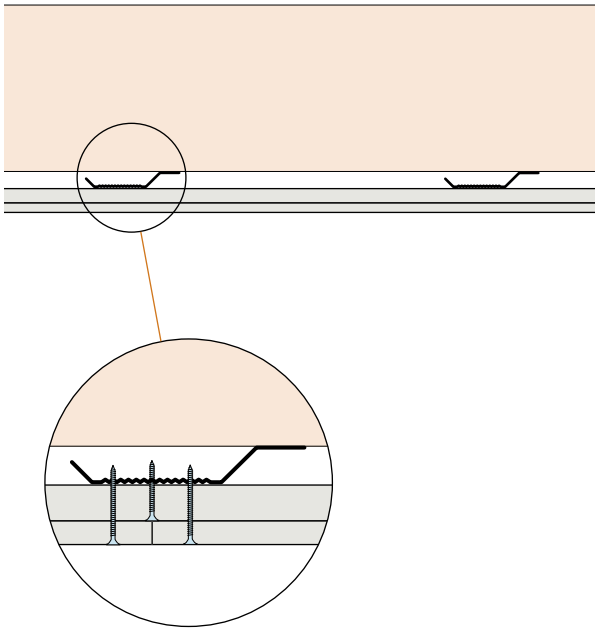
5. Ceiling treatment for E-FT-7

Timber floor ceiling treatment must be CT1, (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

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of $rd\Delta R_w+C_{tr}$=17dB, $rd\Delta R_w$=18dB and $rd\Delta L_w$=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

6. Floating floor treatment for E-FT-7

Floating floor treatment:

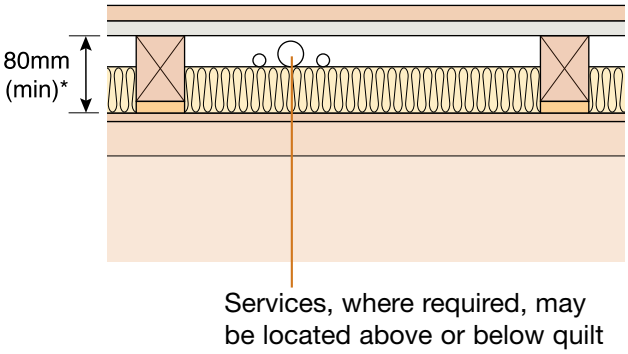
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB, rd $\Delta R_w = 17$dB and rd $\Delta L_w = 16$dB - see Appendix C.

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

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

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

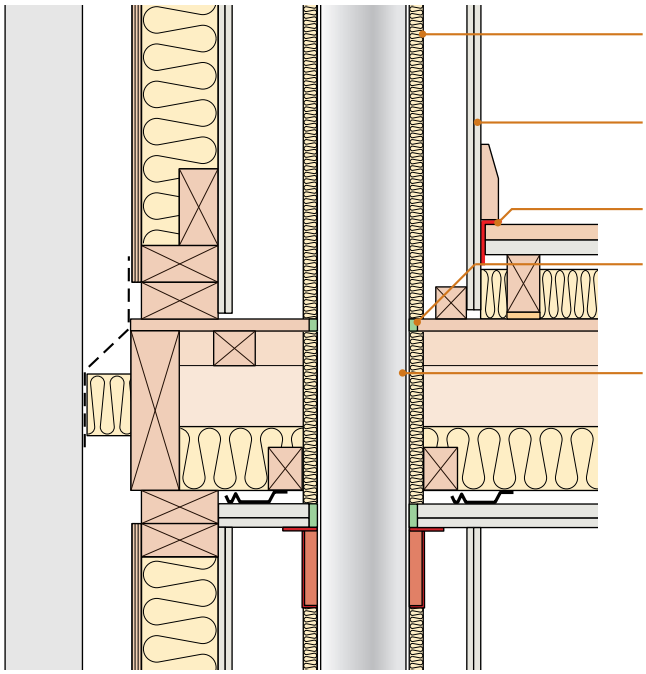
*** Note - 80mm void dimension indicated is when floor is loaded to 25 kg/m².**



FFT80 – Resilient composite deep batten system for E-FT-7

- 22mm (min) t&g flooring board - 600 kg/m³ (min)
- gypsum-based board nominal 13.5 kg/m²
- FFT80 resilient composite deep battens
- resilient layer must be continuous and pre-bonded to batten
- battens may have the resilient layer at the top or the bottom
- mineral wool quilt laid between battens – 50mm (min) 10-36 kg/m³
- ensure any services do not bridge the resilient layer

7. Services – pipes through separating floor



Section

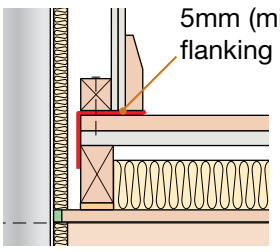
25mm (min) mineral wool quilt (10-36 kg/m³) around pipe

Pipe boxed in with two layers of gypsum-based board combined nominal 16 kg/m²

5mm (min) resilient flanking strip

All voids around pipe sealed

Penetration through separating floor must comply with Building Regulations Part B - Fire Safety



Alternative detail

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

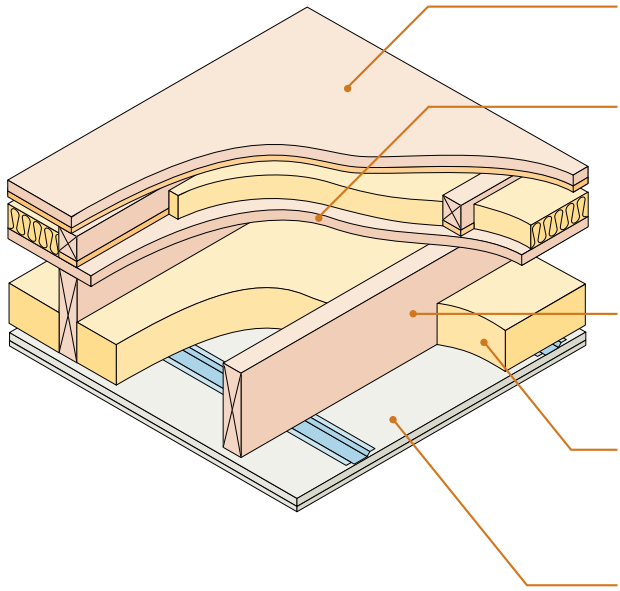
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are timber I-Joists at least 240mm deep?			
2.	Are resilient ceiling bars fitted at right angles to the joists?			
3.	Has quilt (min 100mm thick) been fitted between the joists?			
4.	Has floating floor treatment FFT80 been fitted in accordance with the manufacturer's instructions?			
5.	Has quilt been fitted between the floor battens?			
6.	Has the ceiling system been fitted in accordance with the manufacturer's instructions?			
7.	Is the ceiling treatment CT1, fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
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 16 kg/m^2?			
10.	Have all resilient flanking strips been fitted?			
11.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Timber Solid Joists E-FT-8

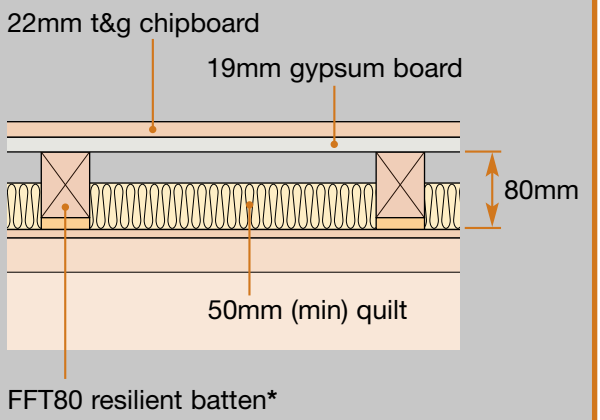
Timber Solid Joists ■
Use with timber frame walls only ■



Floating floor	See page 5 for suitable floating floor treatment
Floor decking	15mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	240mm (min) solid timber joists at maximum 400mm centres
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) between joists
Ceiling	See page 4 for suitable 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.

FLOATING FLOOR

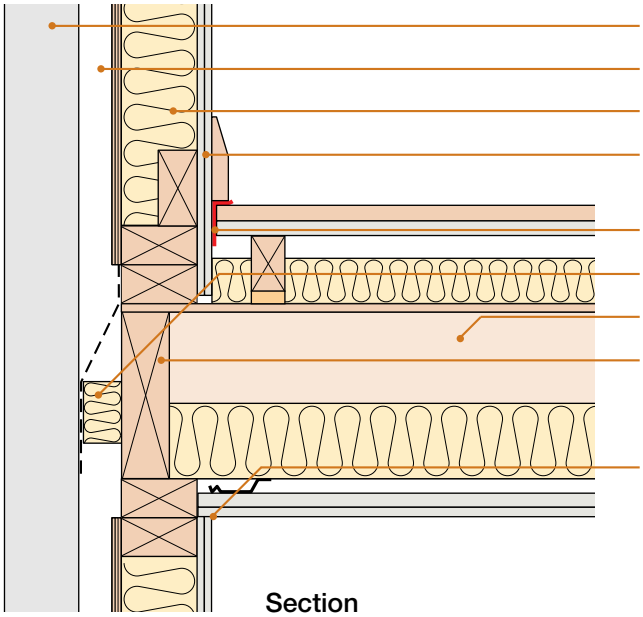


* FFT80 resilient batten must comply with laboratory performance requirements detailed on page 5

DO

- Lay quilt (min 100mm thick) between joists ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure sub-deck quilt is laid between and not under flooring battens
- Install 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 CT1, and is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

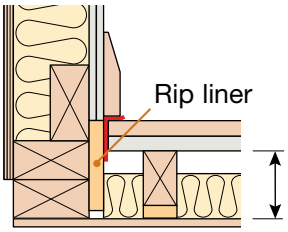
1. External (flanking) wall junction



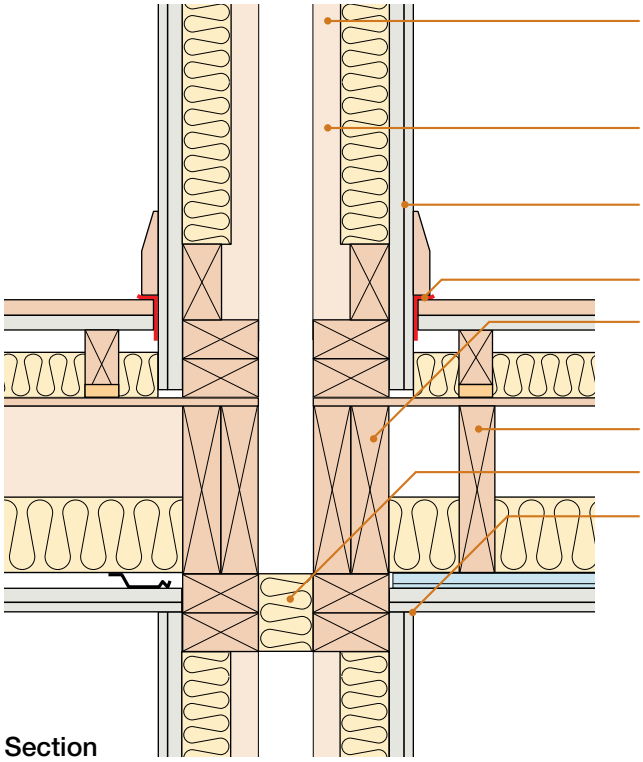
Section

- Masonry outer leaf (min 100mm)
- 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
- 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

Alternative detail



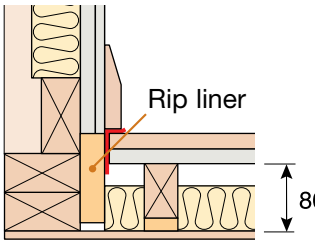
2. Separating wall junction



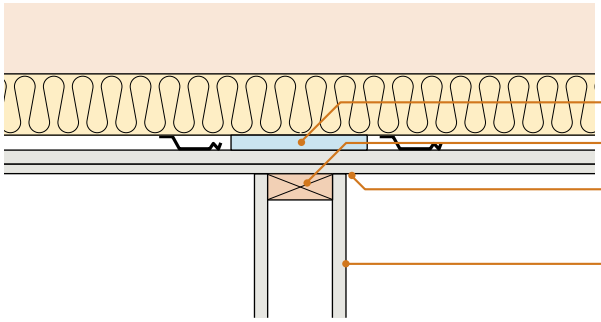
Section

- 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)
- Seal all perimeter joints with tape or caulk with sealant

Alternative detail



3. Internal wall junction (non loadbearing)

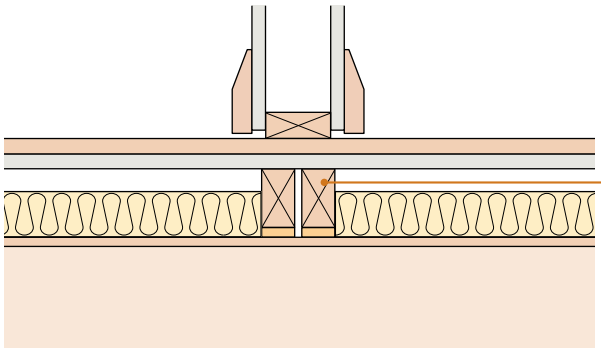


Resilient bar nogging

Headplate fixed to resilient bar nogging

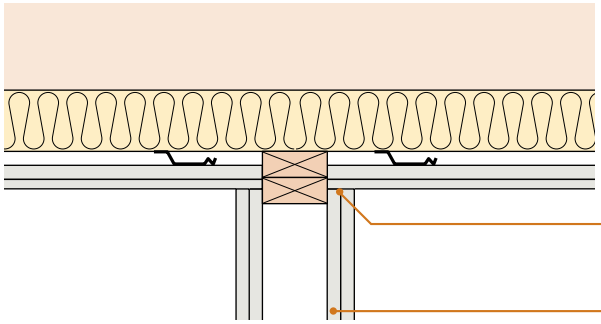
Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



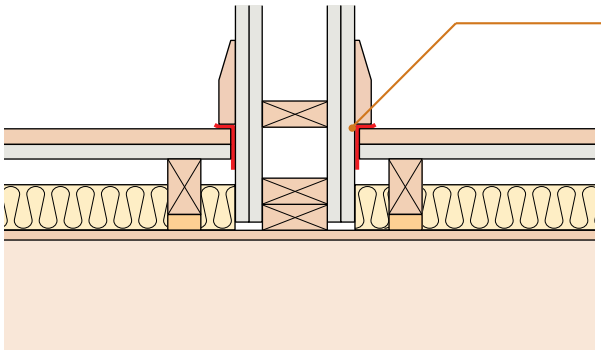
Additional support to partition (see Appendix A)

4. Internal wall junction (loadbearing)

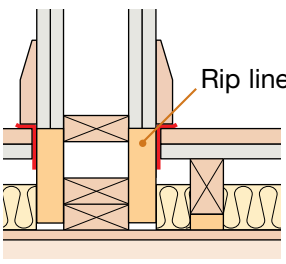


Seal all perimeter joints with tape or caulk with sealant

Where required internal wall to comply with Building Regulations Requirement E2



5mm (min) resilient flanking strip



Rip liner

80mm (min) - see page 5

Alternative detail

5. Ceiling treatment for E-FT-8

Timber floor ceiling treatment must be CT1 (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)

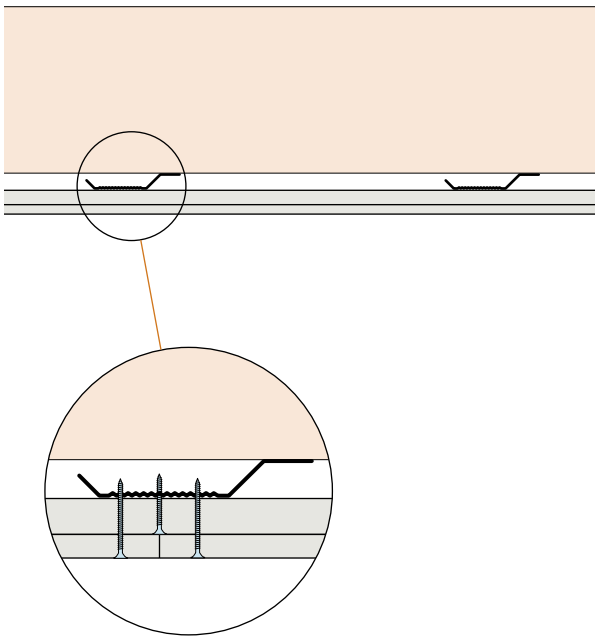
Downlighters and recessed lighting

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

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of $rd\Delta R_w+C_{tr}$=17dB, $rd\Delta R_w$=18dB and $rd\Delta L_w$=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 8 kg/m²) fixed with 42 mm screws

6. Floating floor treatment for E-FT-8

Floating floor treatment:

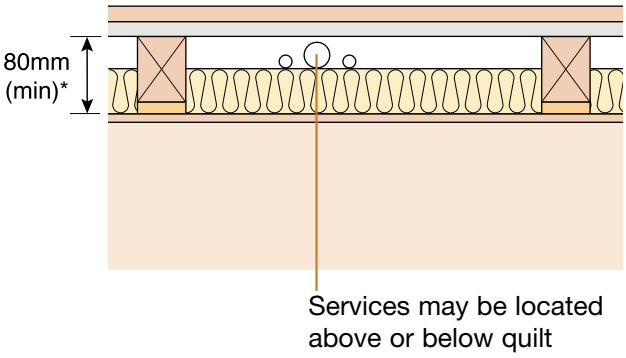
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB, rd $\Delta R_w = 17$dB and rd $\Delta L_w = 16$dB - see Appendix C.

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

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

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

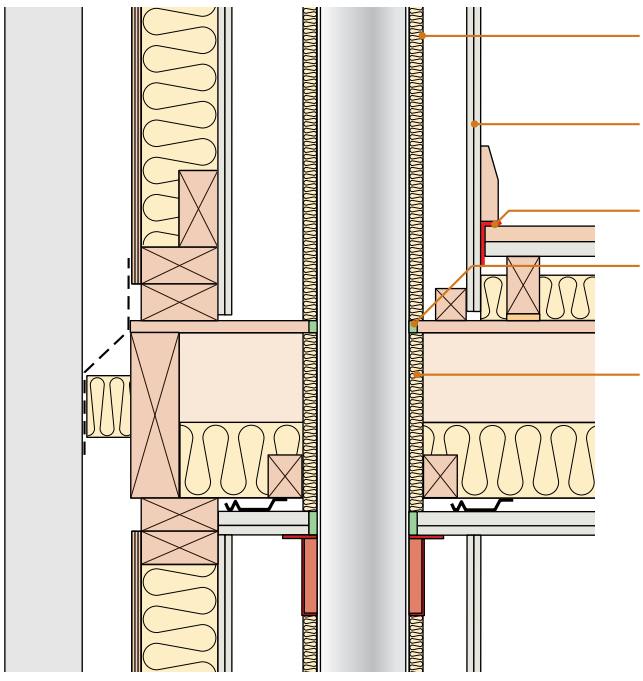
*** Note - 80mm void dimension indicated is when floor is loaded to 25 kg/m².**



FFT80 – Resilient composite deep batten system for E-FT-8

- 22 mm (min) t&g flooring board - 600 kg/m³ (min)
- gypsum-based board nominal 13.5 kg/m²
- FFT80 resilient composite deep battens
- resilient layer must be continuous and pre-bonded to batten
- battens may have the resilient layer at the top or the bottom
- 50mm (min) 10-36 kg/m³ mineral wool quilt laid between battens
- ensure any services do not bridge the resilient layer

7. Services – pipes through separating floor



Section

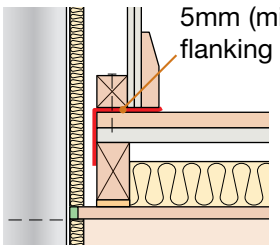
25mm (min) mineral wool quilt (10-36 kg/m³) around pipe

Pipe boxed in with two layers of gypsum-based board combined nominal 16 kg/m²

5mm (min) resilient flanking strip

All voids around pipe sealed

Penetration through separating floor to comply with Building Regulations Part B - Fire Safety



Alternative detail

5mm (min) polyethylene foam flanking strip

CHECKLIST (to be completed by site manager/supervisor)

Company:

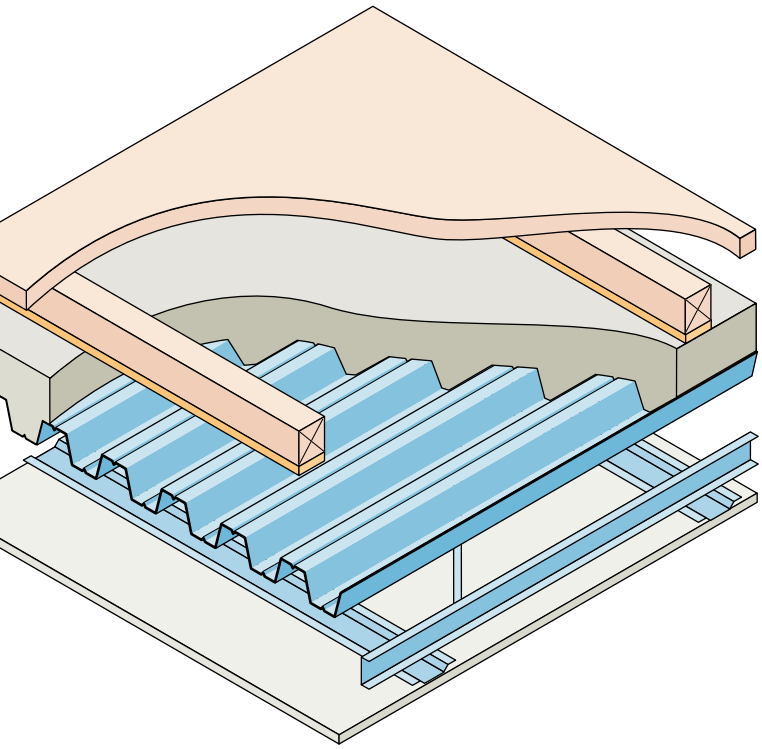
Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are solid timber joists at least 240mm deep installed at no greater than 400mm centres?			
2.	Has quilt (min 100mm thick) 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.	Is floor decking 15mm thick (min)?			
6.	Has floating floor treatment FFT80 been fitted in accordance with the manufacturer's instructions?			
7.	Has 50mm (min) quilt been fitted between the floor battens?			
8.	Is ceiling treatment CT1 fixed to the resilient bars with correct screws such that the screws do not touch or penetrate the joists?			
9.	Are all joints sealed with tape or caulked with sealant?			
10.	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?			
11.	Have all resilient flanking strips been fitted?			
12.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

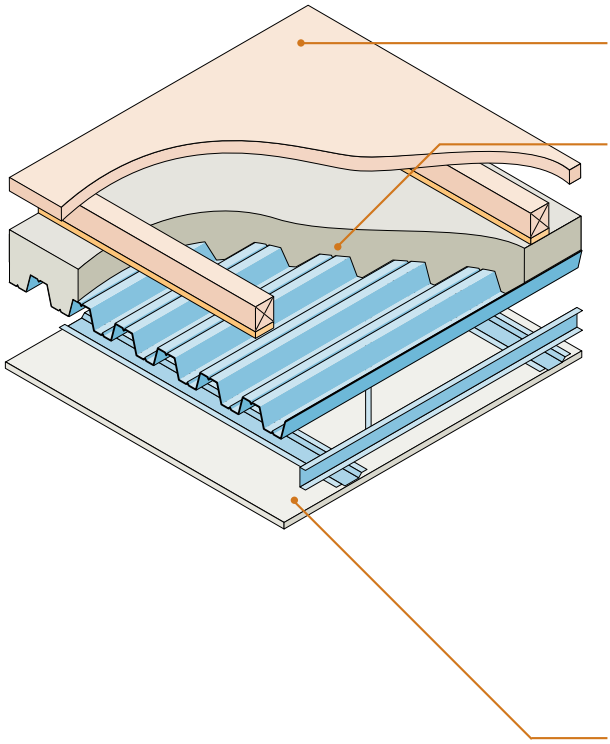
Site manager/supervisor signature . . . . . .



STEEL - CONCRETE COMPOSITE

Separating Floor – Steel-concrete composite E-FS-1

In-situ concrete slab supported by profiled metal deck ■
Use with steel frame construction only ■



Floating Floor	See section 4 for suitable floating floor treatment
Structural floor	In-situ concrete slab supported by profiled metal decking: • "shallow" or "deep" profiled metal decking • overall distance from top surface of concrete to underside of ceiling treatment 300mm (min) • concrete thickness – 80mm (min) at shallowest point, and – 130mm (min) at deepest point • concrete density 2200 kg/m^3 (min)
Ceiling	See section 3 for suitable ceiling treatment

All sketches show "shallow" trapezoidal profiled metal decking. "deep" trapezoidal and "shallow" and "deep" re-entrant profiled metal decking is also acceptable

Alternative external (flanking) wall construction

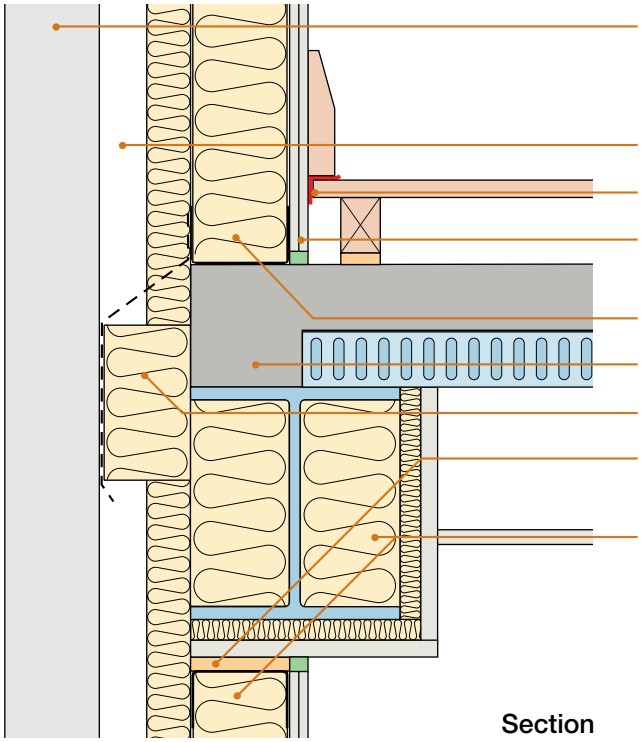
Storey height glazing units are an acceptable alternative to the external walls illustrated:

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

DO

- Ensure floor slab density is 2200 kg/m^3 (min)
- Fill all voids between walls and floor
- Ensure that where floor profiles are at a right angle to walls the voids are filled with profiled mineral wool inserts and caulked with acoustic or flexible sealant
- Ensure minimum concrete thickness - 80mm at shallowest point and 130mm at deepest point
- Ensure floating floor treatment is suitable and install in accordance with the manufacturer's instructions
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure that the overall distance from top surface of concrete to underside of ceiling treatment is at least 300mm
- Ensure ceiling board is not in direct contact with any steel beams/columns
- Refer to Appendix A

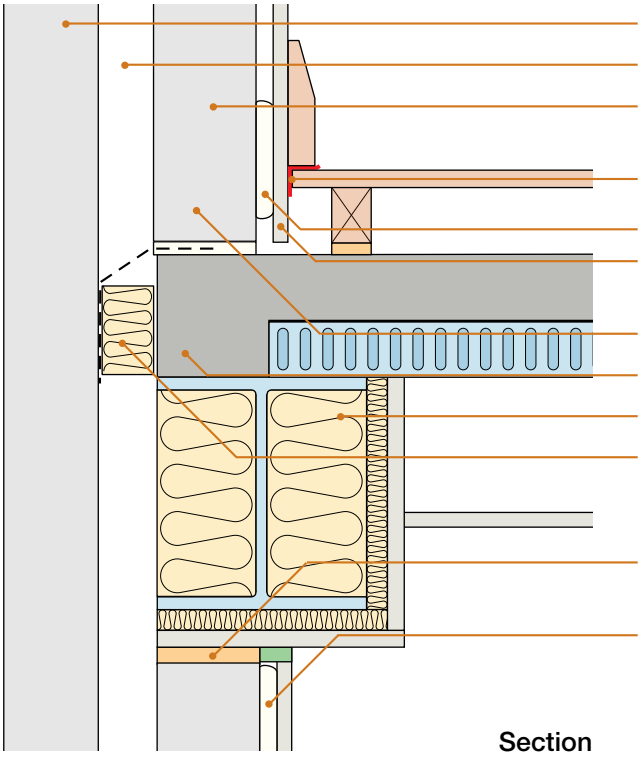
1. External (flanking) wall junction - steel or timber frame inner leaf



Sketch shows FFT1 type floating floor treatment

- Outer leaf may be:
  - masonry, or
  - precast panels
- External wall cavity (min 50mm)
- 5mm (min) resilient flanking strip
- 2 layers (min) gypsum-based board nominal 8 kg/m^2 each layer
- Inner leaf must not be continuous between storeys
- Deck/slab must not abut inner leaf
- Close cavity with a flexible cavity stop
- All voids between slab and inner leaf filled with flexible closer or sealant
- Mineral wool insulation 10 kg/m^3 (min)
- Where floor profiles are at a right angle to walls, voids to be filled with profiled mineral wool inserts and caulked with acoustic or flexible sealant
- Note: for “deep” decking, the beam will be cast within the slab.
- Particular attention should also be paid to Building Regulation Part B – Fire Safety.

2. External (flanking) wall junction - masonry inner leaf



Sketch shows FFT1 type floating floor treatment

- Outer leaf may be masonry or precast panels
- External wall cavity (min 50mm)
- Inner leaf (min 100mm) concrete block (1350 to 1600 kg/m^3 or 1850 to 2300 kg/m^3)
- 5mm resilient flanking strip
- Continuous ribbon of adhesive
- Gypsum-based board nominal 8 kg/m^2 or 13mm plaster
- Inner leaf must not be continuous between storeys
- Deck/slab must not abut inner leaf
- Mineral wool insulation 10 kg/m^3 (min)
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation or expanded polystyrene beads
- All voids between slab and inner leaf filled with flexible closer or sealant
- Continuous horizontal ribbon of adhesive
- Where floor profiles are at a right angle to walls, voids to be filled with profiled mineral wool inserts and caulked with acoustic or flexible sealant
- Note: for “deep” decking, the beam will be cast within the slab.
- Particular attention should also be paid to Building Regulation Part B – Fire Safety.

3. Ceiling treatment for E-FS-1

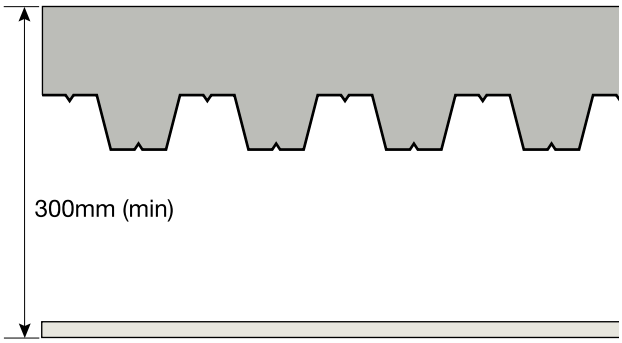
Ceiling treatment must be installed in accordance with the manufacturer's instructions

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

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

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

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



Downlighters and recessed lighting

Provided there is a minimum ceiling void of 75mm downlighters or recessed lighting may be installed in the ceiling:

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

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

Any ceiling system

- one layer of nominal 8 kg/m^2 gypsum-based board

4. Floating floor treatments for E-FS-1

All floating floor treatments :

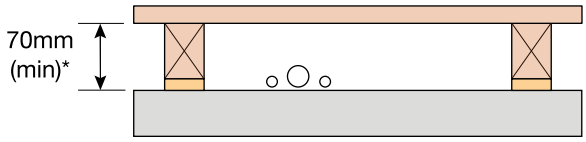
a) Must achieve a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

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

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

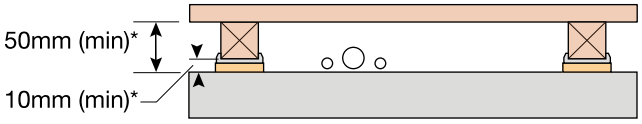
d) For further guidance on floating floor treatments and flanking strips please refer to Appendix A.

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



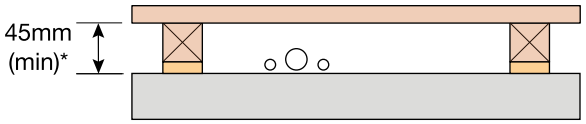
FFT 1 – Resilient composite deep batten system

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



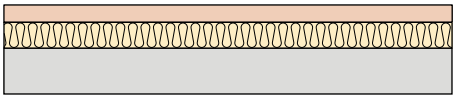
FFT 2 – Resilient cradle and batten system

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



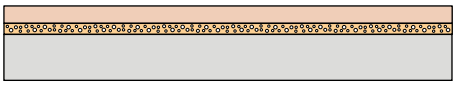
FFT 3 – Resilient composite standard batten system

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



FFT 4 – Resilient overlay platform floor system

- proprietary platform system inclusive of resilient layer greater than or equal to 16 kg/m^2 mass per unit area
- no services to be installed in floor system*

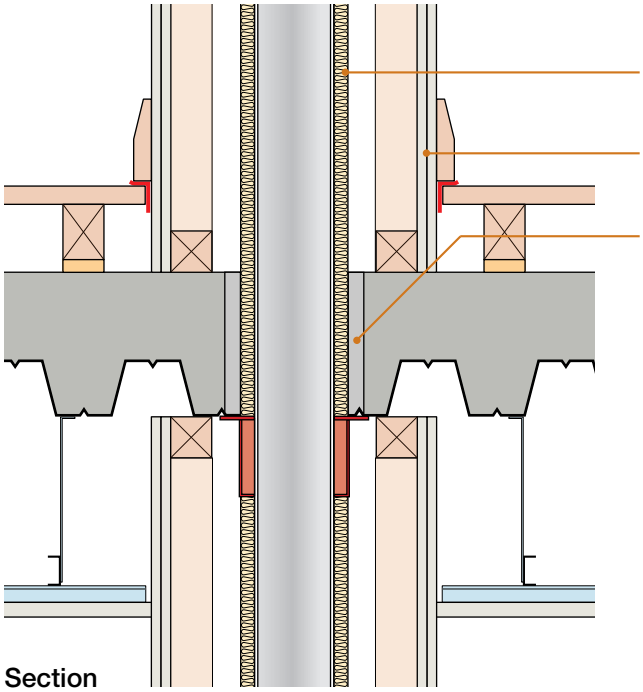


FFT 5 – Resilient overlay shallow platform floor system

- 9mm (min) t & g flooring board
- resilient layer pre-bonded to flooring board
- no services to be installed in floor system*

***** Additional under floor heating layers may be incorporated within FFT4 and FFT5 provided the complete build-up, using all components, has been tested to give a minimum laboratory performance of rdΔL_w=17dB - see Appendix D.

5. Services – Service pipes through separating floor



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

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

All voids around pipe sealed

Section

Sketch shows FFT1 type floating floor treatment and metal ceiling treatment

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

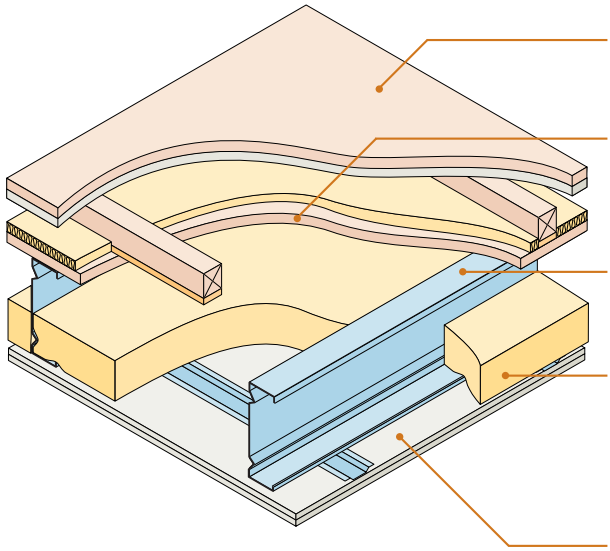
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is concrete density 2200 kg/m^3 (min)?			
2.	Is concrete at least 80mm thick at shallowest point and 130mm thick at deepest point?			
3.	Is inner leaf discontinuous between storeys?			
4.	Has ceiling system been installed in accordance with the manufacturer's instructions (where applicable)?			
5.	Is overall distance from top surface of concrete to underside of ceiling treatment at least 300mm?			
6.	Are all ceiling board joints sealed with tape or caulked with sealant?			
7.	Has floating floor treatment been installed in accordance with the manufacturer's instructions?			
8.	Have all resilient flanking strips been fitted?			
9.	Are vertical service pipes wrapped in quilt and boxed in with two layers of gypsum-based board, nominal 8 kg/m^2 each layer?			
10.	Is separating floor satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – UltraBEAM Metal Joists E-FS-2

Hadley Group UltraBEAM Metal Joists ■
Use with lightweight metal frame walls only ■

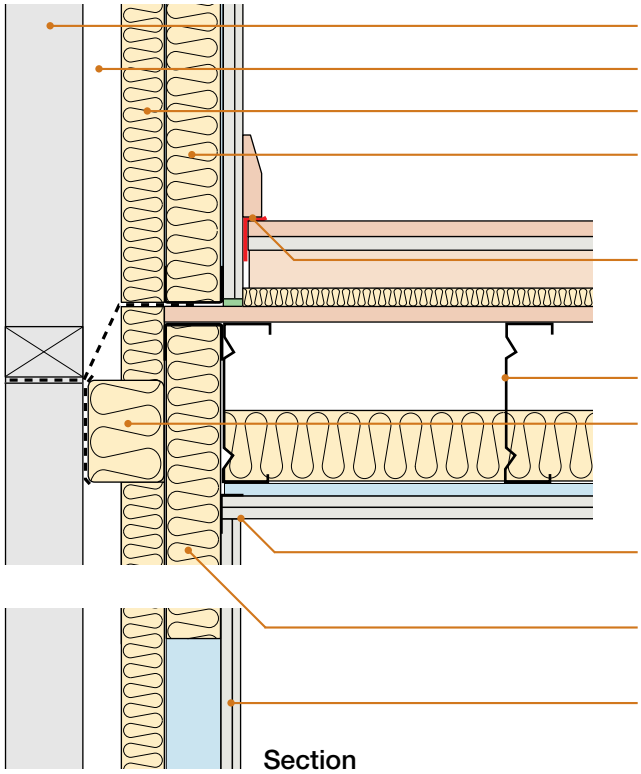


Floating floor	See section 6 for suitable floating floor treatment
Floor decking	22mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	225mm (min) deep UltraBEAM metal joists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or Cellecta MICRO 50 between joists
Ceiling	See section 5 for suitable ceiling treatment

DO

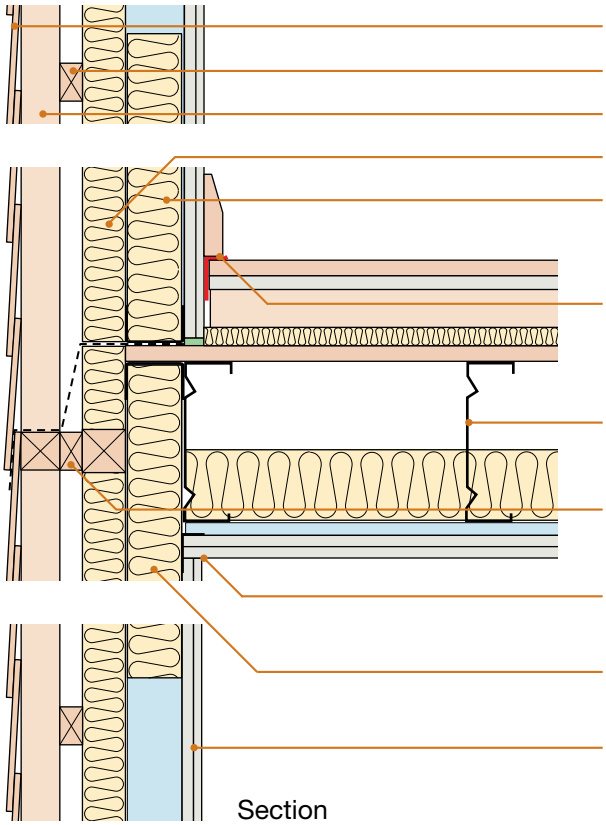
- Lay quilt between all joists, including doubled up joists, ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure quilt is laid between and not under flooring battens
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure ceiling treatment is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction – masonry outer leaf



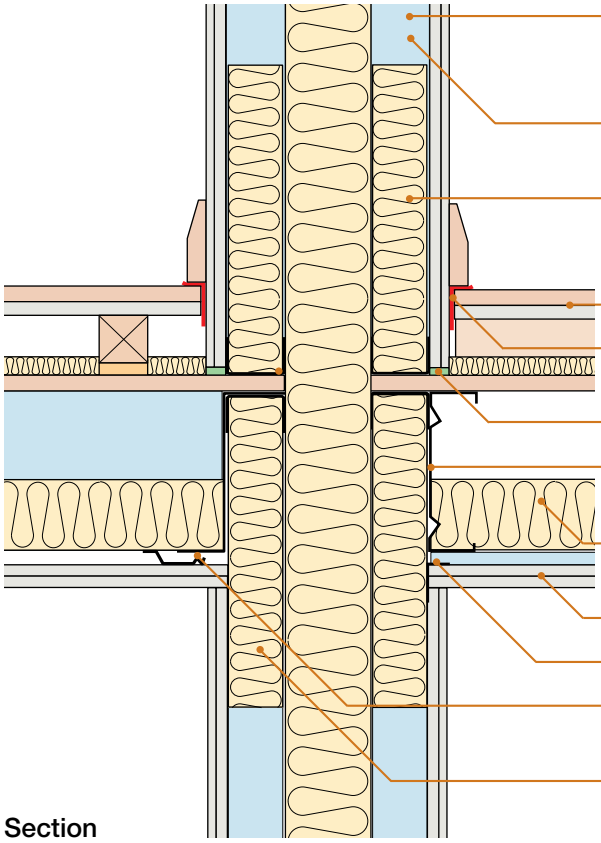
- Masonry outer leaf (min 100mm thick)
- 25mm (min) cavity
- 55mm (min) rigid insulation board
- Mineral wool insulation batts, 33-60 kg/m^3, between studs to 600mm (min) above bottom rail of steel frame
- 5mm (min) resilient flanking strip installed at perimeter and turned under skirting board
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- Seal all perimeter joints with tape or caulk with sealant
- Mineral wool insulation batts, 33-60 kg/m^3, between studs to 600mm (min) below ceiling level
- Two layers gypsum-based board fixed to external steel frame nominal 20 kg/m^2 combined

2. External (flanking) wall junction – timber cladding outer leaf



- 8mm (min) weatherboard
- 50x50mm timber battens
- 25x50mm timber counterbattens
- 55mm (min) rigid insulation board
- Mineral wool insulation batts, 33-60 kg/m^3, between studs to 600mm (min) above bottom rail of steel frame
- 5mm (min) resilient flanking strip installed at perimeter and turned under skirting board
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- Seal all perimeter joints with tape or caulk with sealant
- Mineral wool insulation batts, 33-60 kg/m^3, between studs to 600mm (min) below ceiling level
- Two layers gypsum-based board fixed to steel frame nominal 20 kg/m^2 combined, joints to be staggered and taped

3. Separating wall junction



Section

If using robustdetails® for wall - refer to Table 3c in Introduction to select an appropriate robustdetails® separating wall

If using wall requiring pre-completion testing - seek specialist advice

Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) above bottom rail of steel frame

Floating floor treatment (see section 6)

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

Flexible acoustic sealant below plasterboard

225mm (min) deep UltraBEAM metal joists with 22mm water resistant t&g floor decking

100mm mineral wool insulation quilt - 10-36 kg/m³ (min) or Cellecta MICRO 50

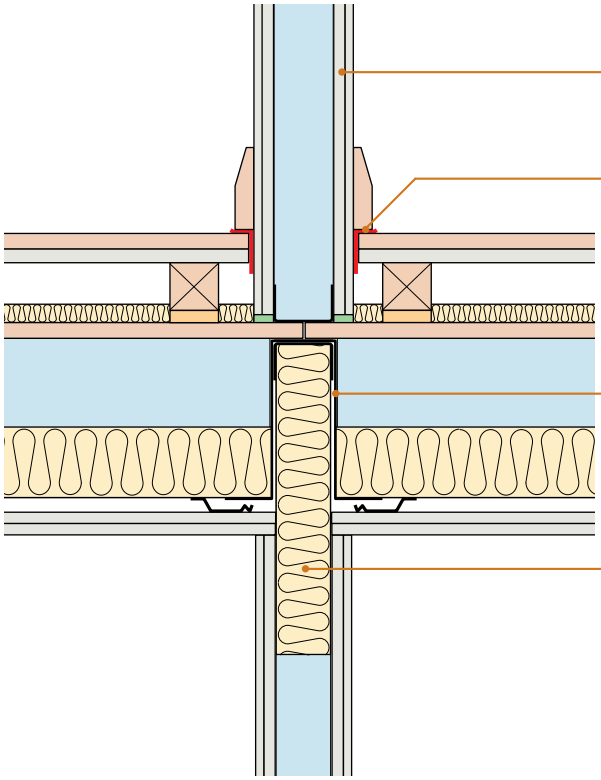
Ceiling treatment (see section 5)

Fixing angle

Resilient bar below joists at 450mm centres fixed through joist flange to manufacturer's detail

Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level

4. Internal wall junction



2 layers of gypsum-based board nominal 20 kg/m² combined, joints to be staggered and taped

5mm (min) resilient flanking strip

Lipped 'Zed' floor support by Hadley Group

Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level

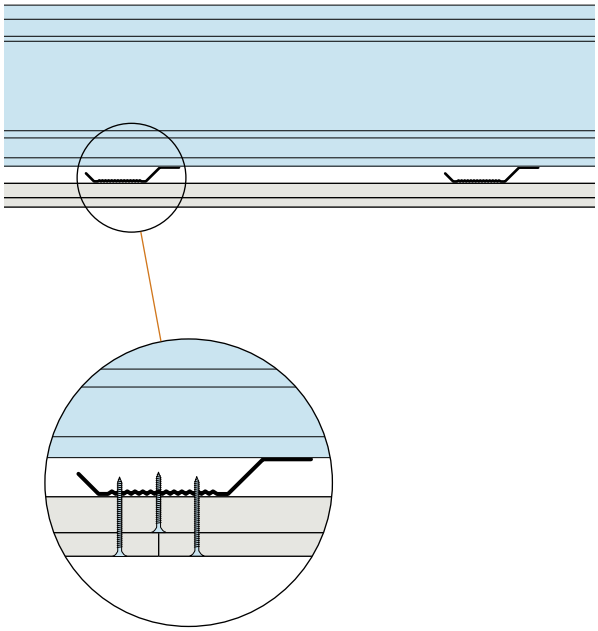
5. Ceiling treatment for E-FS-2

Metal floor ceiling treatment must be as shown 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 lightweight 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 450mm 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

25mm (min) resilient bars with CT3

25mm (min) metal resilient ceiling bars mounted at right angles to the joists at 450mm centres (bars must achieve a minimum laboratory performance of rdΔRw+Ctr=17dB and rdΔLw=16dB) - see Appendix E

Ceiling treatment CT3

Two layers of gypsum-based board, composed of 10mm (nominal 12kg/m²) fixed with 30mm screws and second layer of 10mm (nominal 12kg/m²) fixed with 30mm screws

6. Floating floor treatment for E-FS-2

Floating floor treatment:

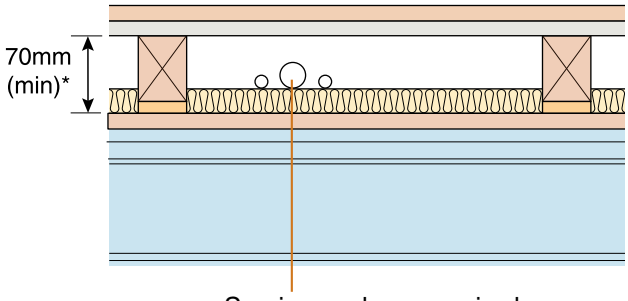
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB and rd $\Delta L_w = 15$dB - see Appendix C.

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

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

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

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



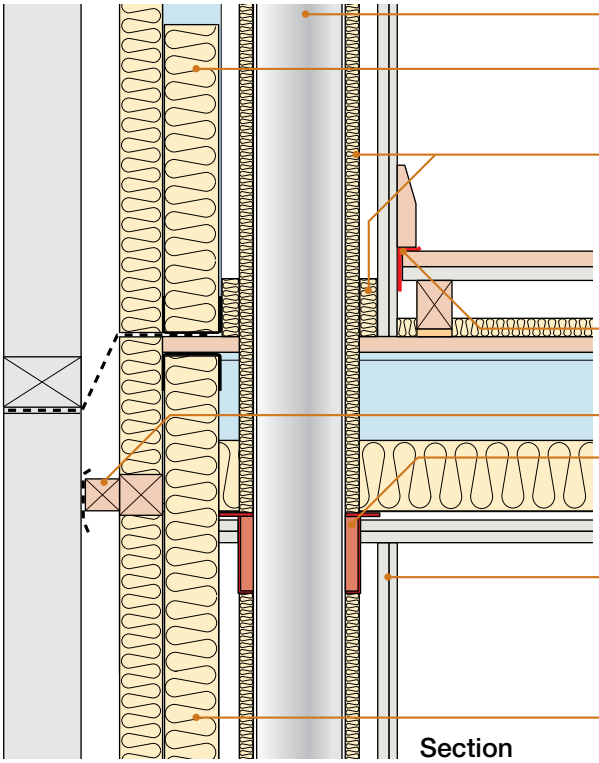
FFT1 – Resilient composite deep batten system

- 22 mm (min) t&g flooring board
- gypsum-based board nominal 13.5 kg/m^2
- FFT1 resilient composite deep battens
- resilient layer must be continuous and pre-bonded to batten
- battens may have the resilient layer at the top or the bottom
- 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

7. Services – pipes through separating floor



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?			

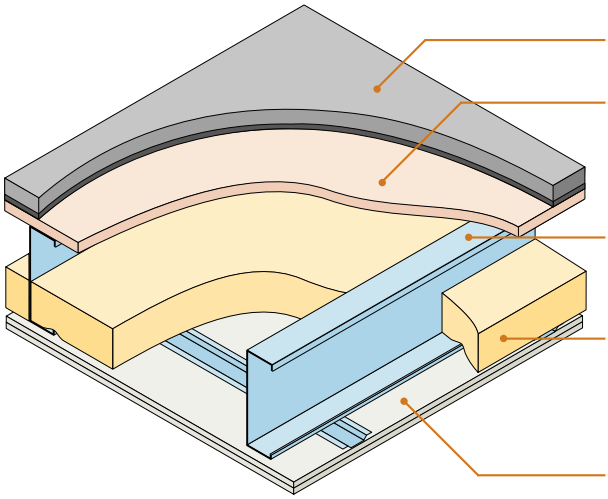
Contact details for technical assistance from Hadley Group, manufacturer of UltraBEAM metal joists:

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 . . . . . .

Cellecta ScreedBoard® 28 on timber sub-floor ■
Use with lightweight metal frame walls only ■

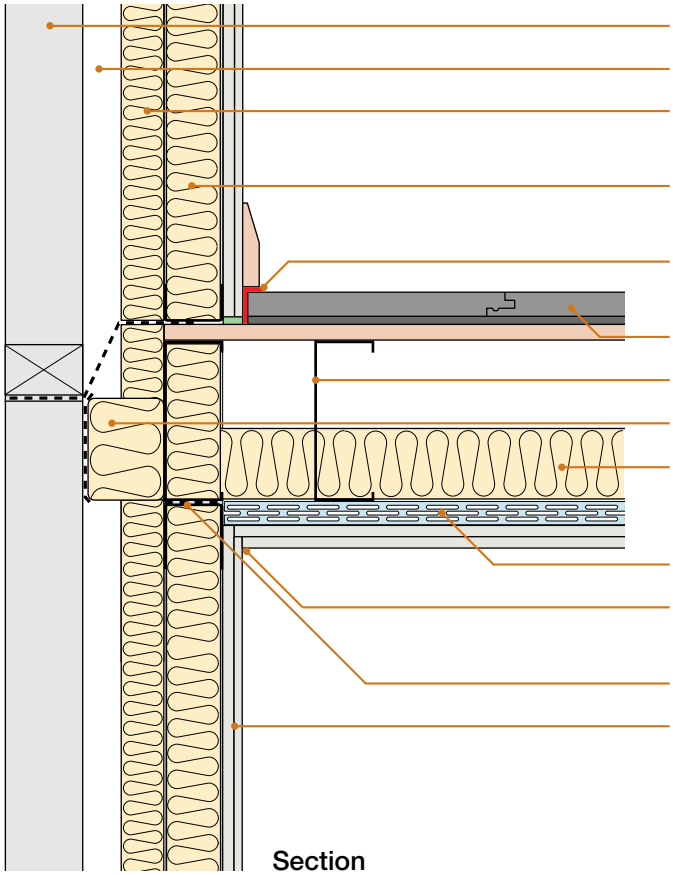


Floating floor	Cellecta ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	254mm (min) deep metal joists
Absorbent material	100mm (min) mineral wool quilt insulation (10-36 kg/m³) between joists
Ceiling	See section 4 for suitable ceiling treatment

DO

- Lay quilt (min 100mm thick) between all joists, including doubled up joists, ensuring no gaps remain
- Apply Cellecta SB adhesive to all ScreedBoard® 28 decking joints
- Install 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 ceiling treatment is fixed correctly (see section 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

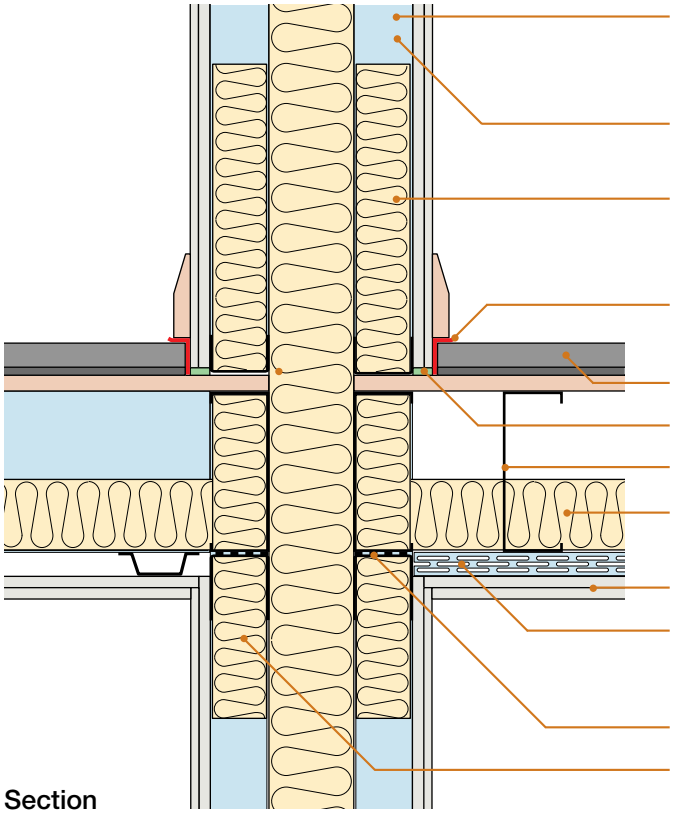
1. External (flanking) wall junction – masonry outer leaf



Section

- Masonry outer leaf (min 100mm thick)
- 50mm (min) cavity
- 55mm (min) rigid insulation board (not required if using Fusion Thermashield)
- Mineral wool insulation batts, 33-60 kg/m³, between studs or use Fusion Thermashield
- YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- 100mm (min) mineral wool insulation quilt, 10-36 kg/m³
- Cellecta HP30 resilient bar
- Seal all perimeter joints with tape or caulk with sealant
- 2mm resilient strip on top of wall panels
- Two layers gypsum-based board fixed to external steel frame nominal 25 kg/m² combined. Or if using Fusion Thermashield, this can be replaced with two layers gypsum-based board nominal 17.5 kg/m² combined, spaced off frame by min 25mm resilient bar or min 38mm batten

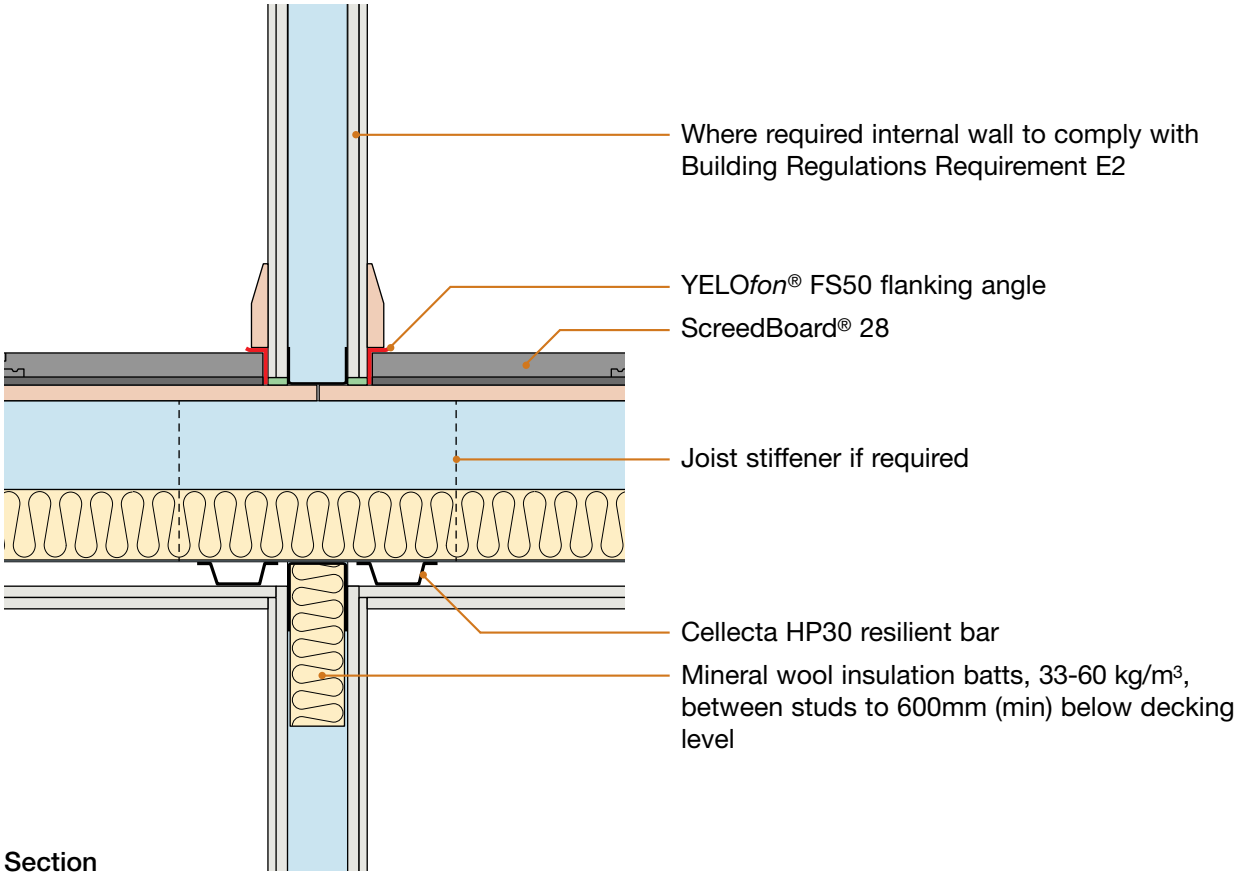
2. Separating wall junction



Section

- If using robustdetails® for wall - refer to Table 3c in Introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) above bottom rail of steel frame
- YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Flexible acoustic sealant below plasterboard
- 254mm (min) deep metal joists
- 100mm (min) mineral wool insulation quilt, 10-36 kg/m³
- Ceiling treatment (see section 4)
- Resilient bar below joists at 600mm (max) centres fixed through joist flange to manufacturer's detail
- 2mm resilient strip on top of wall panels
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level

3. Internal wall junction

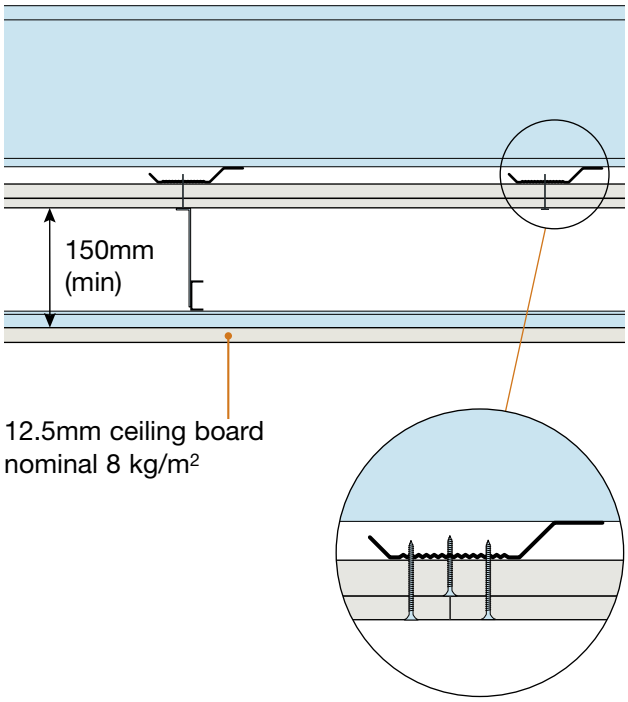


Section

4. Ceiling treatment for E-FS-3

- 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

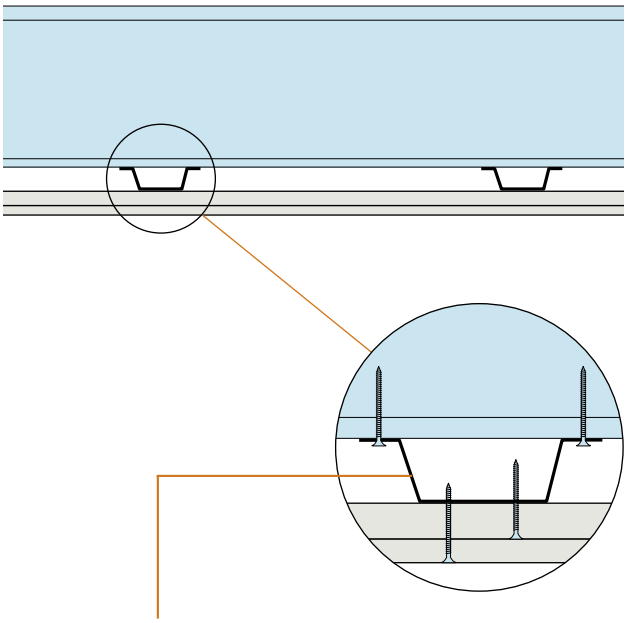
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

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

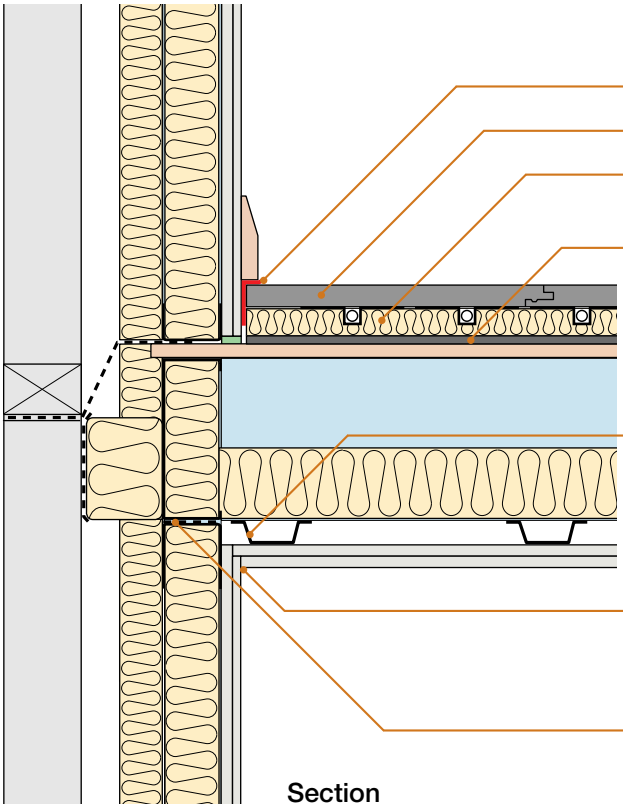
Downlighters or recessed lighting may be installed in the primary ceiling:

- 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.

5. 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

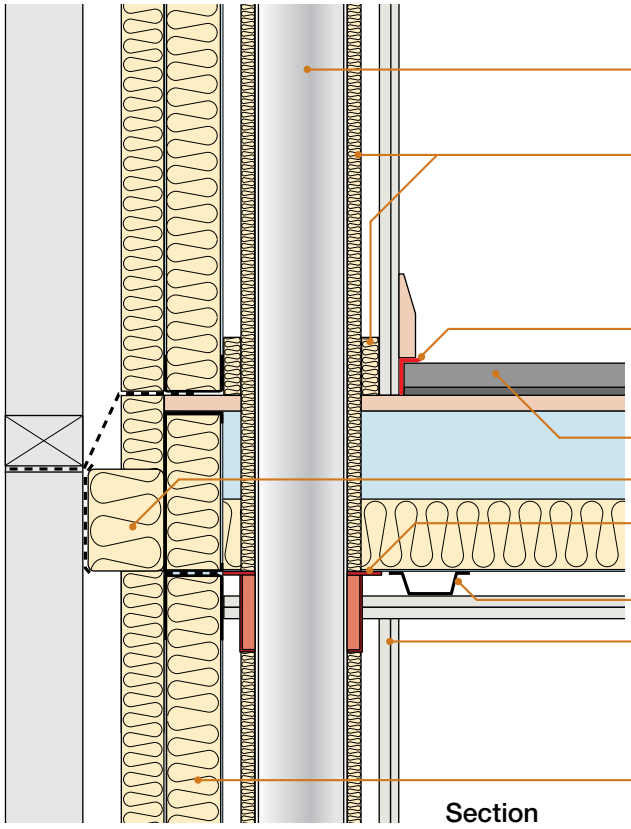
8mm *Cellecta*® FIBRE*fon*® 8 resilient layer

Cellecta HP30 resilient bar

Seal all perimeter joints with tape or caulk with sealant

2mm resilient strip on top of wall panels

6. Services – pipes through separating floor



Section

Service pipe

25mm mineral fibre quilt insulation (10-36 kg/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

YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board

ScreedBoard® 28

Close cavity with a cavity stop (see Appendix A)

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

Cellecta HP30 resilient bar

2 layers of gypsum-based board nominal 16 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

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are metal joists minimum 254mm deep?			
2.	Is sub-deck minimum 18mm, 600 kg/m³?			
3.	Are YELO*fon*® FS50 flanking angles installed correctly?			
4.	Has the ScreedBoard® 28 floating floor treatment been fitted in accordance with the manufacturer's instructions?			
5.	Where underfloor heating is used, is FIBRE*fon*® 8 installed in addition to the ScreedBoard® 20?			
6.	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)?			
7.	Has quilt (min 100mm thick) been fitted between the joists?			
8.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
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/m²?			
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 . . . . . .

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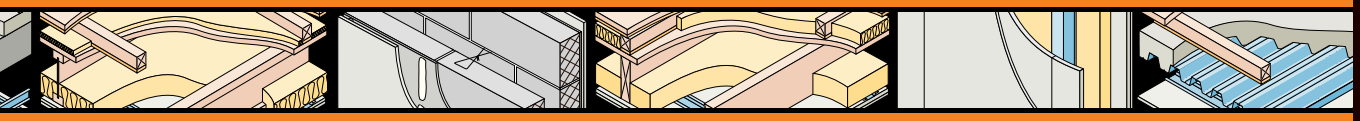
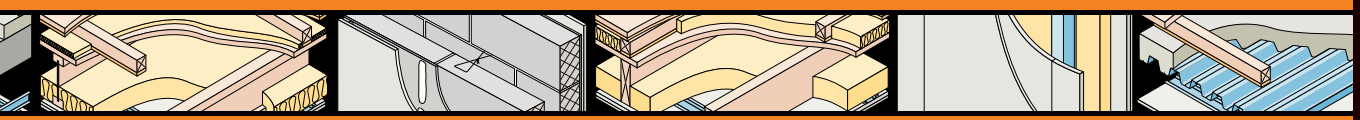


APPENDICES



Appendix A1 – Additional Guidance

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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).

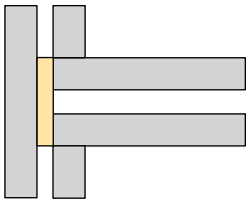


Diagram a

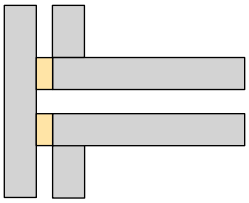


Diagram b

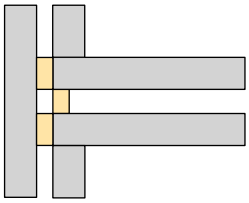


Diagram c

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.

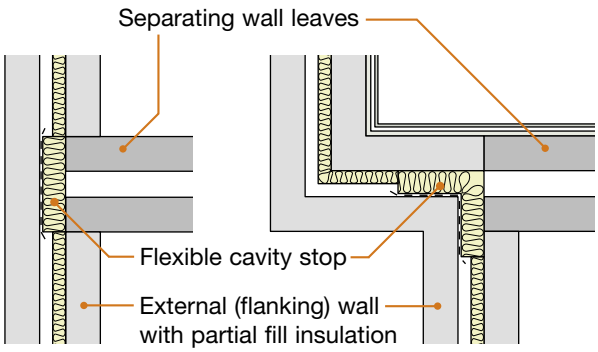


Diagram d

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:

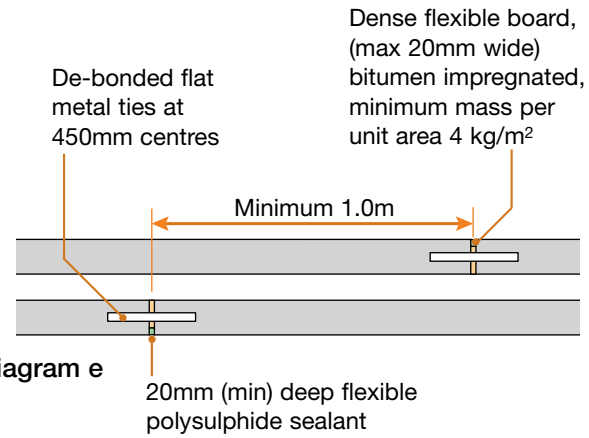


Diagram e

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.

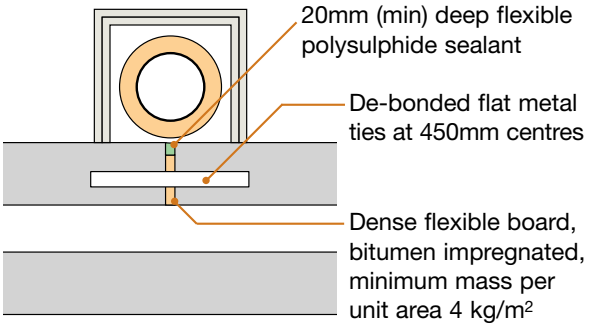


Diagram f

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

Appendix A1 – Additional Guidance

Bed joint reinforcement

It is acceptable to install masonry reinforcement within the horizontal bed joints of the cavity masonry separating provided:

- the masonry reinforcement is contained wholly within the mortar bed joint of each individual leaf of masonry
- the masonry reinforcement does not connect the two leaves of the cavity walls together or bridge the cavity in any way

Internal floor joists/floor beams and masonry separating walls

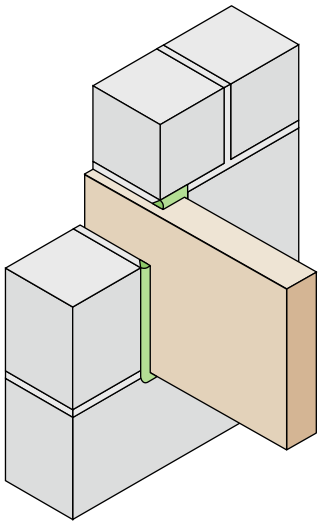
Internal floor joists at right angles to the separating wall may be supported by metal joist hangers or be built into the wall.

The acoustic performance of separating walls is adversely affected by any gaps in the masonry as these provide a direct sound transmission path. **It is essential that joists and beams are built in only if a high standard of workmanship can be guaranteed.**

Solid timber joists

Solid timber joists may be built into the separating wall, provided that:

- the mortar joints around each joist perimeter are recessed or struck, and
- the joint between the masonry and the timber is carefully pointed with silicone sealant.



Alternatively, proprietary joist caps/ends designed to satisfy the air leakage requirements of Approved Document L1 may be used. They should be installed in accordance with the manufacturer's instructions.

In circumstances where the joist end cap is larger than the depth of the joist, such that there is a gap between the top of the joist and the joist end cap, this should be filled with mineral wool or other suitable material such that the acoustic performance of the wall is maintained.

Metal web joists

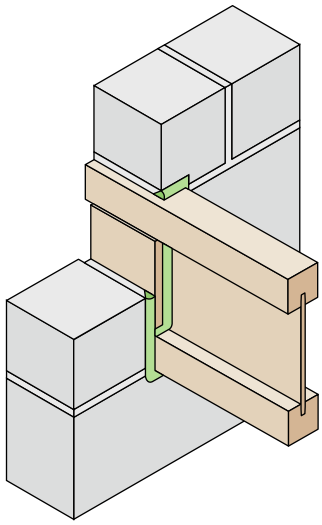
Metal web joists may be built into the separating wall following the guidance for solid timber joists above. Metal web joists must have solid ends.

Timber I-Joists

Timber I-joists may be built into the separating wall, provided that:

- proprietary filler pieces are fitted on both sides of the web between the top and bottom flanges. These filler pieces must not damage the joist flanges - their depth should be slightly less than the dimension between the joist flanges to achieve a "loose fit".
- the mortar joints around each joist perimeter are recessed or struck, and
- the joint between the masonry and the timber and any other air paths are carefully pointed with silicone sealant.

Alternatively, proprietary joist caps/ends designed to satisfy the air leakage requirements of Approved Document L1 may be used. They should be

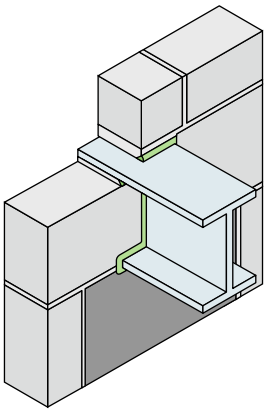


installed in accordance with the manufacturer's instructions. In circumstances where the joist end cap is larger than the depth of the joist, such that there is a gap between the top of the joist and the joist end cap, this should be filled with mineral wool or other suitable material such that the acoustic performance of the wall is maintained.

Appendix A1 – Additional Guidance

Steel beams

Steel beams may be built into the leaf of a cavity separating wall, provided that all voids around the beam ends are filled with mortar or flexible sealant.



Separating walls should not be constructed off steel beams.

Structural steelwork in masonry separating walls

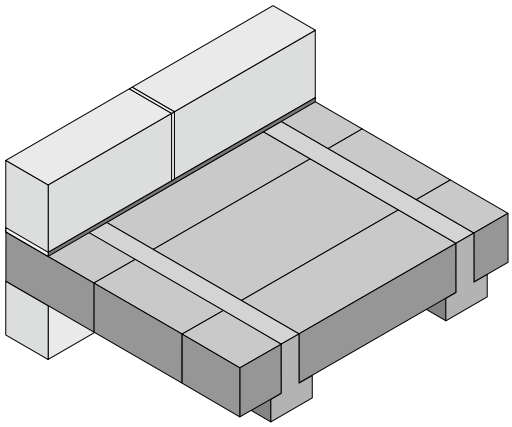
Steel columns built into masonry separating walls are not permitted.

Separating walls should not be constructed off steel beams.

Concrete beam and block ground and internal floors

Concrete beam and block floors may be built into the separating wall, provided:

- all voids are carefully filled with mortar
- the floor does not bridge the cavity leaves.



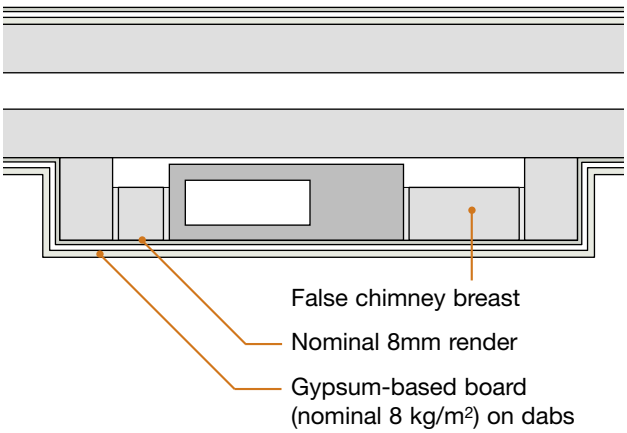
Coursing in blockwork separating walls

For the purposes of adjusting coursing it is permissible to use smaller units of robustdetails® separating wall material (e.g. brick sized), provided the density of the smaller units is at least the same as the separating wall material.

Flues in separating walls

Flue blocks may not be built into the separating wall where the finish is wet plaster. Flue blocks may only be built into the normal width of a separating wall where a diagram is included in the Robust Details.

Any of the robustdetails® masonry separating walls with gypsum-based board on dabs finish, may use the following alternative detail:



Internal render and finishes

Some of the Robust Details for masonry separating walls indicate the use of an internal render (parge) coat prior to the application of dry lining. Where a cement:sand render coat is used it should not be float or skim finished but preferably applied in an uneven manner with a trowel (or equivalent) and scratch finished.

Mixes quoted are for cement, lime and sand by volume based on damp sand. Mixes made with cement, sand and plasticiser are also acceptable.

Internal render, gypsum-based board and wet plaster may be omitted from the following locations:

- wall surfaces not facing into a room
- floor joist/beam zone
- roof space (where there are no rooms in the roof)
- staircases may be installed prior to the application of render, and the gypsum-based board or wet plaster are not required behind the stair string.

Services and chases in separating walls

Where possible, services should not be built into the separating wall.

However, where chasing is permitted in the Detail, they should be kept to a minimum. Chases must not be located back to back. Care must be taken to ensure all voids are fully filled with mortar. Where conduits or cappings are used they should not be in contact with the gypsum-based board.

The Robust Details for timber and steel framed walls show how services should be built in.

Appendix A1 – Additional Guidance

Spandrel panels

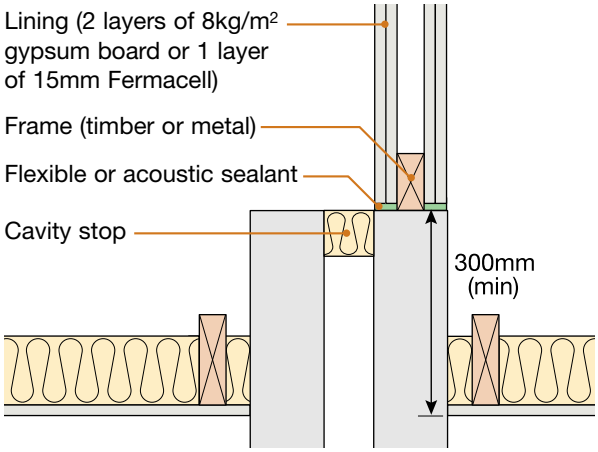
Where stated in the Robust Detail, spandrel panels are an acceptable alternative to continuing the separating wall to the underside of the roof covering in non-room-in-roof situations.

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/m² gypsum-based board (staggered joints) or 1 layer of 15mm Fermacell board (tight butted joints) fitted each side of a 35x45mm (min) timber or lightweight steel frame. Lapped joints or those backed by timber members do not require sealing, but gaps should be treated with sealant or cover strips.

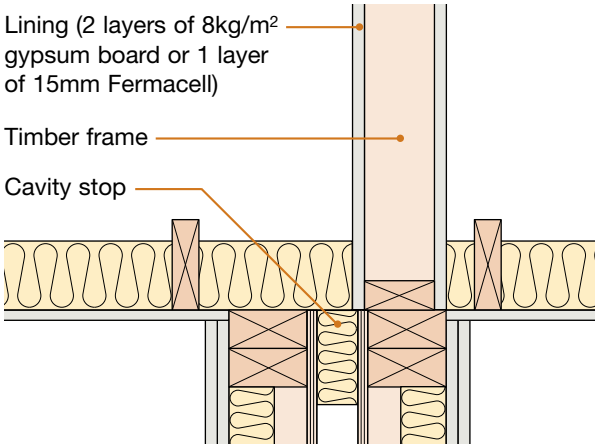
Two panels may be adopted provided a 50mm (min.) cavity is maintained between the sheathing faces, or the stud frames where no sheathing is fitted. Spandrel panels must not connect the wall leafs.

Masonry construction



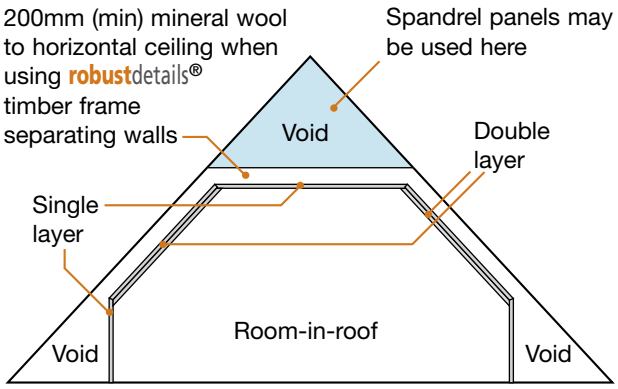
The spandrel panel may be mounted on a layer of mineral wool laid along the blockwork leaf as an alternative to the flexible or acoustic sealant.

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/m²): 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.

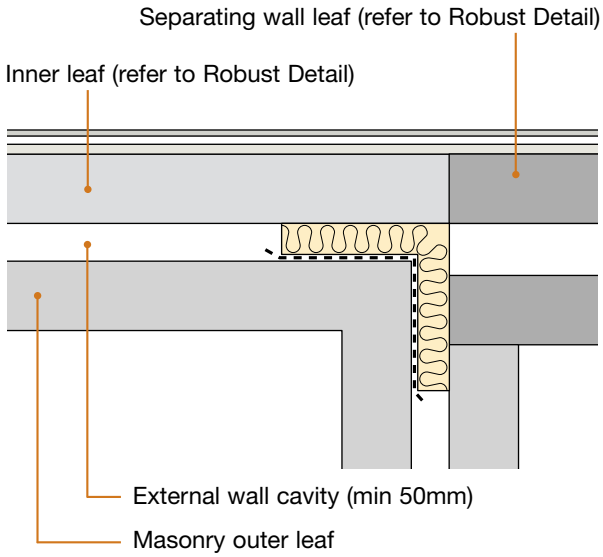
Gypsum coving is an acceptable alternative to caulking or sealing the joint between the wall and the ceiling.

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

Appendix A1 – Additional Guidance

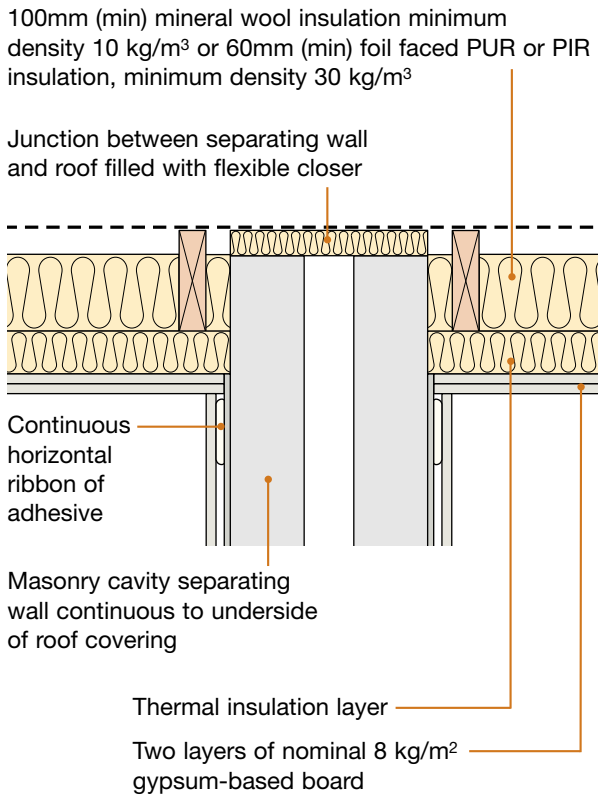
Cavity masonry separating walls – staggered external (flanking) wall junction

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.

Ground floor junctions

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

Screed thickness

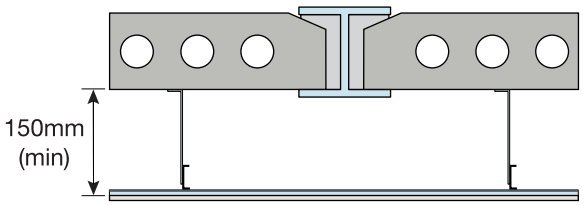
The screed thickness stated is the minimum thickness at any point and a greater thickness should be specified to take account of deviations in the finished levels of the surfaces of bases and any reinforcement provided.

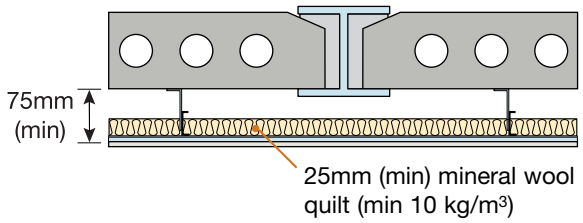
Cement:sand screed should be at least 50mm to comply with BS 8204. Concrete screed is acceptable.

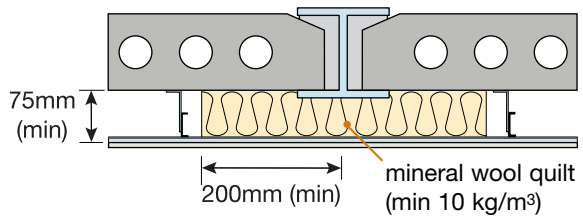
Precast concrete plank separating floors with steel beams

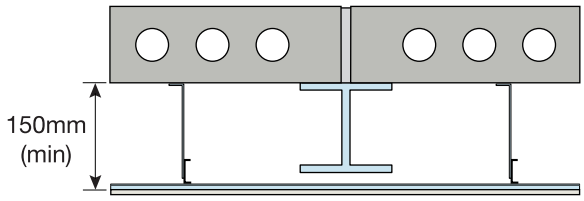
In some situations precast concrete planks may require intermediate support by steel beams supported on masonry.

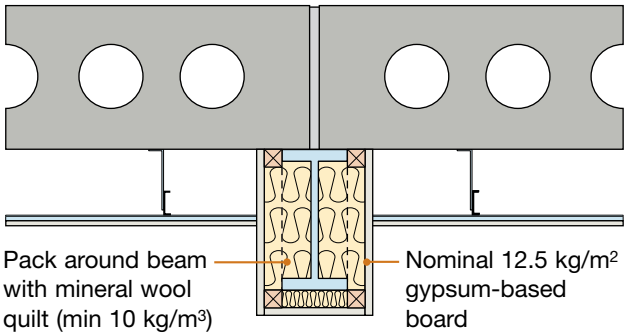
- cavity masonry separating walls must not be built off steel beams – where necessary, external cavity walls may be built off steel beams
- all voids between the steel beam and the slabs should be fully filled with grout or concrete, and
- the supports for the ceiling treatment and the ceiling lining 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



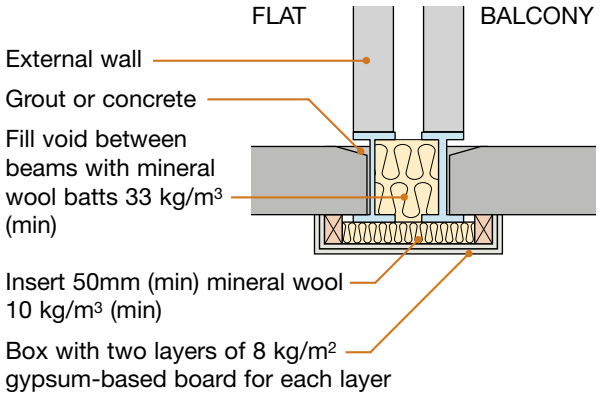








An alternative detail where two steel beams are required to support the external cavity wall is as follows:



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.

With floating screed floors

If underfloor heating systems are required to be installed within the screed they must not penetrate through the resilient layers and must avoid bridging the screed to the slab. Where rigid insulation

boards are used which have surface indents for the heating conduits to be situated within, this is acceptable. For floors that incorporate an insulation layer, such indented boards may be used as part of the resilient layers, provided they are of an appropriate type of material, and that the minimum thickness of the resilient layer is maintained.

Resilient bars

When using resilient bars the specifier should ensure that the resilient bar manufacturer has a laboratory sound test report (as outlined in Appendix E) that demonstrates compliance with the robustdetails® performance criteria.

Timber floating floor treatments

When using timber floating floor treatments (e.g. battens, cradles, platforms) the specifier should ensure that the floating floor treatment manufacturer has a laboratory sound test report (as outlined in Appendix C or D) that demonstrates compliance with robustdetails® performance criteria.

It may be necessary for battens to be installed at closer centres or for additional support to be provided under heavy loads from internal walls, sanitary ware and kitchen units, etc. in accordance with the manufacturer's instructions.

The floating floor treatment must cover all areas where footfall may occur.

Rigid insulation boards (e.g. expanded, extruded or bead polystyrene) are not acceptable for use as the resilient layer or as a flanking strip with a floating floor treatment where the walking surface is board based.

Mineral wool may not be used as a resilient flanking strip. See Appendix B, Glossary, for definition of a resilient flanking strip.

Floating Floor Treatments in kitchens and bathrooms

It is permissible to install kitchen units and appliances along with bathroom sanitary fittings directly onto the sub floor construction. In all cases it is recommended that you contact the manufacturer directly to seek their advice relating to the specific FFT.

Laminated or ceramic flooring on separating floors

In principle it is acceptable to install laminate timber floor finishes on top of the timber floating floor treatments (FFT's) indicated in Part E Robust Details, provided:

- the manufacturer of the FFT system confirms that the performance of the FFT will not be affected;
- any specific guidelines, regarding the installation of such finishes, stipulated by the manufacturer of the FFT system are strictly followed;
- the laminate timber floor finish does not bypass the isolation provided by the flanking strips at the perimeters of the FFT by being in direct contact with the wall or skirting;

In the case of the Part E Robust Details with floating screed, it would also be acceptable in principle to provide a laminate timber floor finish, provided:

- the laminate timber floor finish does not bypass the isolation provided by the isolating edge strips at the perimeters of the screed by being in direct contact with the wall or skirting;

Screed floating floor treatments

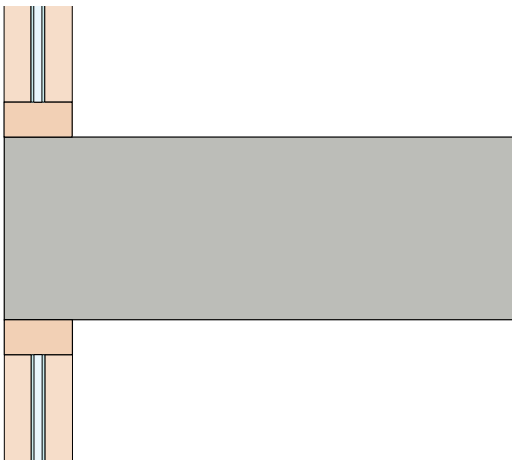
Where screeds are separated from the core floor by resilient layers the screed must be fully isolated from the floor slabs, perimeter walls and skirtings and must not come into direct contact with these areas. The resilient layer(s) should completely cover the core floor surface including into doorways and reveals and be wrapped round the edge of the screed to isolate the screed from the perimeter walls and skirtings.

Masonry angle supports

The masonry outer leaf of external walls used with robustdetails® concrete or steel-concrete composite separating floors, may be supported on suitable proprietary masonry angle supports that are fixed to the edge of the separating floors.

Full height glazing units junction with robustdetails® separating floor

If referred to in the detail, full height glazing units may be used. Where there is no inner leaf and a full height glazing unit, the core floor slab must break the vertical continuity of the glazing facade, as shown below.



Appendix A1 – Additional Guidance

Specification requirements

Where details have “minimum” in their specification, it indicates that the value should not be lower than that stated. It does not preclude the use of higher values.

For example, where a 75mm (min) cavity size is specified, it does not preclude the use of wider cavities. Similarly, a reference to a wall finish with 8 kg/m^2 gypsum-based board does not preclude the use of boards with a greater mass per unit area.

Lifting holes in cassette floors

The required acoustic performance of any of the robustdetails® timber or steel frame separating floors would not be affected if lifting holes within the sub-deck remain untreated, provided:

- each lifting hole is no larger than 120mm in diameter
- mineral wool quilt, of the appropriate specification as indicated in the relevant separating floor specification, is provided covering the whole area of the floor, between the joists/battens, in both the structural floor void and the floating floor void
- all other relevant requirements are strictly followed.

Lifting holes that are larger than 120mm in diameter should be sealed or covered with a board or panel of similar or greater density than the sub-deck board.

Appendix A2 – Specific Flanking Conditions

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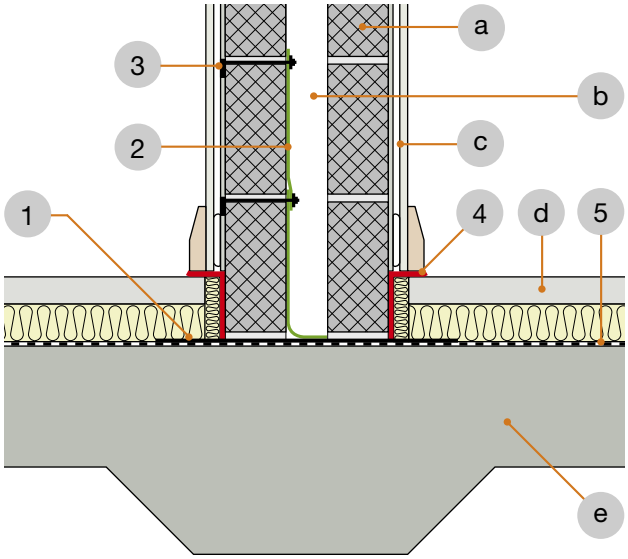
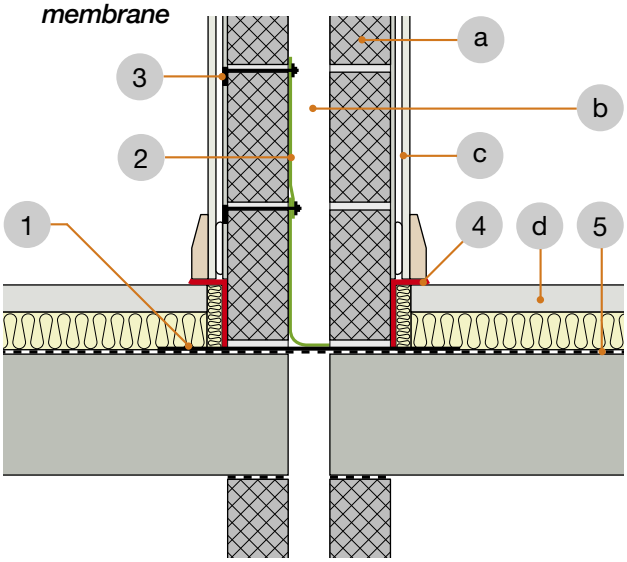
Appendix A2 – Specific Flanking Conditions

Icopal-MONARFLOOR® BRIDGESTOP® System for robustdetails® cavity masonry walls. Refer to Table 6 in Introduction.

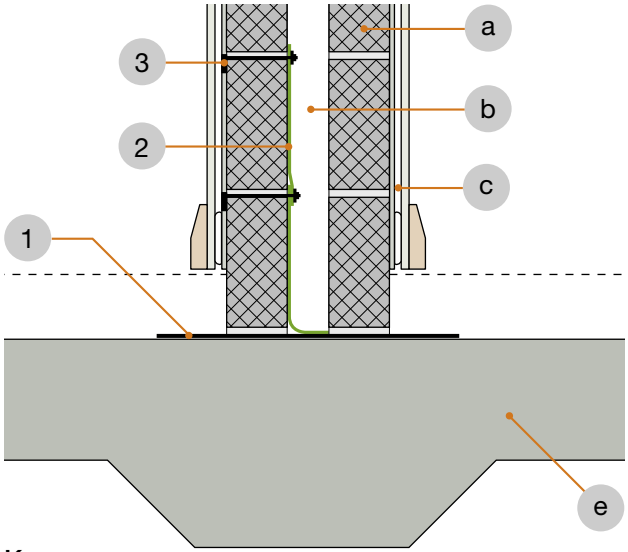
1. Separating wall – direct support on raft



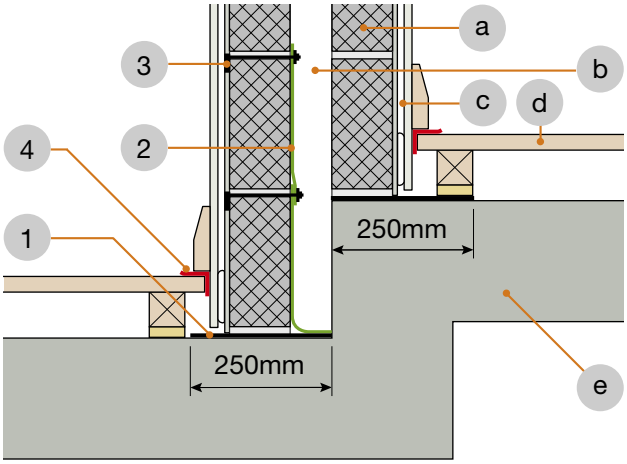
2. Separating wall – suspended floor with gas membrane



3. Insulated raft foundation



4. Stepped foundation



Key

1 500mm wide (or 250mm where shown) MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane laid under the party wall over the dpm. This is an integral part of the system.

2 MONARFLOOR® BRIDGESTOP® Quilt in two lifts to prevent mortar droppings touching both masonry leaves.

3 MONARFLOOR® BRIDGESTOP® Tie to penetrate at max 450mm centres. Ties are reversible. May also be used as render depth marker.

4 MONARFLOOR® 6mm Flanking Band forming a 90° angle to isolate floating floor treatment from separating wall blocks, lining and skirting board.

5 Continuous dpm over the raft where ground gasses are an issue. Contact Icopal for specification.

a Min 100mm block (with appropriate Type A wall ties) dependent on Robust Detail being used. Refer to Table 6a in the Introduction.

b Min 75mm or 100mm cavity width dependent on Robust Detail being used.

c Wall finish dependent on Robust Detail used.

d Floating screed on insulation; or timber floating floor types FFT2 resilient cradle and batten, FFT3 resilient batten, or FFT4 deep platform system.

e 150mm (min) thick insitu concrete 365kg/m² (min) mass per unit area or Insulslab SFRC.

Contact details for Icopal-MONARFLOOR®:

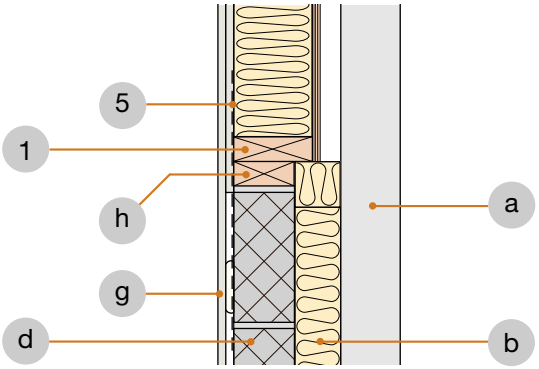
Telephone: 0161 866 6540
Fax: 0161 865 8433
E-mail: acoustics.uk@icopal.com

BRIDGESTOP® is the subject of Patent Application ref GB2429719

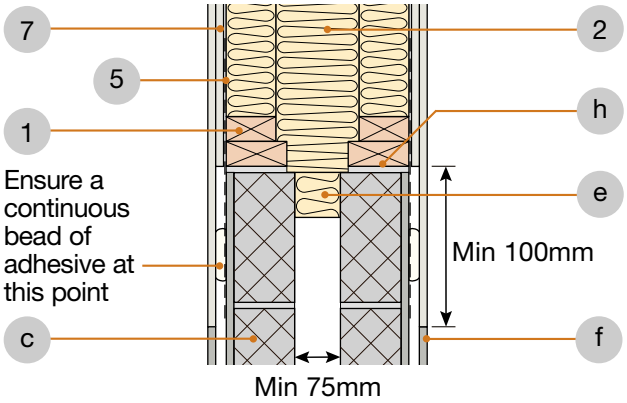
Appendix A2 – Specific Flanking Conditions

Smartroof complete "room-in-roof" panel system using robustdetails® timber or masonry cavity walls. Refer to Table 6 in Introduction.

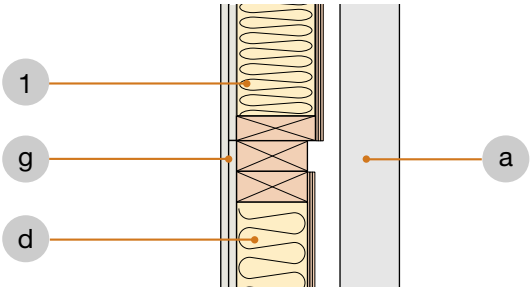
1. Gable flanking junction – masonry



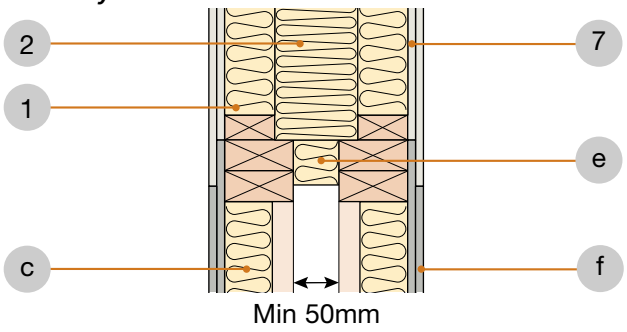
2. Room-in-roof junction with masonry cavity walls



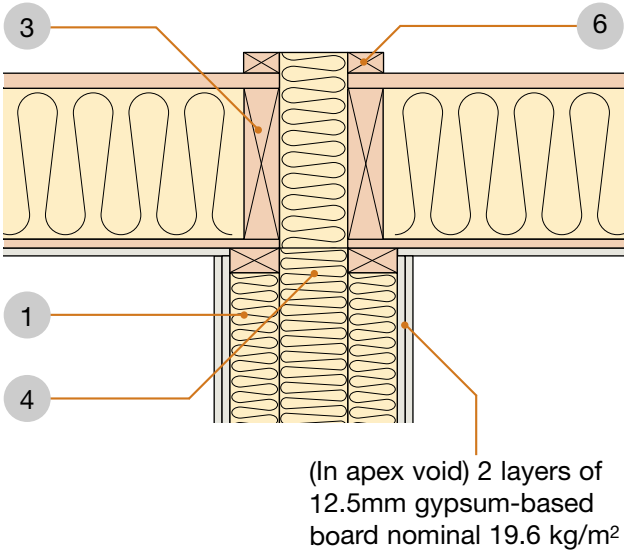
3. Gable flanking junction – timber frame



4. Room-in-roof junction with timber frame cavity walls



5. Separating wall – roof junction



Key

1 Smartroof panel.

2 Breather membrane-encased insulation cushion, fully filling the cavity.

3 Smartroof roof panel.

4 125x265mm flexible cavity closer by Smartroof.

5 Vertical metal straps by Smartroof.

6 25x50mm counterbattens by Smartroof.

7 2 layers min.12.5mm gypsum-based board total 19.6 kg/m² to cover spandrel and wall plate second layer to overlap masonry by min.300mm.

a Outer leaf of external wall.

b Continue cavity batts up to gable end if required.

c Refer to relevant robustdetails® separating wall.

d Inner leaf dependent on Robust Detail being used.

e Flexible cavity closer.

f Gypsum-based board(s) as specified on robustdetails® separating wall.

g Gypsum-based board nominal 8 kg/m². 2 layers required where separating floors are used (refer to robustdetails® separating floor).

h 100x50mm wall plate on nominal 10mm mortar bed. Ensure no gaps remain.

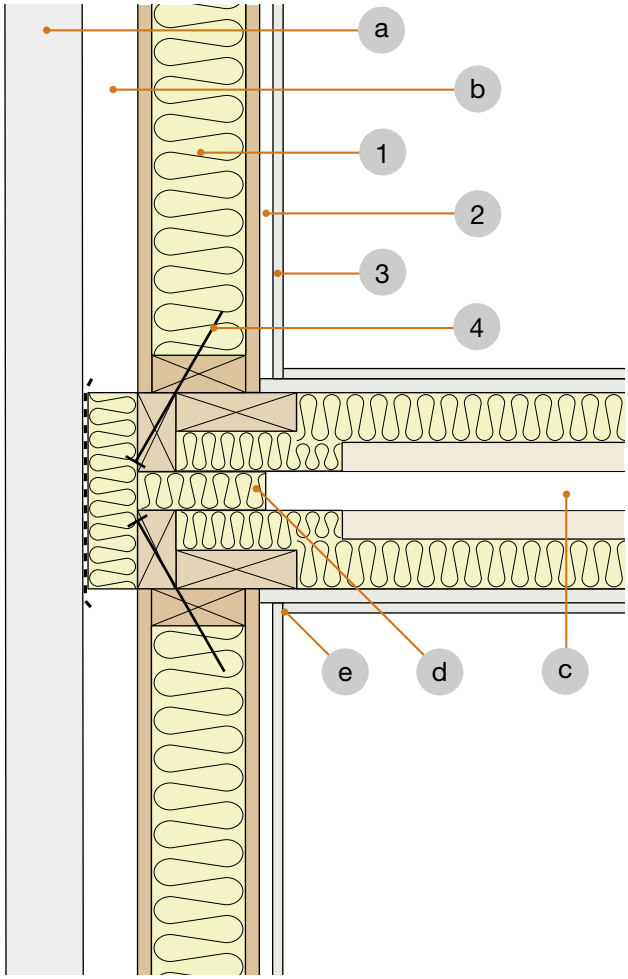
Contact details for Smartroof Limited:

Telephone: 01283 200 199
E-mail: info@smartroof.co.uk
Web: www.smartroof.co.uk

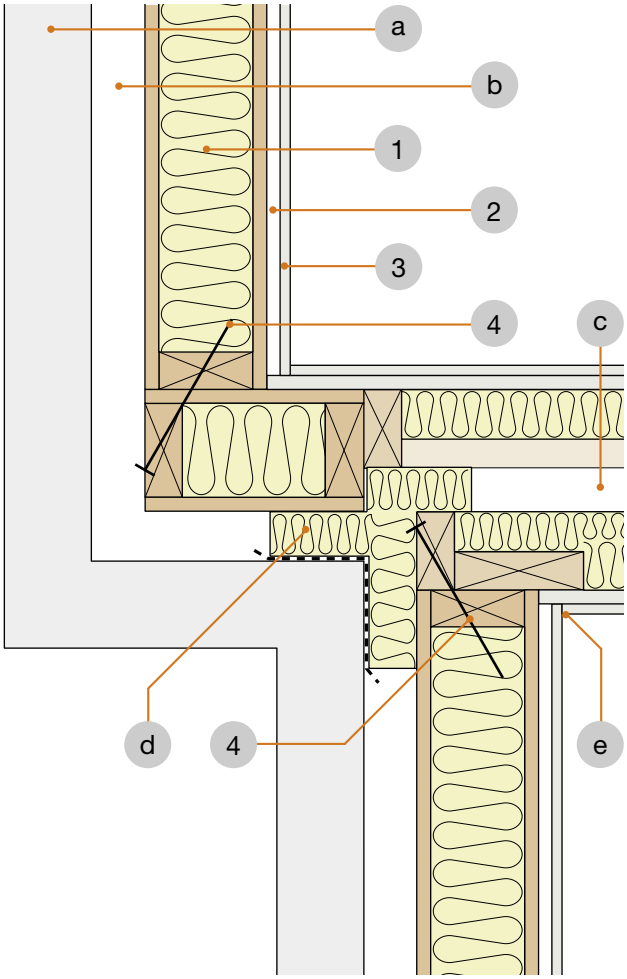
Appendix A2 – Specific Flanking Conditions

Kingspan TEK inner leaf flanking condition for robustdetails® timber separating walls. Refer to Table 6 in Introduction. *Currently when used with separating floors in apartments, separating floors will require pre-completion testing.*

1. External (flanking) wall junction



2. Staggered external (flanking) wall junction



Key

1 Kingspan TEK – 142 Panel.

2 Service void (if required).

3 One layer of gypsum-based board nominal 8 kg/m² on inner leaf where there is no separating floor, e.g. for houses.

Two layers of gypsum-based board nominal 8 kg/m² each on inner leaf where there is a separating floor (non-robustdetails® floor), e.g. for flats and apartments.

4 Approved fixings to TEK BBA Cert No. 02/S029.

a Masonry outer leaf (min 100mm thick).

b External wall cavity (min 50mm).

c robustdetails® timber frame separating wall. (Refer to Table 6 in Introduction and relevant timber frame Robust Details in Handbook).

d Close cavity with flexible cavity stop (see Appendix A).

e Seal all joints with tape or caulk with sealant.

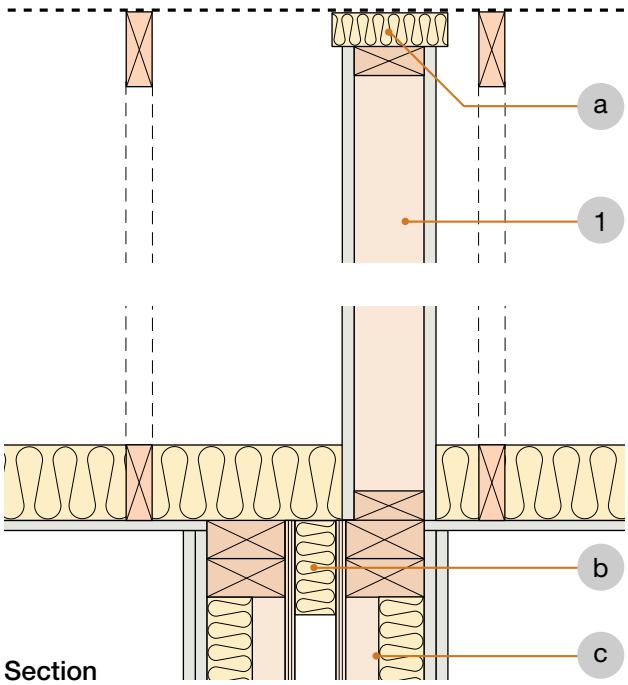
Contact details for Kingspan TEK,
Kingspan Insulation Limited:

Telephone: 01544 387382
Fax: 01544 387482
E-mail: technical.uk@tek.kingspan.com
Web: www.tek.kingspan.com

Appendix A2 – Specific Flanking Conditions

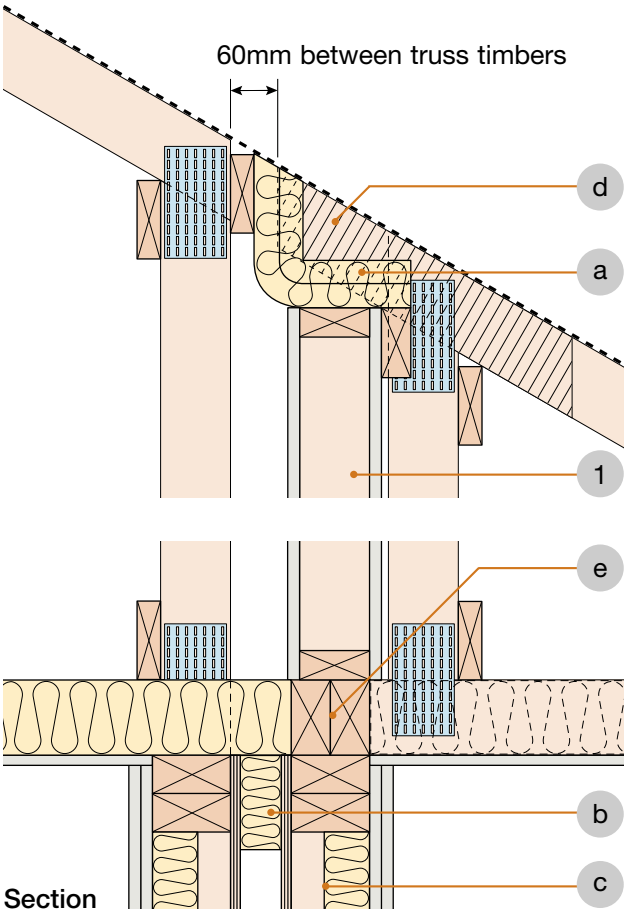
Prestoplan PresPeak 60 interlocking single spandrel panel system for use on robustdetails® timber separating walls in non room-in-roof situations. Refer to Table 6 in Introduction.

1. Spandrel panel located parallel to trussed rafters



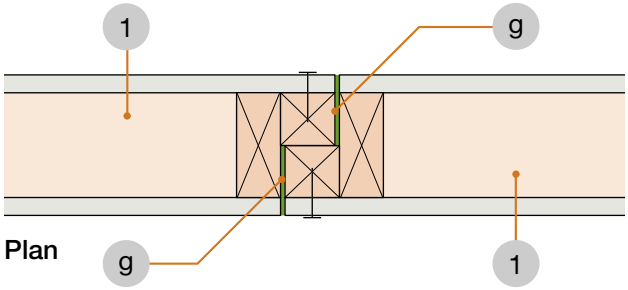
Section

2. Spandrel panel located across trussed rafters



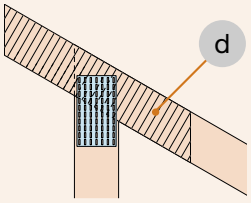
Section

3. Spandrel panel joint detail

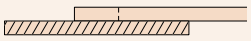


Plan

Top chord detail

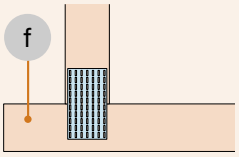


Elevation



Plan

Bottom chord detail



Elevation

Key

1 PresPeak 60 spandrel panels.
a Firestop wired mineral wool closer.
b Flexible cavity stop.
c Timber frame separating wall.
d Site-fixed rafter extension.
e Continuous blocking between bottom chords of trusses.
f Bottom chord extended for support.
g Intumescent tape.

Refer also to manufacturer's guidance

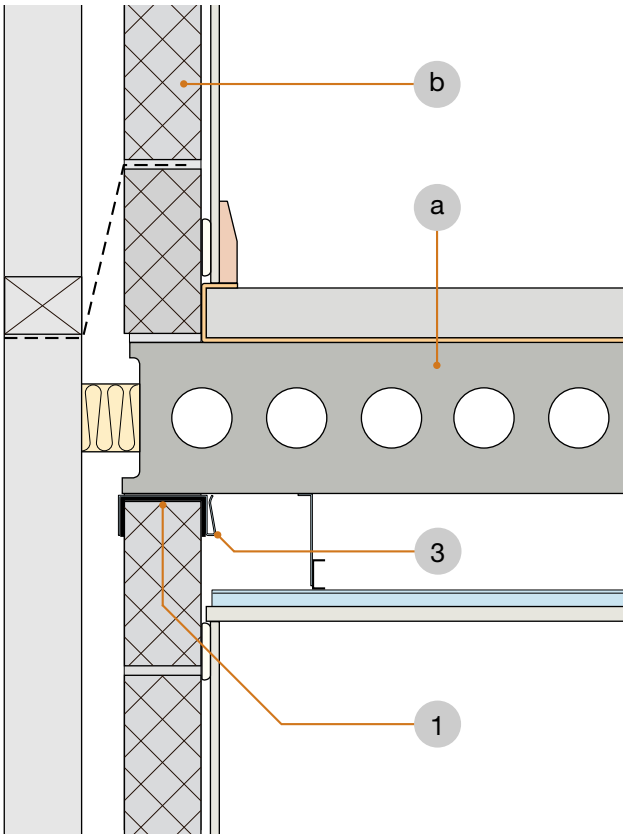
Contact details for Prestoplan Limited:

Telephone: 01772 627373
Fax: 01772 627575
Web: www.prestoplan.co.uk

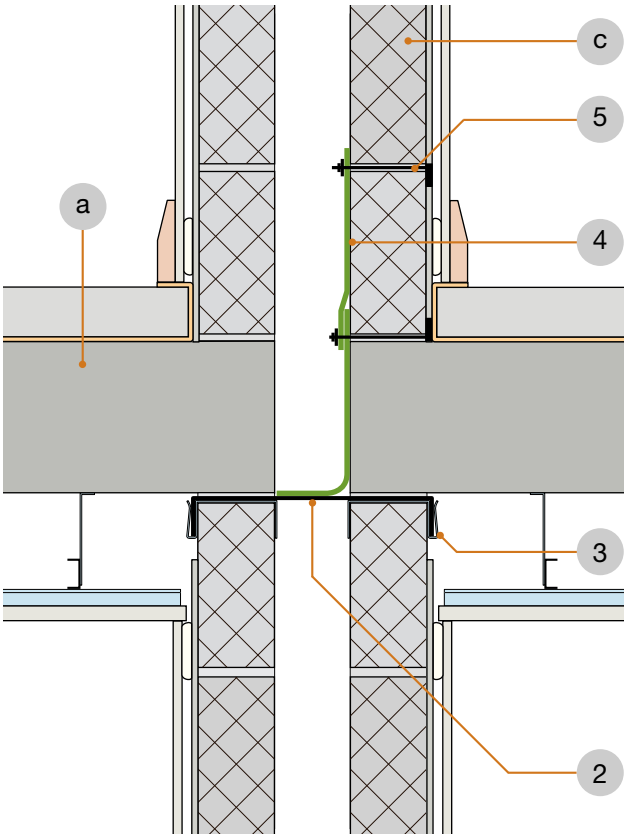
Appendix A2 – Specific Flanking Conditions

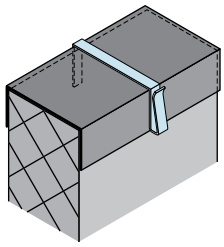
Icopal-MONARFLOOR® Wall Cap RDA2 System for robustdetails® separating floors in conjunction with cavity walls. Refer to Table 6 in Introduction.

1. External (flanking) wall junction

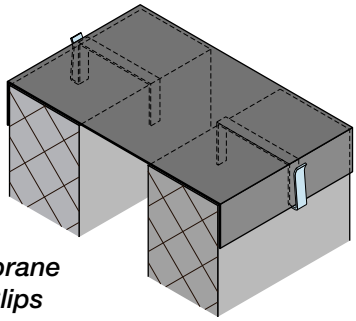


2. Separating wall junction





Wall Cap 200 and Wall Cap Clip



Wall Cap RDA2 Membrane and Wall Cap RDA2 Clips

When applying this system to forms of construction other than masonry, please refer to manufacturer's installation guides. Note: In these cases, not all components shown above may be required.

Key

1 3.5mm MONARFLOOR® Wall Cap 200 laid as continuous layer on external (flanking) wall.

2 3.5mm MONARFLOOR® Wall Cap RDA2 Membrane laid as continuous layer on separating wall.

3 Wall Cap RDA2 Clips.

4 MONARFLOOR® RDA2 Quilt in two lifts to prevent mortar droppings touching both masonry leafs.

5 MONARFLOOR® RDA2 Tie to penetrate at max 450mm centres. Ties are reversible and may also be used as render depth gauges.

a robustdetails® separating floor. Refer to Table 6 in Introduction.

b External (flanking) wall. Refer to floor Robust Detail for specification.

c Separating wall. If using robustdetails® separating wall refer to Table 3a in Introduction.

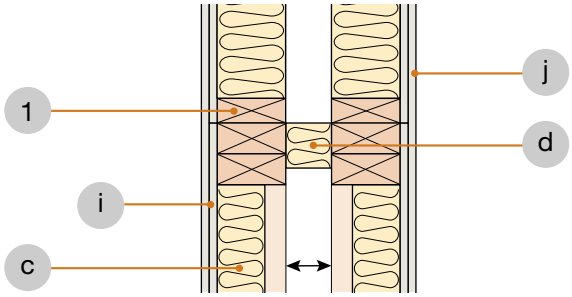
Contact details for Icopal-MONARFLOOR®:

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

Appendix A2 – Specific Flanking Conditions

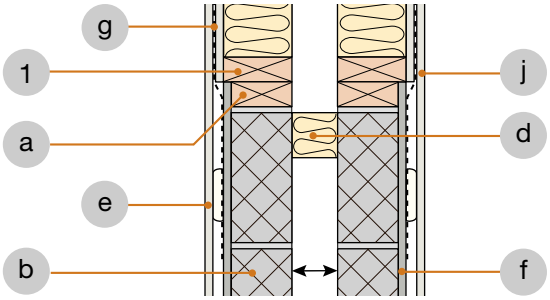
RoofSpace I-Roof™ "room-in-roof" panel system using robustdetails® timber or masonry cavity walls. Refer to Table 6 in Introduction.

1. Room-in-roof junction with timber frame cavity walls



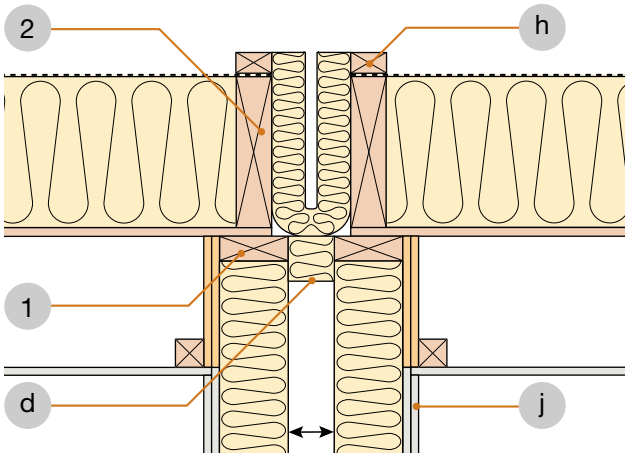
Min 50mm

2. Room-in-roof junction with masonry cavity walls



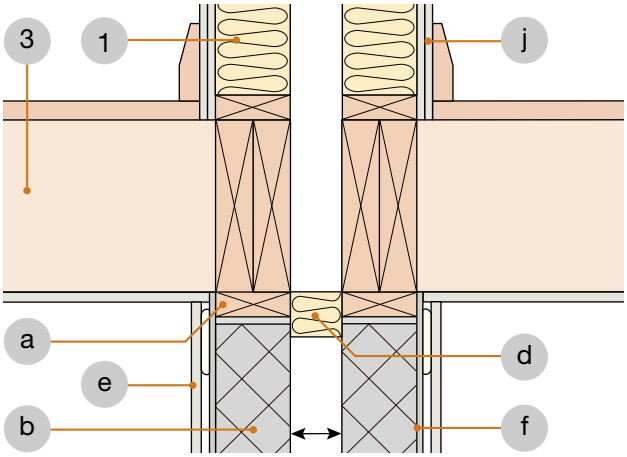
Min 75mm

3. Separating wall – roof junction



Min 50mm

4. Internal floor cassette junction option



Min 75mm

Key

1 RoofSpace I-Roof™ spandrel panel.

2 RoofSpace I-Roof™ roof panel.

3 RoofSpace internal floor cassette.

a Timber wall plate bedded on 10mm mortar bed to take out unevenness in blockwork.

b Minimum 100mm blockwork.

c Timber frame separating wall leaf.

d Cavity closer.

e Gypsum-based board dependent on Robust Detail being used.

f Nominal 8mm render coat (refer to relevant robustdetails® separating wall).

g Vertical metal straps at 1200mm centres if required.

h 25 x 38mm counterbatten.

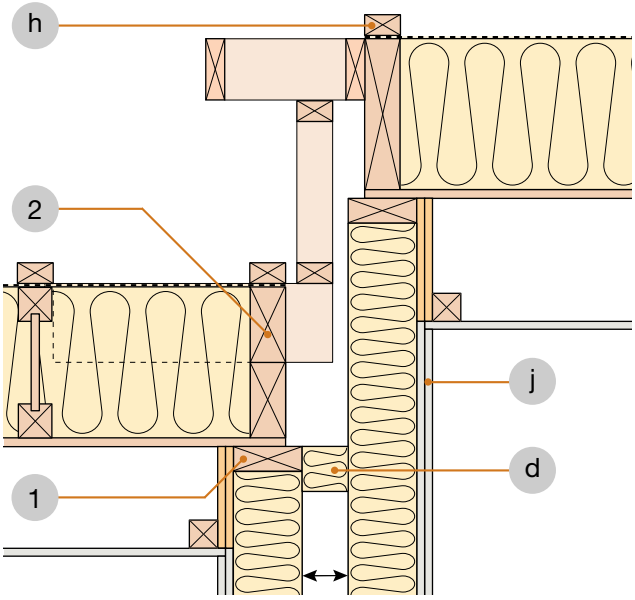
i 2 layers gypsum-based board total nominal 22 kg/m².

j 2 layers gypsum-based board total minimum 19.6 kg/m².

Spandrel panel cavity insulation (optional)

The cavity between the spandrel panels may be insulated with mineral wool rolls or batts with a density of 18-40 kg/m³. Ensure insulation thickness is no greater than 10mm wider than cavity width to avoid excessive compression of the insulation.

5. Separating wall – roof junction – stepped terrace



Min 50mm

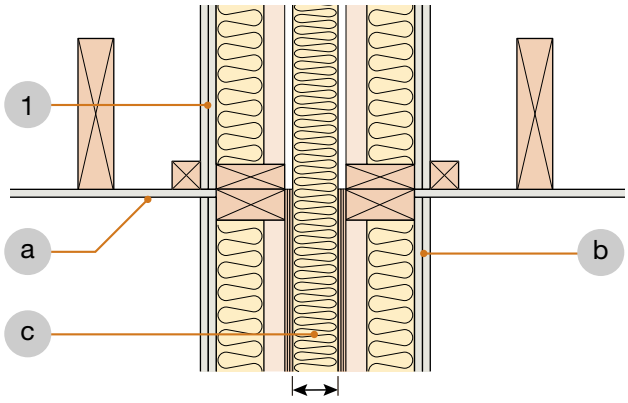
Contact details for Roofspace Solutions:

Telephone: 01789 768000
E-mail: technical@roofspacesolutions.co.uk
Web: www.roofspacesolutions.co.uk

Appendix A2 – Specific Flanking Conditions

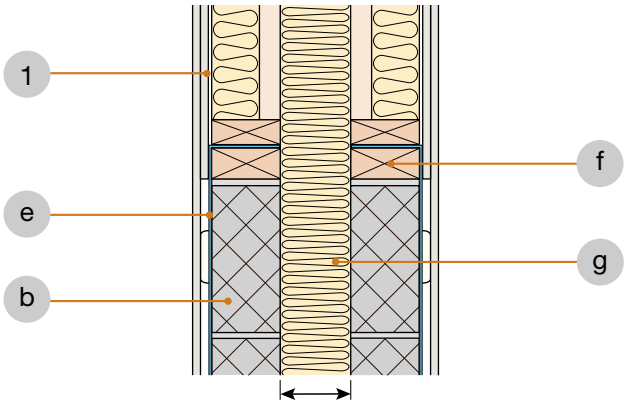
Space4 "room-in-roof" panel system using robustdetails® timber or masonry cavity walls. Refer to Table 6 in Introduction.

1. Non room-in-roof spandrel panel to timber separating wall junction



Min 50mm

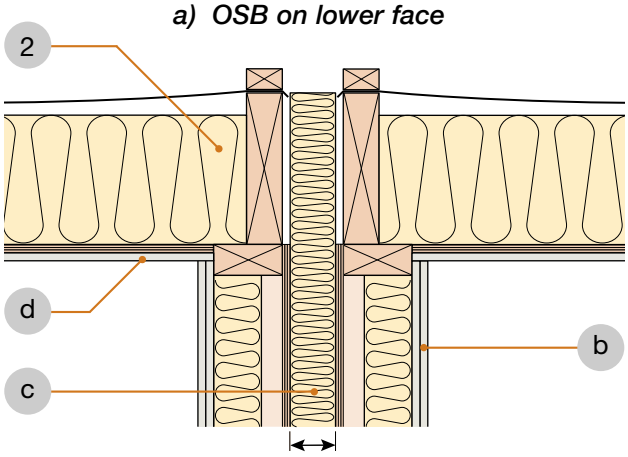
2. Spandrel panel to masonry separating wall junction



Min 100mm

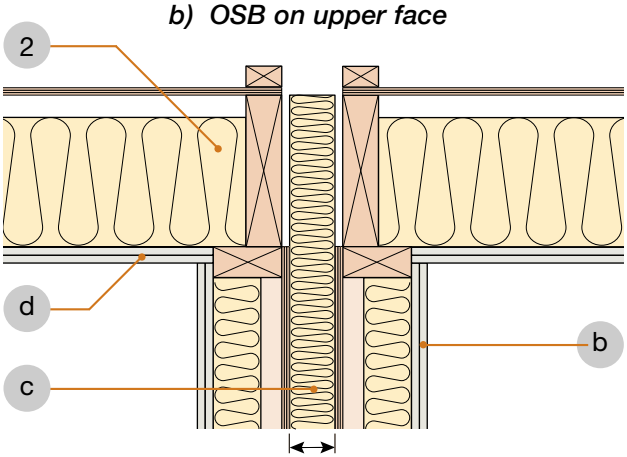
3. Roof cassette to timber separating wall junction for room-in-roof

a) OSB on lower face



Min 50mm

b) OSB on upper face



Min 50mm

Key

1 Space4 spandrel panel.

2 Space4 roof cassette.

a Minimum 1 layer nominal 8 kg/m² gypsum-based board to ceiling.

b robustdetails® separating wall.

c Mineral wool 18-40 kg/m³.

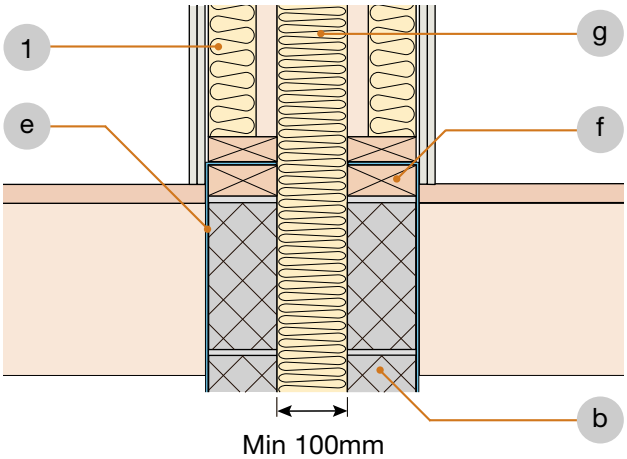
d OSB underdraw overlaid with minimum 1 layer gypsum-based board nominal 16 kg/m² total or 2 layers of gypsum-based board nominal 16 kg/m² total.

e Vertical metal straps at 1200mm centres if required.

f Wall plate fully bedded on mortar with no gaps.

g Mineral wool 12-25 kg/m³.

4. Internal floor junction for room-in-roof



Min 100mm

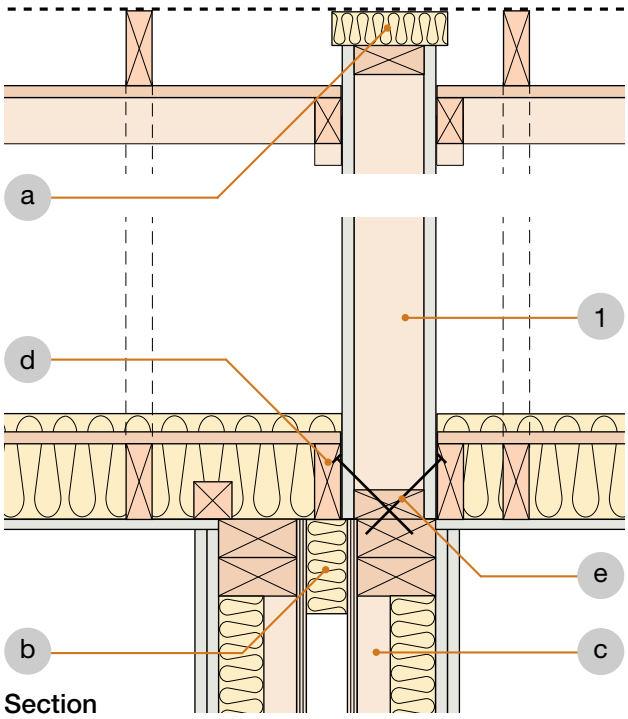
Contact details for Space4:

Telephone: 0121 748 8383
Fax: 0121 776 7369
E-mail: technical@space4.co.uk
Web: www.space4.co.uk

Appendix A2 – Specific Flanking Conditions

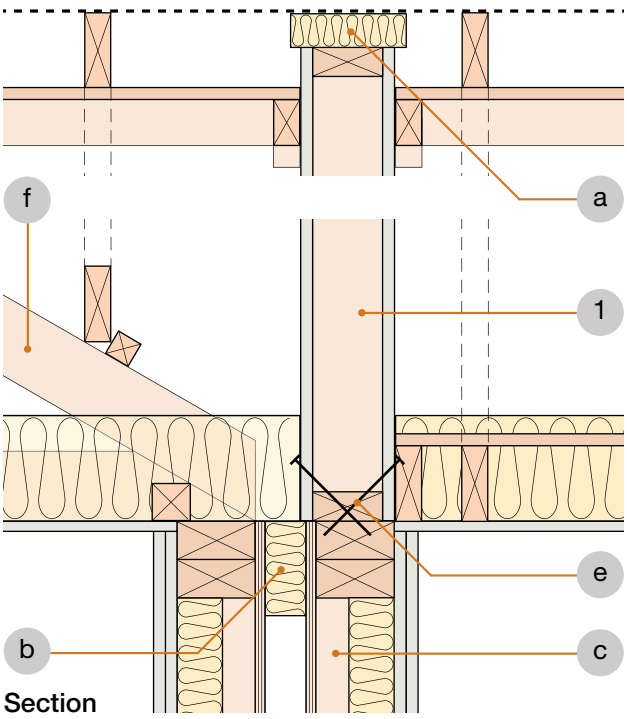
Donaldson Timber Systems Single Leaf Spandrel Panel System for use on robustdetails® timber separating walls in non room-in-roof situations. Refer to Table 6 in Introduction.

1. Spandrel panel located parallel to trussed rafters



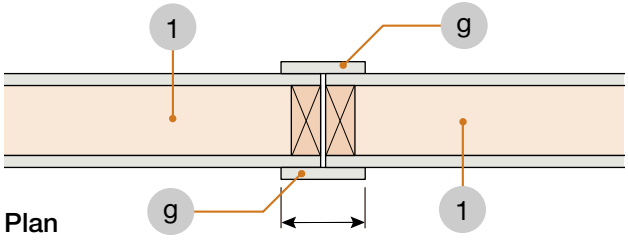
Section

2. Spandrel panel located across trussed rafters



Section

3. Spandrel panel joint detail
Panels secured together using angled screw fixings



Plan

Min 100mm

Key

1 Donaldson Timber Systems Single Leaf Spandrel Panel System.

a Mineral wool closer.

b Flexible cavity stop.

c Timber frame separating wall.

d Site-fixed runners must not contact both wall leafs.

e Angled screw fixings to secure spandrel to wall head.

f Trusses and rafters must not contact both wall leafs.

g Gypsum board cover strip.

Refer also to manufacturer's guidance

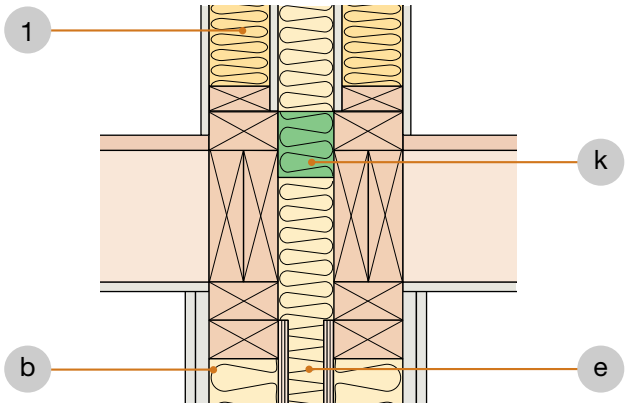
Contact details for
Donaldson Timber Systems Limited:

Telephone: 0845 009 2774
Email: help@donaldsontimbersystems.com
Web: www.donaldsontimbersystems.com

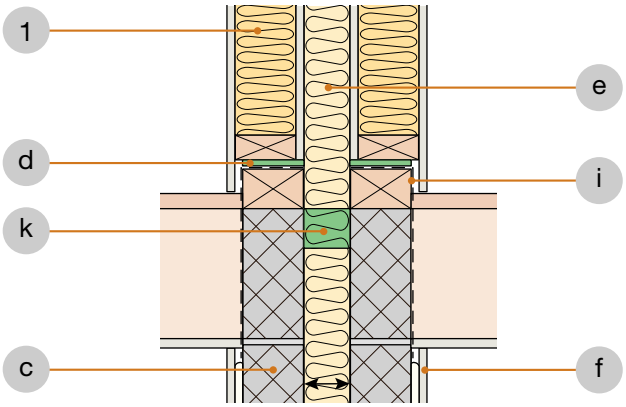
Appendix A2 – Specific Flanking Conditions

NTSROOF *RAPID FIT SYSTEM* for **robust**details® timber or masonry cavity walls for "room-in-roof" situations. Refer to Table 6 in Introduction.

1. Room-in-roof junction with timber cavity walls

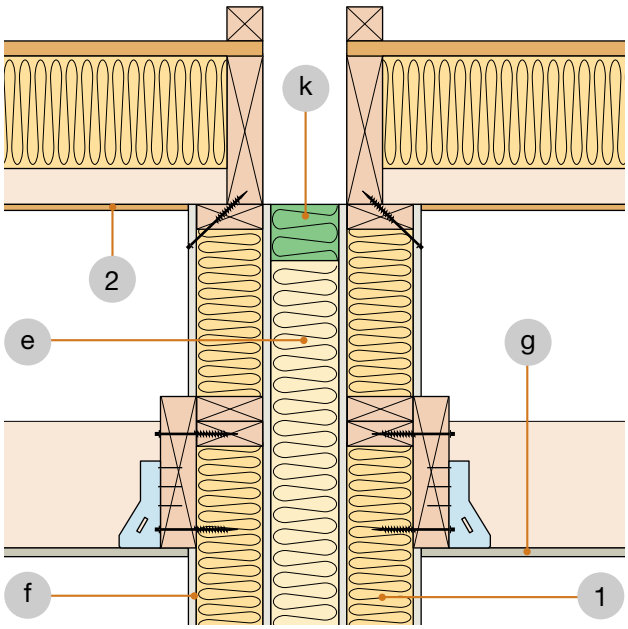


2. Room-in-roof junction with masonry cavity walls

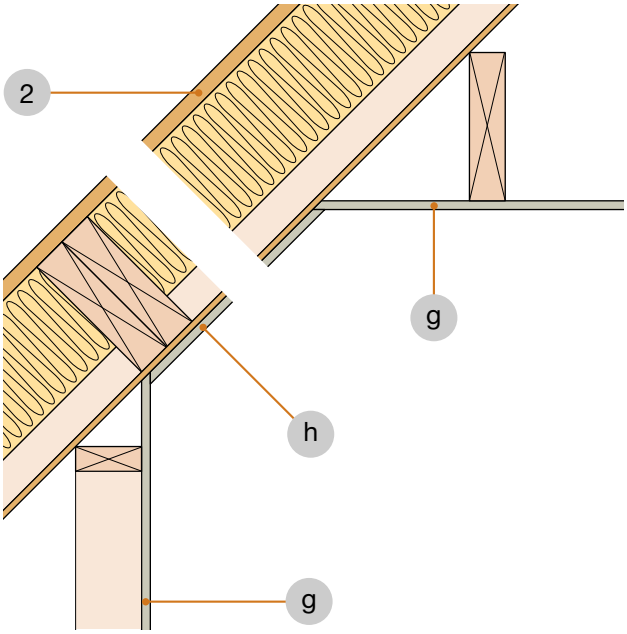


Min 75mm

3. Separating wall – roof junction



4. Room-in-roof lining requirements



Key

a Outer leaf of external wall.

b Timber **robust**details® wall (see Table 6 in Introduction).

c Blockwork dependent on Robust Detail used.

d Intumescent sealant.

e Cavity insulation dependent on Robust Detail used.

f Gypsum-based board (nominal 10 kg/m²).

g Gypsum-based board (nominal 8 kg/m²)

h Min. 1 layer gypsum-based board (nominal 10 kg/m²).

i Vertical metal straps if required. Straps must not extend into the cavity.

j Wall plate bedded on mortar, notched to take straps.

k Cavity closer if required for other Regulations.

1 **NTS**ROOF spandrel panel.

2 **NTS**ROOF roof cassette.

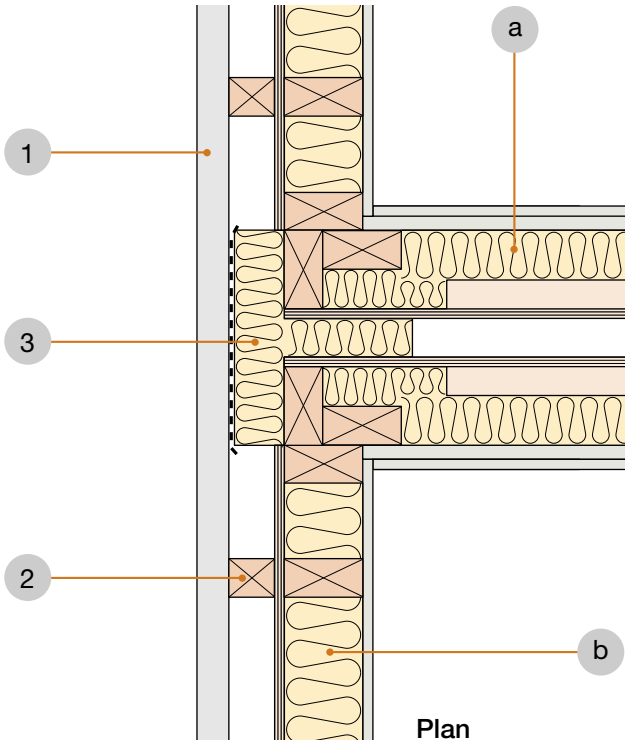
Contact details for National Timber Systems:

Telephone: 01609 751111
Fax: 01609 788388
E-mail: george.rayden@nationaltimbersystems.co.uk
Web: www.nationaltimbersystems.co.uk

Appendix A2 – Specific Flanking Conditions

Lightweight external cladding treatments for robustdetails® timber separating walls. Refer to Table 6 in Introduction. *Currently when used with separating floors in apartments, separating floors will require pre-completion testing.*

External (flanking) wall junction



Plan

Key

1 Cladding system (see Table below).

2 Cladding support rails (timber or metal). Horizontal rails fixed directly to the wall structure must not be continuous across the separating wall.

3 Flexible cavity closer to fully close the cavity behind the cladding.

a Separating wall. See chosen Robust Detail for specification.

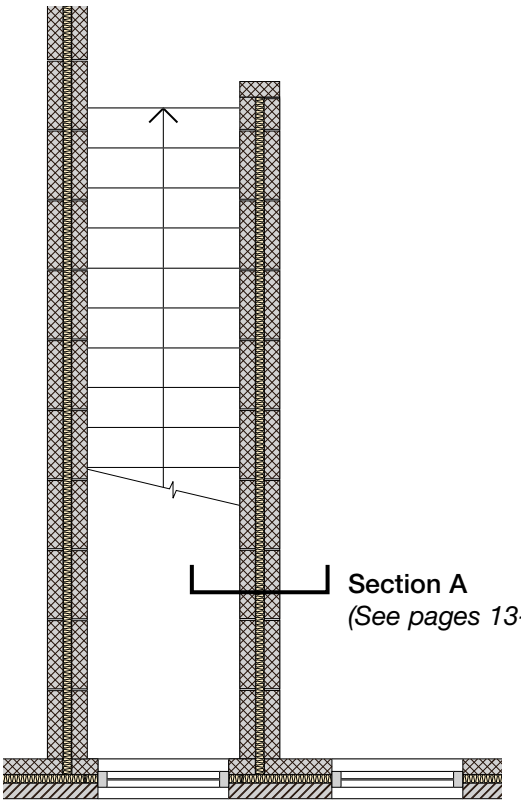
b Inner leaf of external wall. See chosen Robust Detail for specification.

Acceptable cladding types	
Render board	Systems having minimum 9mm rigid render board with minimum mass per unit area of 12.4 kg/m^2. It is acceptable to have multiple board layers.

Appendix A2 – Specific Flanking Conditions

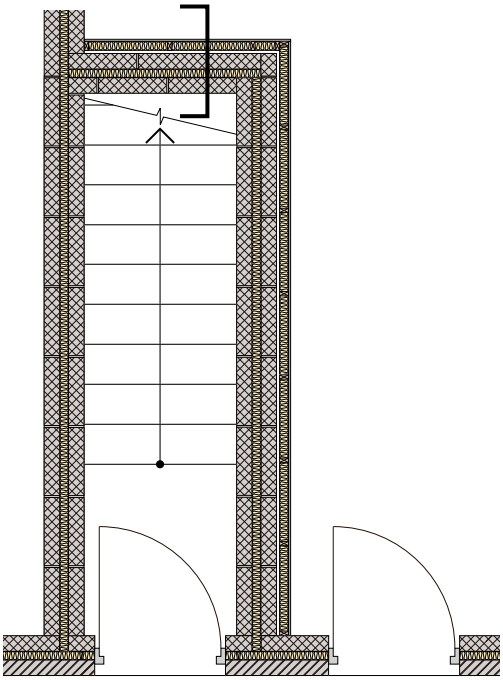
Flanking construction guidance for **robust**details® precast concrete separating floors around private stairs, where there are two flats (one above the other) and where stairs being open to the upper flat prevents the flanking condition published in the floor Robust Detail from being fully constructed. See Table 6b in the Introduction.

Typical stair arrangement



First floor plan

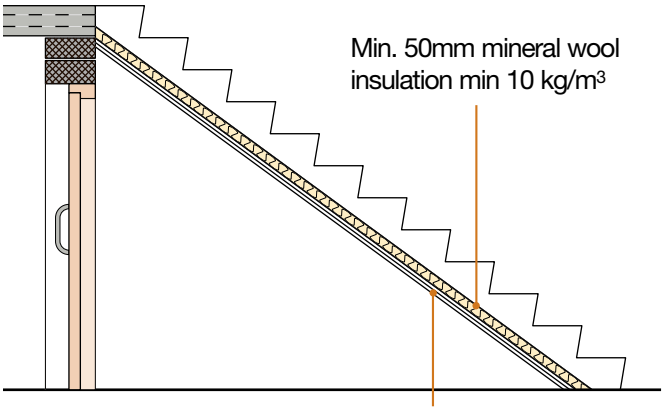
Section B *(See page 15)*



Ground floor plan

Stair soffit treatment - applies to both timber and concrete stairs

Stair landing



Cupboard under stairs

2 layers gypsum board nominal 10 kg/m² each on independent framework not fixed to the stairs

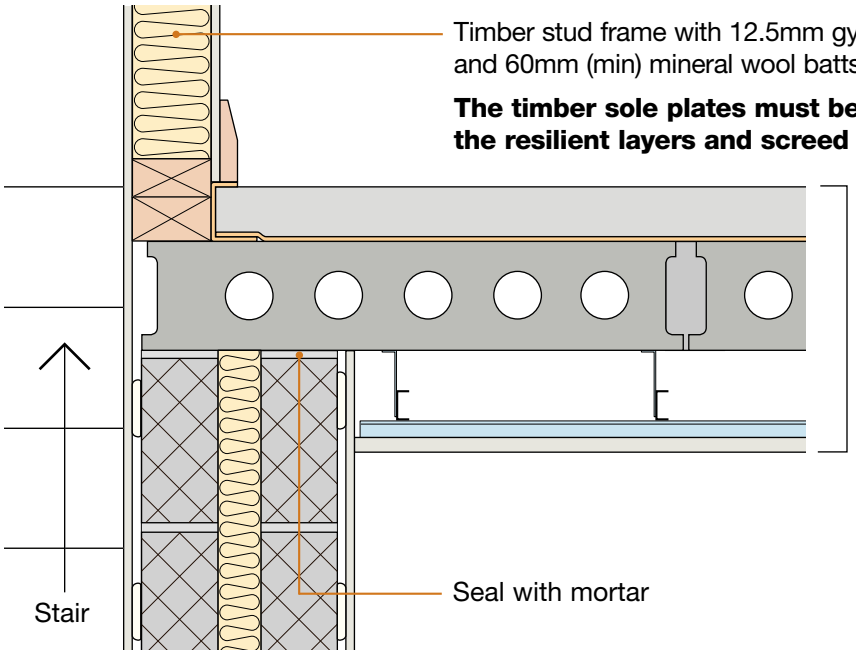
Stair landing

Stairwell fully enclosed

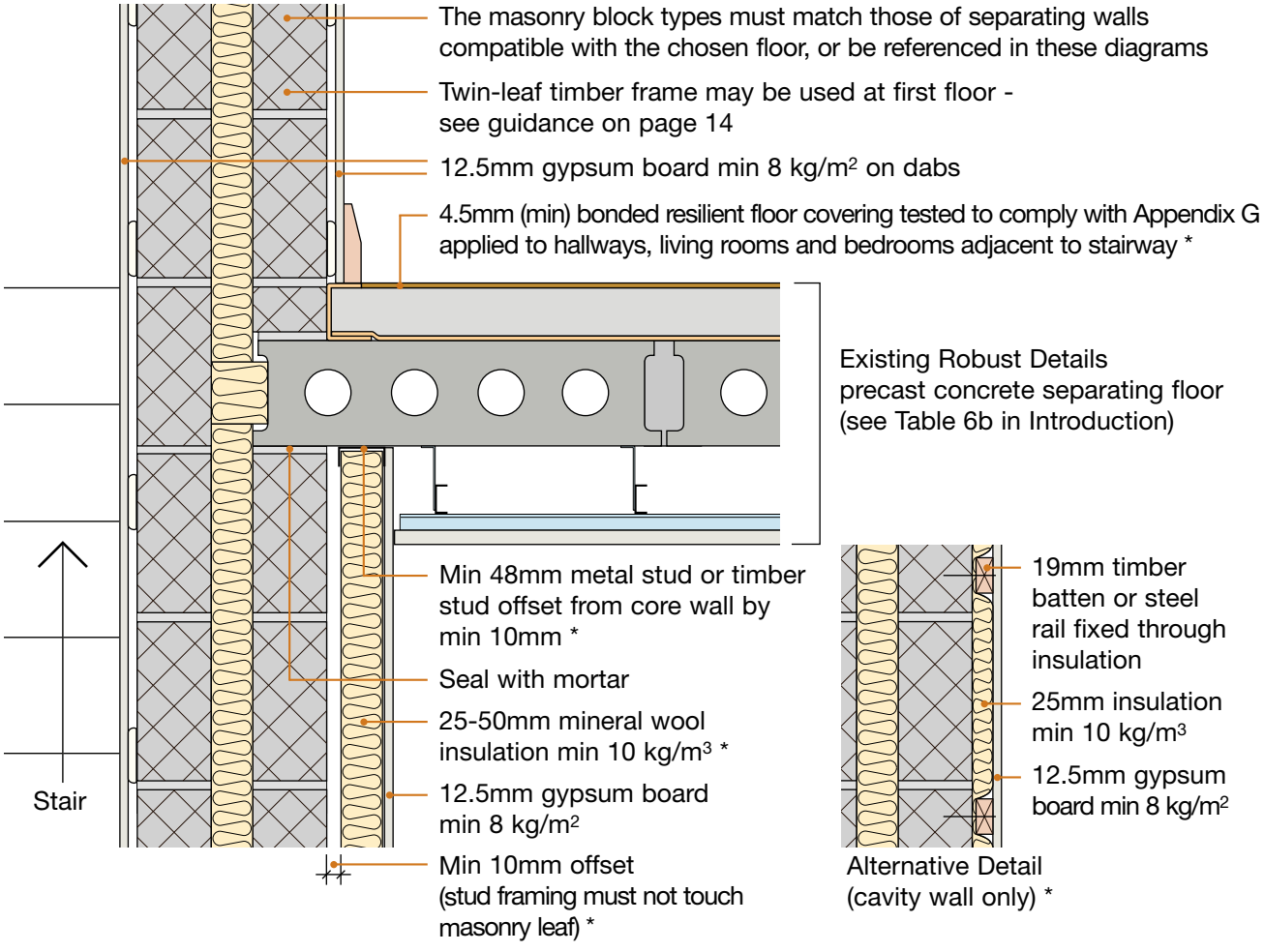
The area under the stairs must either form a cupboard or be fully enclosed. It is not acceptable to have the stairs soffit within a habitable room.

Appendix A2 – Specific Flanking Conditions

Section A - cavity walls



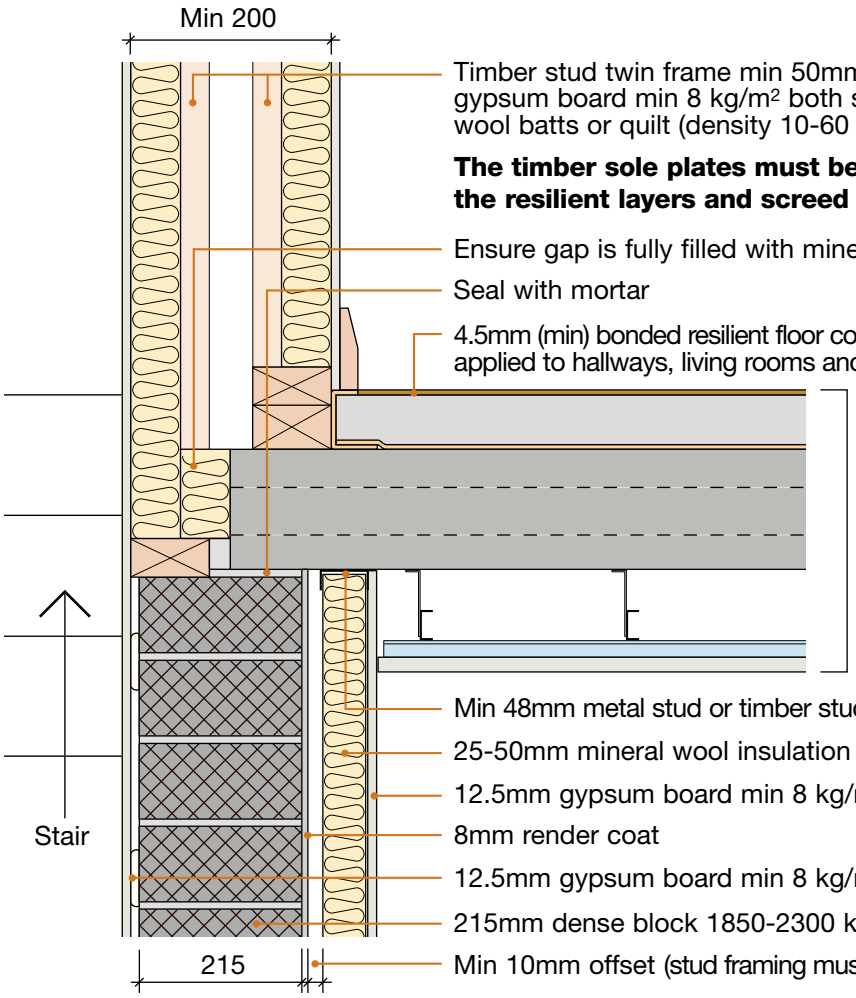
Alternative construction



* The independent leaf and bonded resilient layer are optional where a cavity masonry wall is used at ground floor.

Appendix A2 – Specific Flanking Conditions

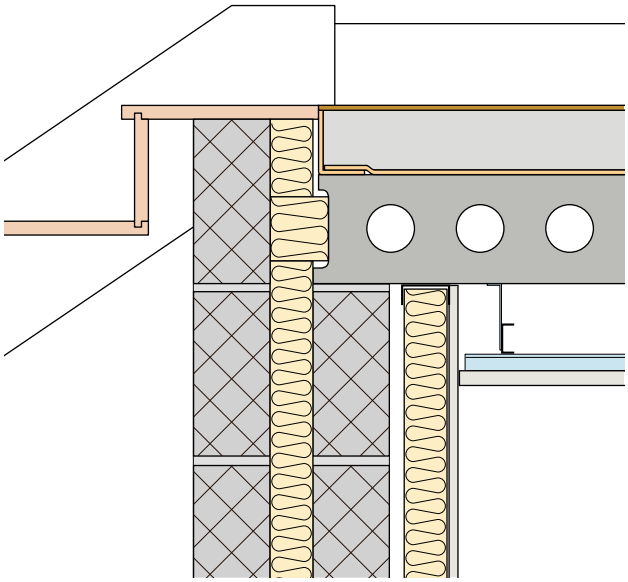
Section A - solid walls

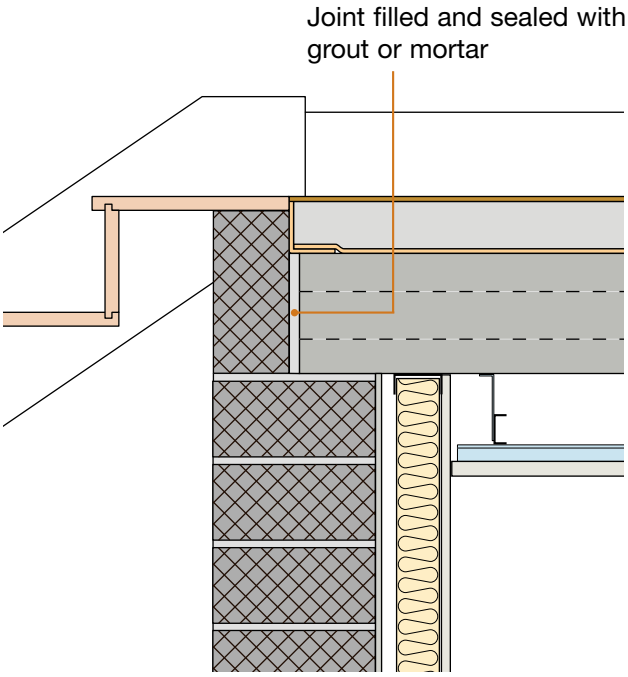


Appendix A2 – Specific Flanking Conditions

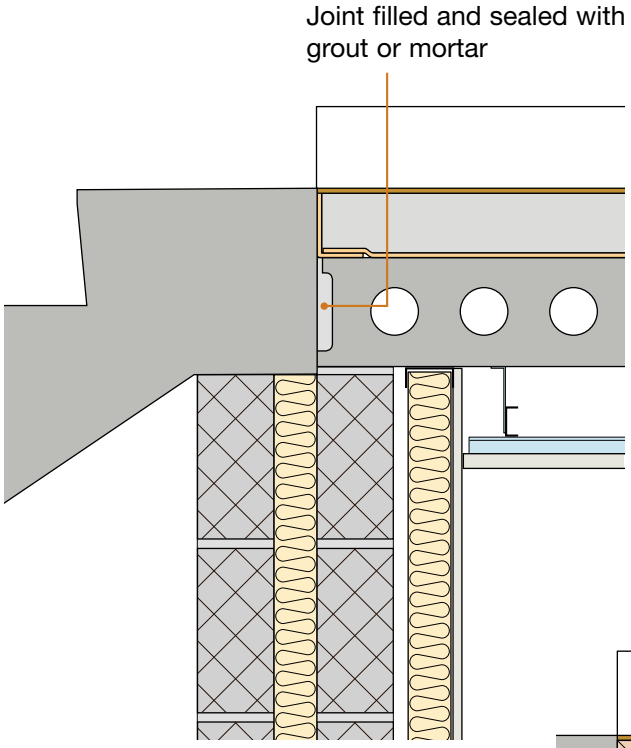
The stairs or timber block (see Alternative Detail) must be in place prior to installation of the resilient layers and screed

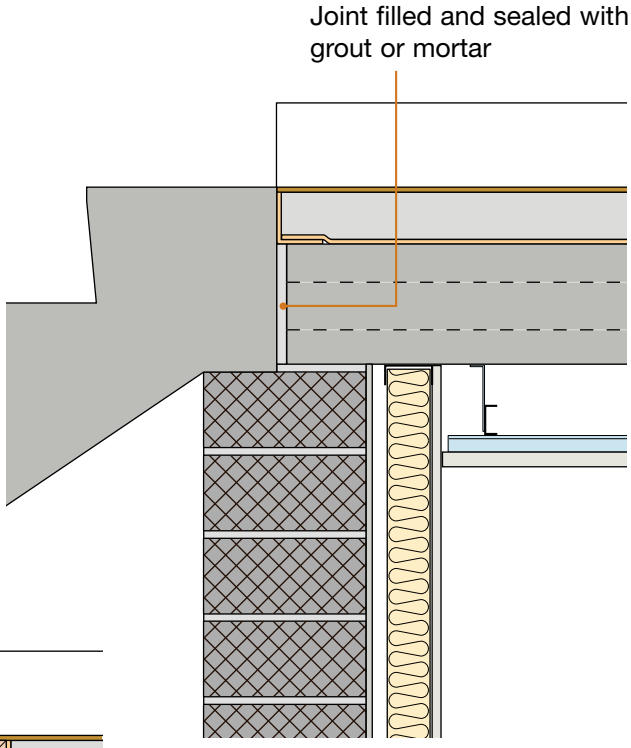
Section B - common junctions at stair landing
Timber stairs



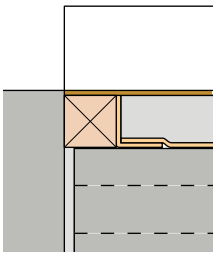


Section B - common junctions at stair landing
Concrete stairs





The independent leaf and bonded resilient layer are optional where a cavity masonry wall is used at ground floor.

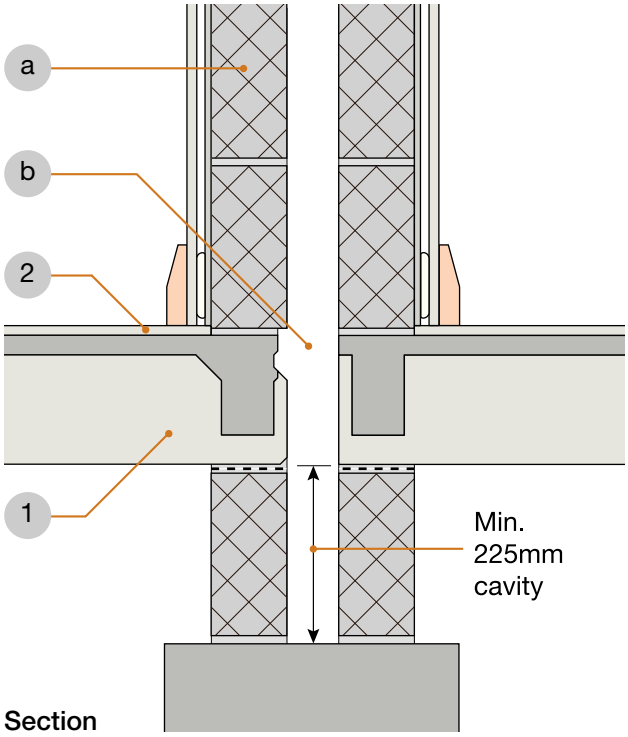


Alternative Detail at Floor/Stair Junction (can be used with any of the four configurations shown above)

Appendix A2 – Specific Flanking Conditions

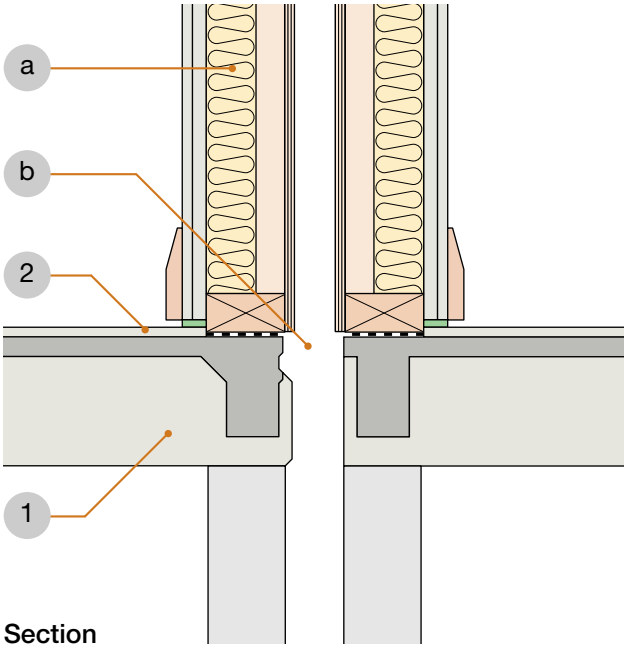
Nu-Span and Spantherm pre-insulated ground floor concrete slabs for robustdetails® cavity separating walls. Refer to Table 6 in Introduction.

1. Slab installation - ground floor only



Section

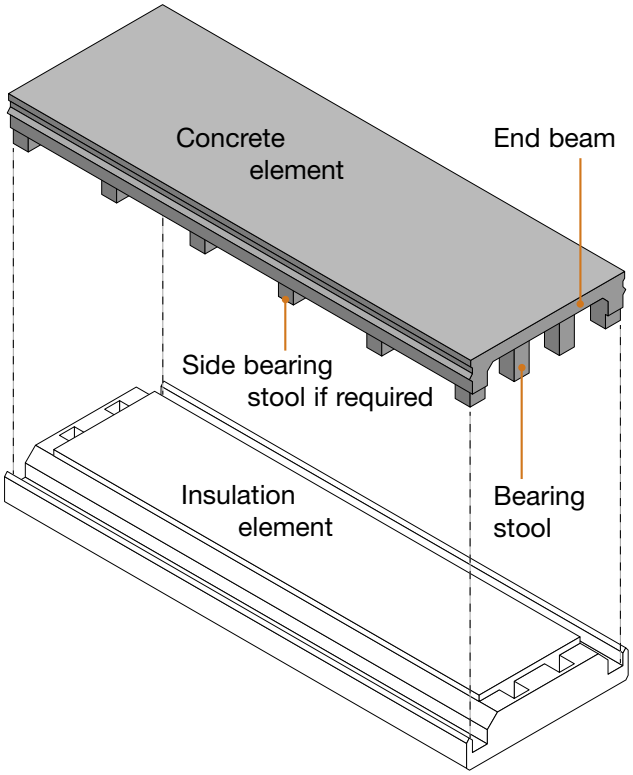
Masonry walls



Section

Timber and light steel frame walls

2. Slab components



Key

1 Nu-Span or Spantherm pre-insulated slab, 300mm or 375mm deep.
Slabs can be end-bearing or side-bearing.

2 Nominal 10mm self-levelling compound. Thicker screed layers are also acceptable.

a robustdetails® separating wall. Refer to Table 6a in the Introduction and relevant Robust Detail in the Handbook

b Maintain minimum cavity width specified for chosen robustdetails® separating wall. This can be insulated in accordance with the specification for the chosen wall type.

Contact details for Nu-Span:

Telephone: 01842 810445
E-mail: info@nu-span.com
Web: www.nu-span.com

Contact details for Spantherm:

Telephone: 01636 831043
E-mail: spantherm@creaghconcrete.com
Web: www.creaghconcrete.com

Appendix A3 – Specific Proprietary Products

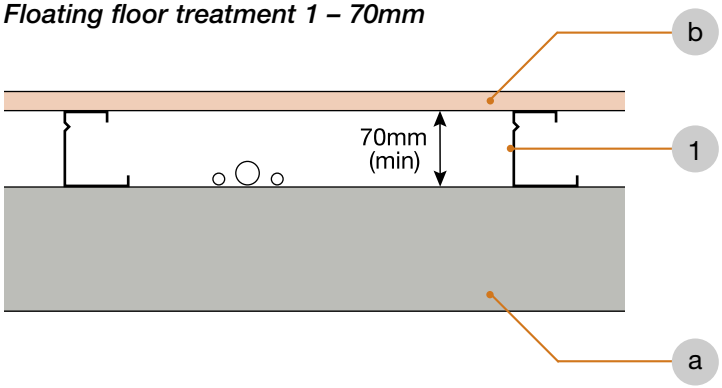
Contents

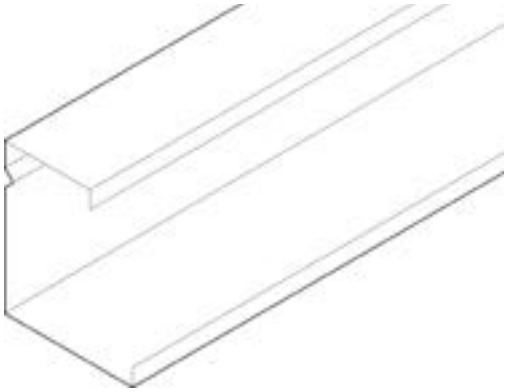
Section	Page
British Gypsum GypFloor SB floating floor treatment for robustdetails® concrete separating floors	2
Insumate Limited insulation support tray for robustdetails® timber joist separating floors	3
Cellecta HiDECK Structural floor board floating floor treatment for robustdetails® timber and steel joist separating floors	4

Appendix A3 – Specific Proprietary Products

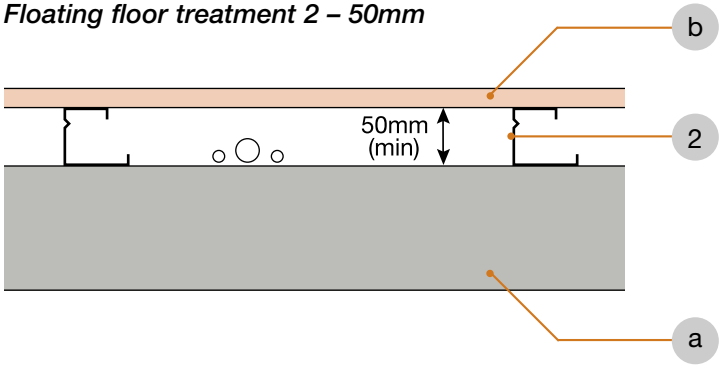
British Gypsum GypFloor SB floating floor treatment for robustdetails® concrete separating floors. Refer to Table 7 in Introduction.

Floating floor treatment 1 – 70mm





Floating floor treatment 2 – 50mm



Key

1 British Gypsum 70 SB 65 steel batten.

2 British Gypsum 50 SB 65 steel batten.

a robustdetails® concrete separating floor.

b 18mm (min) t&g flooring board.

Note: The robustdetails® separating floor may require a levelling screed. Please refer to the relevant floor details in the Handbook.

This system must be installed in accordance with the manufacturer's instructions.

Gypframe GypFloor SB flanking strip SB3 must be applied around the perimeter of the flooring board to isolate floor from walls and skirting.

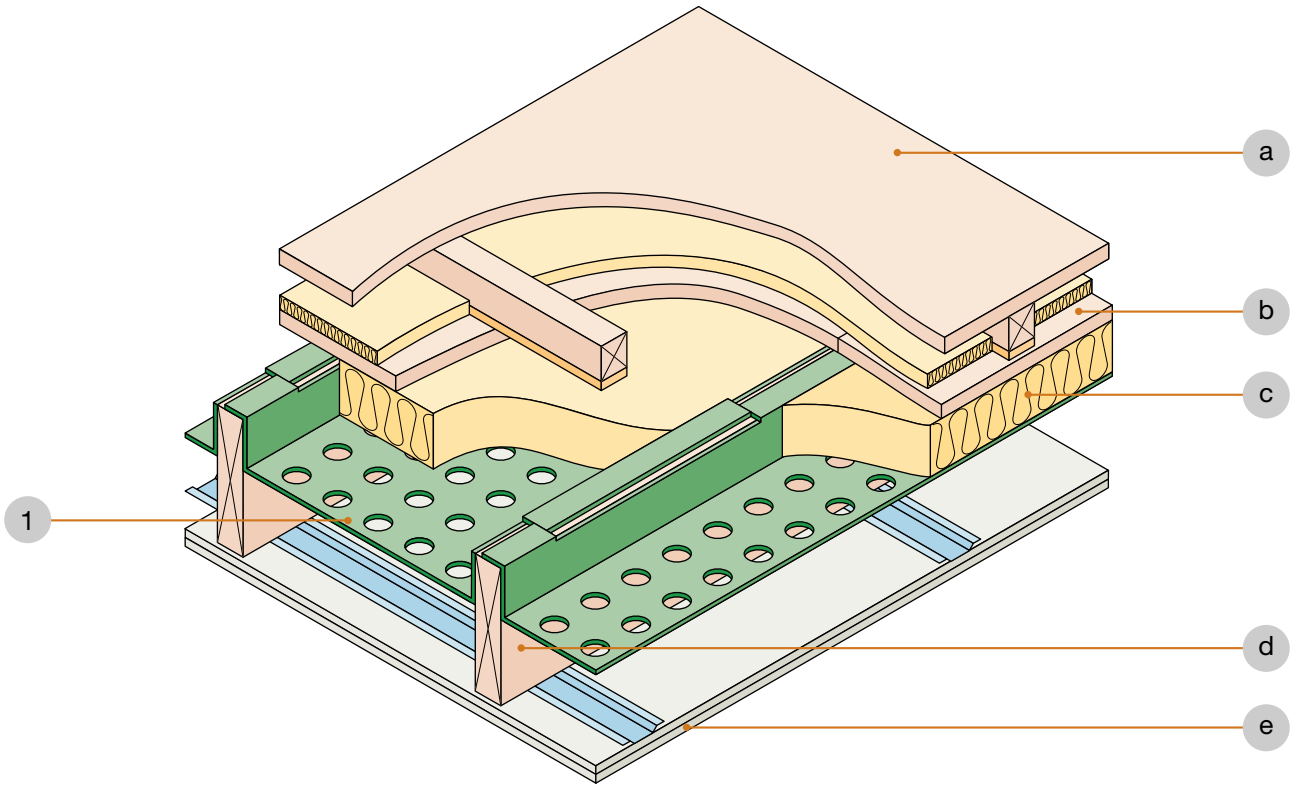
For further guidance on floating floor treatments and flanking strips, please refer to Appendix A1.

Contact details for British Gypsum Limited:

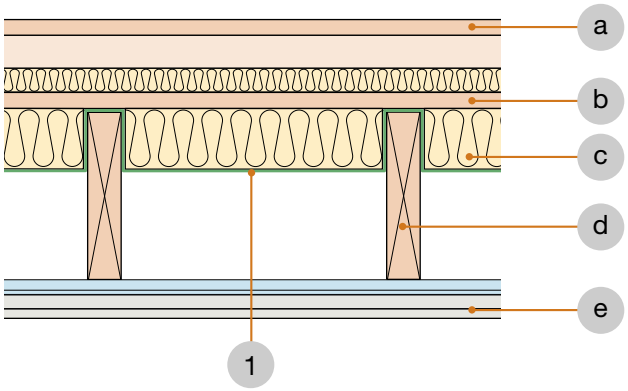
Telephone: 08705 456 123
Fax: 08705 456 356
E-mail: bgtechnical.enquiries@bpb.com
Web: www.british-gypsum.com

Appendix A3 – Specific Proprietary Products

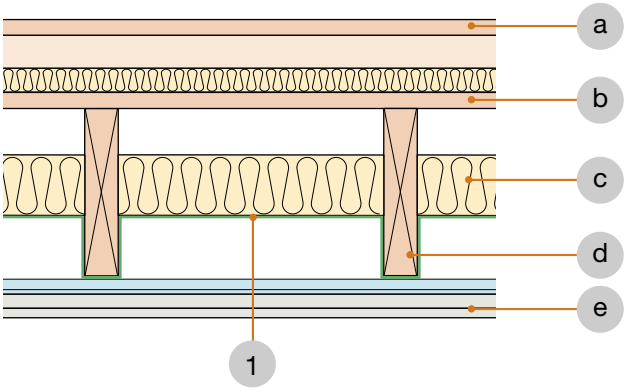
Insumate insulation support tray for robustdetails® timber joist separating floors. Refer to Table 7 in Introduction and the relevant Robust Details for acceptable joist types.



Option 1
as illustrated above



Option 2
Insumate trays may be inverted



Key

1 Insumate insulation support tray.

a Floating floor treatment.

b Floor sub-deck.

c Absorbent material.

d Floor joist – Refer also to Table 7 in Introduction.

e Ceiling treatment.

(For specification of items a to e, refer to the relevant Robust Detail)

Note

Ensure absorbent material 'c' is fitted between all joists, and also between the final joist and the perimeter blocking.

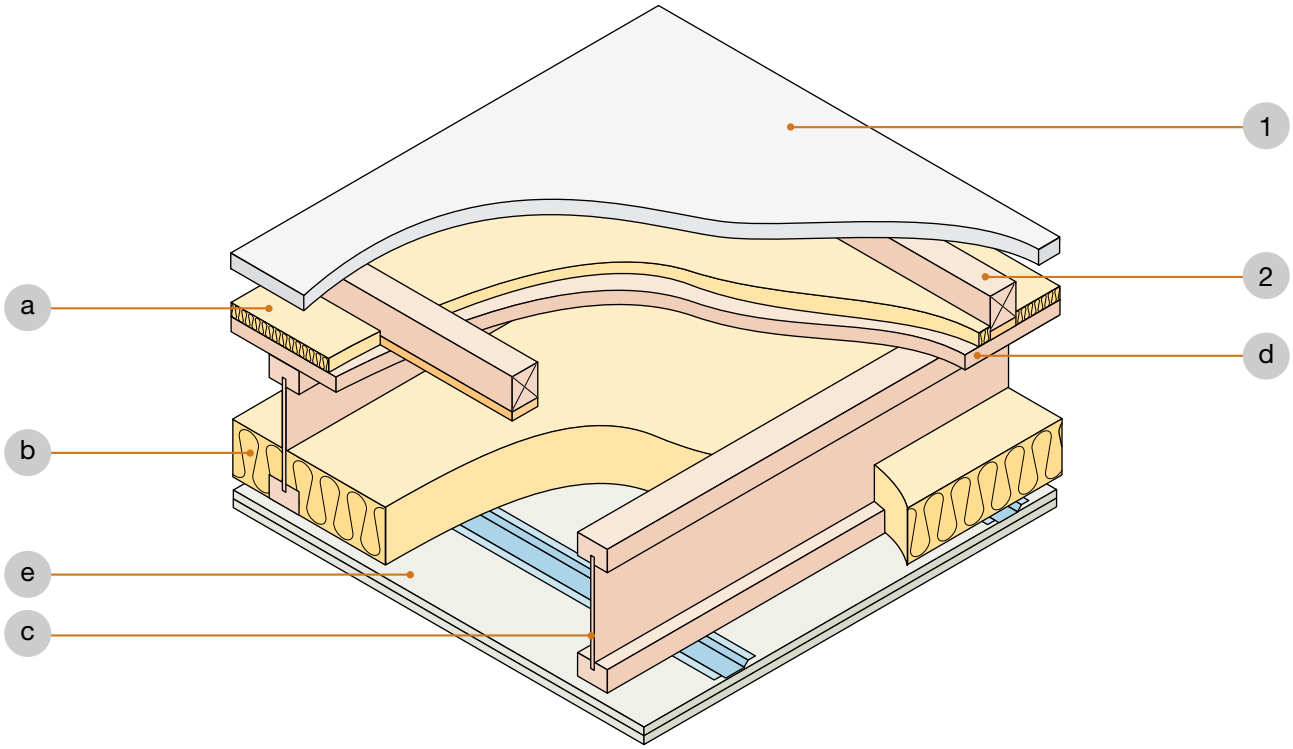
Insumate must be installed in accordance with the manufacturer's instructions.

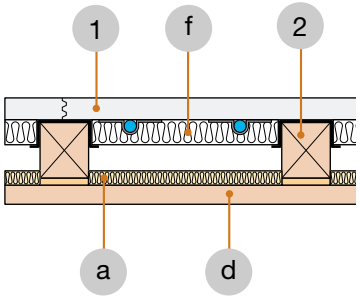
Contact details for Insumate Limited:

Telephone: 01768 866 009
Fax: 01768 866 009
E-mail: sales@insumateltd.com
Web: www.insumateltd.com

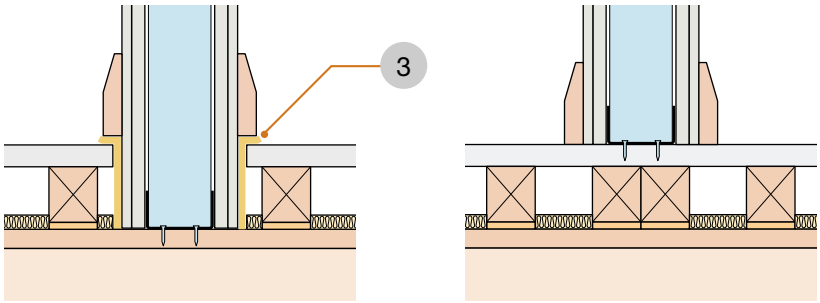
Appendix A3 – Specific Proprietary Products

Cellecta HiDECK Structural floor board floating floor treatment for robustdetails® timber and steel joist separating floors. Refer to Table 7 in Introduction and the relevant Robust Details for acceptable joist types.





Optional underfloor heating



Partition may be fitted through or on top of the HiDECK Structural floor board

Key

1 25, 28 or 30mm tongue & groove Cellecta HiDECK Structural floor board.

2 Cellecta DECK*fon* Batten 70.

3 5mm Cellecta YELO*fon* ES5 edging strip to the whole flooring perimeter.

a 15mm Cellecta FIBRE*fon* Micro 15, or mineral wool - as relevant Robust Detail.

b 50mm Cellecta FIBRE*fon* Micro 50, or mineral wool - as relevant Robust Detail.

c Steel or timber joist - as relevant Robust Detail.

d Timber subdeck - as relevant Robust Detail.

e Ceiling treatment - as relevant Robust Detail.

f Optional underfloor heating.

HiDECK Structural floor board and related components must be fitted in accordance with the manufacturer's instructions.

Contact details for Cellecta:

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

Appendix B

Glossary

The definitions given below are for the purposes of this document only and are not intended to be rigorous.

Absorption
Conversion of sound energy into heat, often by the use of a porous material.

Absorbent material
Material that absorbs sound energy.

Airborne sound
Sound propagating through the air, often linked to noise sources such as speech and television.

Airborne sound insulation
Sound insulation that reduces the transmission of airborne sound between adjoining dwellings or parts of adjoining dwellings.

Block density
The net density of the block (kg/m^3), measured at the appropriate moisture content from Table 3.2 CIBSE Guide A (1999), necessary to achieve the required mass per unit area (kg/m^2) of wall.

Block thickness
The block thickness quoted is the work size. Permissible manufacturing tolerances in accordance with the appropriate material part of BS EN 771.

Built in insulation
Insulation batts built in during construction (not pumped or blown material).

Cavity stop
A proprietary product or material such as mineral wool (fibre) used to close the gap in a cavity wall.

Composite resilient batten
A timber batten which is composed of a timber batten with a prebonded resilient material to provide isolation between the flooring surface layers and floor base.

Cradle / Saddle
An intermediate support system (with a resilient layer base) which uses levelling packer pieces to support a timber batten, isolating it from the floor base.

C_{tr}
Spectrum adaptation term (No.2) from BS EN ISO 717-1 to take account of a specific sound spectra (which are predominantly low frequency based).

Decibel (dB)
The unit used for different acoustic quantities to indicate the level with respect to a reference level.

Density (kg/m^3)
Mass per unit volume, expressed in kilograms per cubic metre (kg/m^3).

Direct transmission
Sound which is transmitted only through the main separating element and involves no other flanking element.

D_{nT}
Standardised level difference. The difference in sound level between a pair of rooms (source and receiving rooms), for a stated frequency, which is corrected (normalised) for the reverberation time (in the receiving room). See BS EN ISO 140-4.

$D_{nT,w}$
Weighted standardised level difference. A single-number quantity (weighted) which characterises the airborne sound insulation between two rooms. See BS EN ISO 717-1.

$D_{nT,w} + C_{tr}$
Weighted standardised level difference which characterises the airborne sound insulation between two rooms using spectrum adaptation term (No.2) from BS EN ISO 717-1.

Flanking element (e.g. flanking wall)
Any building element that contributes to the airborne sound or impact transmission between rooms in a building which is not the direct separating element (i.e. not the separating wall or separating floor).

Flanking strip or edge strip
A 5mm (min) resilient strip which is located at the perimeter of a floor to isolate the floor surface layer from the **perimeter walls and skirtings**. A typical example of a flanking strip is 5mm (min) foamed polyethylene. Rigid boards, (such as extruded, expanded or bead polystyrene) or mineral wool based products may not be used as a flanking strip where the walking surface is board based.

For screed floating floors the permitted flanking strip or edge strip detail will be dependant on the resilient layer system adopted and the relevant Robust Detail must be strictly followed.

Flanking transmission
Airborne sound or impact transmission between rooms which is transmitted via flanking elements and/or flanking elements in conjunction with the main separating elements.

Flexible closer
A flexible cavity stop or cavity barrier typically mineral wool “tubular style’ which seals the air path in cavities linking adjoining dwellings.

Appendix B

Floating floor treatment
A timber floating floor system which may use battens, cradles or platform base; all of which use a resilient layer to provide isolation from the base floor and adjacent wall elements.

Flooring board
The boards which form the top surface of the floor. Boards should be wood-based panels 600mm (min) wide.

Habitable room
For the purposes of Part E robustdetails®, habitable rooms are all rooms except the hall, staircase and landing.

Internal wall
A wall or partition which divides the dwelling space into different functions but which does not provide separation between different dwellings.

Internal floor
A floor which divides the dwelling space into different functions but which does not provide separation between different dwellings.

L'_{nT}
Standardised impact sound pressure level. The impact sound pressure level in the receiving room at a stated frequency, corrected (normalised) for the reverberation time in the receiving room. See BS EN ISO 140-7.

$L'_{nT,w}$
Weighted standardised impact sound pressure level. A single-number quantity (weighted) to characterise the impact sound insulation of floors. See BS EN ISO 717-2.

Mass per unit area (or surface density)
Mass per unit area is expressed in kilograms per square metre (kg/m^2).

Mineral wool
A rock or glass based mineral material which can be manufactured in a quilt, batt or blown form.

Nominal density of gypsum-based board
The density stated in the Robust Detail with a tolerance of up to -0.3 kg/m^2 per layer.

Proprietary screed
A self-compacting floor screed, which achieves a nominal mass per unit area of 80 kg/m^2 as laid, without the requirement for manual or mechanical compacting.

rd ΔL_w
This is specific to robustdetails® performance requirements and is the difference in weighting between two floor impact tests undertaken in an acoustic test laboratory. This should not be confused with the Approved Document E ΔL_w using BS EN ISO 717-2.

rd ΔR_w+C_{tr}
This is specific to robustdetails® performance requirements and is the difference in weighting between two floor airborne tests undertaken in an acoustic test laboratory.

Rigid closer
A rigid cavity stop or cavity barrier which seals the air path in cavities linking adjoining dwellings. This can be timber or other rigid board material.

Rip liner
Small section of wall lining material or any board material fitted in advance of the main wall lining to allow the installation of the floating floor treatment. This does not necessarily need to be the same thickness as the wall lining material.

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

Robust Detail
A Robust Detail for Part E of the Building Regulations has been given the status of Robust Detail following a minimum of 30 “field tests” where the recorded mean performance was 5 dB better than the sound insulation requirements as described in Approved Document E for new build separating walls and floors.

R_w
A single-number quantity (weighted) which characterises the airborne sound insulation of a building element from measurements undertaken in an acoustic test laboratory.
See BS EN ISO 717-1.

Sealant (acoustic or flexible)
A gun-applied sealant which has resilience and forms a non-rigid caulking.

Separating floor
A floor that separates adjoining dwellings.

Separating wall
A wall that separates adjoining dwellings.

Spandrel panel
An element manufactured to divide or close off the profile in the roof space.

t&g
Tongue and groove edged jointing of flooring boards (bonded lapped joints are also acceptable)

Appendix C

Determination of the acoustic performance requirements for floating floor treatments used with robustdetails® timber separating floors

To determine the acoustic performance of floating floor treatments on robustdetails® timber separating floors airborne and impact measurements should be undertaken in an acoustic test laboratory. The following test procedure may be used for robustdetails® timber separating floors with floating floor treatments. The following sections C.1 to C.4 outline the measurement and performance rating criteria.

C.1 Test Laboratory Requirements

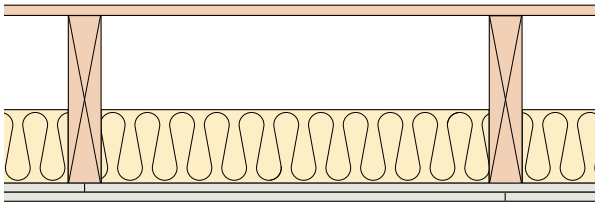
The test facility must have UKAS Accreditation (or EC equivalent) for the measurement of sound insulation in the laboratory, for both airborne sound insulation and impact sound transmission. The test measurement should be undertaken in accordance with BS EN IS0 10140-2, BS EN ISO 10140-3 and BS EN ISO 10140-4 and the performance of each measurement rated in accordance with BS EN ISO 717 (Parts 1 & 2). The measurements should be undertaken in a laboratory with suppressed flanking transmission and in accordance with BS EN IS0 10140-5.

The R'_{max} value of the laboratory test facility shall be at least 15 dB greater than the sound insulation value of the structure under test.

C.2 Core (or base) Timber Floor and Floating Floor Treatment

Testing should be undertaken on a core (or base) floor which consists of the following construction specification:

Floor Decking	18mm OSB timber decking board (or equivalent timber based board) with mass per unit area of 10-11 kg/m^2
Joists	235mm x 50mm solid timber joists C16 grade timber
Insulation	100mm glass based mineral wool insulation with a density of 10-11 kg/m^3
Ceiling	Two layers of gypsum-based board with an overall mass per unit area of 23-25 kg/m^2.



Laboratory Test Core Floor Construction

The timber joists should be mounted on joist hangers at 450mm centres and the 100mm (deep) glass based mineral wool insulation should be placed in the cavities between the joists and also between cavities formed between the joists and the test aperture border. The floor decking should be mounted on the timber joists with screws at 300mm centres. All junctions between the floor surface perimeter and test aperture should be sealed with a flexible or acoustic sealant.

The ceiling layers should be mounted with joints staggered and the first layer (inner layer) should be fixed to the underside of the joists with screws, at 300mm centres within the field of the boards and at 150mm centres at the board ends. The second layer (outer layer) should be fixed with screws, at 230mm centres within the field of the boards and at 150mm centres at the board ends. The perimeter of the ceiling should be sealed with flexible or acoustic mastic sealant and all joints and screwheads taped with self-adhesive tape

Floating Floor Treatment

The floating floor treatment should cover the entire test area of the core floor surface and should be constructed in accordance with the manufacturer's instructions. All robustdetails® floating floor treatments require a flanking strip to isolate the edge of the floorboard from the perimeter walls. As such the manufacturer should also use the flanking strip, which they would normally use on site, in the laboratory measurements.

C.3 Testing Required

For the purposes of evaluating the performance of a floating floor treatment for Robust Details involving timber separating floors four different measurements are required (2 airborne and 2 impact measurements). The following measurements are required:

Airborne

Test 1 Determination of R_w+C_{tr} for the core (or base) timber floor.

Test 2 Determination of R_w+C_{tr} for the core (or base) timber floor with the floating floor treatment applied to the core floor surface.

Impact

Test 3 Determination of $L_{n,w}$ for the core (or base) timber floor.

Test 4 Determination of $L_{n,w}$ for the core (or base) timber floor with the floating floor treatment applied to the core floor surface.

Note: Testing of floating floor treatments done in accordance with previous versions of this Appendix C, will still be valid.

Appendix C

C.4 Expression of Performance

The airborne sound insulation performance of the floating floor treatment should be expressed as the improvement in airborne sound insulation ($rd\,\Delta R_w+C_{tr}$) as a result of the application of the floating floor treatment to the core floor ($rd\,\Delta R_w+C_{tr}$ = Test 2 - Test 1).

The impact sound transmission performance of the floating floor treatment should be expressed as the reduction in impact sound transmission ($rd\,\Delta L_w$) as a result of the application of the floating floor treatment to the core floor ($rd\,\Delta L_w$ = Test 3 - Test 4).

Appendix D

Determination of the acoustic performance requirements for floating floor treatments used with robustdetails® concrete and steel-concrete composite separating floors

To determine the acoustic performance of floating floor treatments on robustdetails® concrete separating floors airborne and impact measurements should be undertaken in an acoustic test laboratory. The following test procedure may be used for robustdetails® concrete and steel-concrete composite separating floors with floating floor treatments. The following sections D.1 to D.4 outline the measurement and performance rating criteria.

D.1 Test Laboratory Requirements

The test facility must have UKAS Accreditation (or EC equivalent) for the measurement of sound insulation in the laboratory for impact sound transmission. The test measurement should be undertaken in accordance with BS EN ISO 10140-3 and BS EN ISO 10140-4 and the performance of each measurement rated in accordance with BS EN ISO 717-2. The measurements should be undertaken in a laboratory with suppressed flanking transmission and in accordance with BS EN ISO 10140-5.

The R'_{max} value of the laboratory test facility shall be at least 15 dB greater than the sound insulation value of the structure under test.

D.2 Core (or base) Concrete Floor and Floating Floor Treatments

Testing should be undertaken using the heavyweight reference floor as defined within BS EN ISO 10140-5 Annex C, paragraphs C2 to C2.2.

No ceiling treatments are permitted and no additional ceiling layers should be applied.

Floating Floor Treatment

The floating floor treatment should cover the entire test area of the core floor surface and should be constructed in accordance with the manufacturer's instructions. All robustdetails® floating floor treatments require a flanking strip to isolate the edge of the flooring board from the perimeter walls. As such the manufacturer should also use the flanking strip, which they would normally use on site, in the laboratory measurements.

D.3 Testing Required

For the purposes of evaluating the performance of a floating floor treatment for robustdetails® concrete and steel-concrete composite separating floors, two different impact measurements are required. The following measurements are required:

Impact

Test 1 Determination of $L_{n,w}$ for the core (or base) concrete floor.

Test 2 Determination of $L_{n,w}$ for the core (or base) concrete floor with the floating floor treatment applied to the core floor surface.

D.4 Expression of Performance

The impact sound transmission performance of the floating floor treatment should be expressed as the reduction in impact sound transmission ($rd\Delta L_w$) as a result of the application of the floating floor treatment to the core floor ($rd\Delta L_w$ = Test 1 - Test 2).

Note: Testing of floating floor treatments done in accordance with previous versions of this Appendix D, will still be valid.

Appendix E

Determination of the acoustic performance requirements for resilient bars used on ceilings

To determine the acoustic performance of resilient bars for use within robustdetails® separating floors airborne and impact measurements should be undertaken in an acoustic test laboratory. The performance of the resilient bars is calculated from the improvement in airborne and impact performance by a ceiling connected via resilient bars as opposed to a direct fix ceiling. The ceiling linings should be identical in both tests. The following sections E.1 to E.4 outline the measurement and performance rating criteria.

E.1 Test Laboratory Requirements

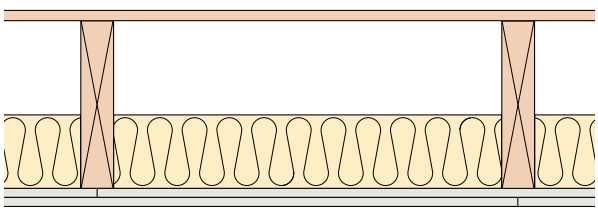
The test facility must have UKAS Accreditation (or EC equivalent) for the measurement of sound insulation in the laboratory, for both airborne sound insulation and impact sound transmission. The test measurement should be undertaken in accordance with BS EN IS0 140-3, BS EN IS0 140-6 and the performance of each measurement rated in accordance with BS EN ISO 717 (Parts 1 & 2). The measurements should be undertaken in a laboratory with suppressed flanking transmission and in accordance with BS EN ISO 140-1 and BS EN ISO 140-2.

The R'_{max} value of the laboratory test facility shall be at least 10 dB greater than the sound insulation value of the structure under test.

E.2 Direct Fix Ceiling versus Resilient Bar Ceiling

Testing should be undertaken on a floor with a direct fix ceiling which consists of the following construction specification:

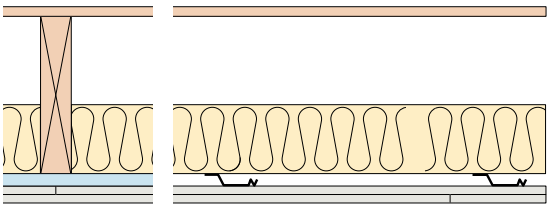
Floor Decking	15mm OSB timber decking board (or equivalent timber based board) with mass per unit area of 10-11 kg/m^2
Joists	235mm x 50mm solid timber joists C16 grade timber
Insulation	100mm glass based mineral wool insulation with a density of 10-11 kg/m^3
Ceiling	Two layers of gypsum-based board with an overall mass per unit area of 23-25 kg/m^2.



Laboratory Test Construction of Floor with Direct Fix Ceiling

The timber joists should be mounted on joist hangers at 450mm centres and the 100mm (deep) glass based mineral wool insulation should be placed in the cavities between the joists and also between cavities formed between the joists and the test aperture border. The floor decking should be mounted on the timber joists with screws at 300mm centres. All junctions between the floor surface perimeter and test aperture should be sealed with a flexible or acoustic sealant.

The direct fix ceiling is composed of two layers of gypsum-based board which have an overall mass per unit area of 23-25 kg/m^2 and have a minimum overall thickness of 30mm. The ceiling layers should be mounted with joints staggered and the first layer (inner layer) should be fixed to the underside of the joists with screws, at 300mm centres within the fields of the boards and 150mm centres at the board ends, and the second layer (outer layer) should be fixed with screws, at 230mm centres within the fields of the boards and at 150mm centres at the board ends. The perimeter of the ceiling should be sealed with flexible or acoustic sealant and all joints and screwheads taped with self-adhesive tape.



Laboratory Test Construction of Floor with the Ceiling Connected via Resilient Bars

The floor construction and materials used should be identical to the Direct Fix test structure except that the ceiling is only connected to the joists via the resilient bars. The resilient bars should be directly connected to the joists at 400mm centres using metal screws, mounted perpendicular to the joist span and in accordance with the manufacturer's instructions. The gypsum-based board ceiling layers should be identical in their material properties to those used for the Direct Fix ceiling.

Appendix E

E.3 Testing Required

For the purposes of evaluating the performance of resilient bars for robustdetails®, four different measurements are required (2 airborne and 2 impact measurements). The following measurements are required:

Airborne

Test 1 Determination of R_w+C_{tr} for the floor with a direct fix ceiling.

Test 2 Determination of R_w+C_{tr} for the floor with a ceiling connected with resilient bars.

Impact

Test 3 Determination of $L_{n,w}$ for the floor with a direct fix ceiling.

Test 4 Determination of $L_{n,w}$ for the floor with a ceiling connected with resilient bars.

E.4 Expression of Performance

The airborne sound insulation performance of resilient bars should be expressed as the improvement in airborne sound insulation ($rd\Delta R_w+C_{tr}$) as a result of the application of the resilient bar connected ceiling as opposed to the direct fix ceiling ($rd\Delta R_w+C_{tr}$ = Test 2 - Test 1).

The impact sound transmission performance of resilient bars should be expressed as the reduction in impact sound transmission ($rd\Delta L_w$) as a result of the application of the resilient bar connected ceiling as opposed to the direct fix ceiling ($rd\Delta L_w$ = Test 3 - Test 4).

Appendix F

Determination of the Influence on the Acoustic Performance of robustdetails® Lightweight Separating Floors due to the presence of Downlighters (Recessed Lighting)

To determine the influence on the acoustic performance due to the presence of downlighters for use within robustdetails® lightweight separating floors, airborne and impact measurements should be undertaken in an acoustic test laboratory. For the purposes of robustdetails® separating floors the following test procedure may be used.

Note: This test method may also be used by manufacturers to demonstrate whether they can exceed the spacing/area criteria which are specified in the Robust Detail specification sheets for the robustdetails® separating floors.

The influence on the acoustic performance of the floor is calculated from airborne and impact measurements on a timber floor structure with and without downlighters present. The timber floor structure must be identical in both sets of tests (for airborne and impact) except for the presence of the downlighters.

For downlighters to qualify for inclusion in robustdetails® lightweight separating floors, the difference in performance with the downlighters present should be no worse than 1dB for both airborne and impact measurements, when tested under the following conditions. The following sections F.1 to F.4 outline the measurement and performance rating criteria.

F.1 Test Laboratory Requirements

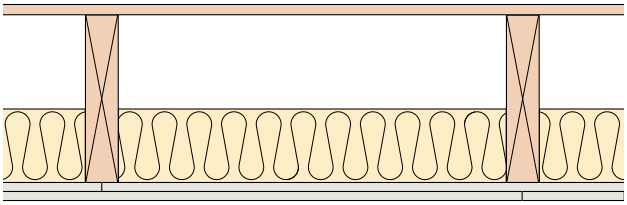
The test facility must have UKAS Accreditation (or EC equivalent) for the measurement of sound insulation in the laboratory, for both airborne sound insulation and impact sound transmission. The test measurement should be undertaken in accordance with BS EN ISO 140-3, BS EN ISO 140-6 and the performance of each measurement rated in accordance with BS EN ISO 717 (Parts 1 & 2). The measurements should be undertaken in a laboratory with suppressed flanking transmission and in accordance with BS EN ISO 140-1 and BS EN ISO 140-2.

The R'_{max} value of the laboratory test facility shall be at least 10dB greater than the sound insulation value of the structure under test.

F.2 Core Timber Floor (no downlighters)

Testing should be undertaken on a floor with the following construction specification:

Floor Decking	15mm OSB timber decking board (or equivalent timber based board) with mass per unit area of 10-11 kg/m^2
Joists	235mm x 50mm solid timber joists C16 grade timber
Insulation	100mm glass based mineral wool insulation with a density of 10-11 kg/m^3
Ceiling	Two layers of gypsum-based board with an overall mass per unit area of 23-25 kg/m^2.



Construction of Initial Timber Floor (no downlighters)

The timber joists should be mounted on joist hangers at 450mm centres and the 100mm (deep) glass based mineral wool insulation should be placed in the cavities between the joists and also between cavities formed between the joists and the test aperture border. The floor decking should be mounted on the timber joists with screws at 300mm centres. All junctions between the floor surface perimeter and test aperture should be sealed with a flexible or acoustic mastic sealant.

The direct fix ceiling is composed of two layers of gypsum-based board which have an overall mass per unit area of 23-25 kg/m^2 and have a minimum overall thickness of 30mm. The ceiling layers should be mounted with joints staggered and the first layer (inner layer) should be fixed to the underside of the joists with screws, at 300mm centres within the fields of the boards and 150mm centres at the board ends, and the second layer (outer layer) should be fixed with screws, at 230mm centres within the fields of the boards and at 150mm centres at the board ends. The perimeter of the ceiling should be sealed with flexible or acoustic mastic sealant and all joints and screwheads taped with self adhesive tape.

Construction of Timber Floor with Downlighters

The floor construction and materials used should be identical to the initial timber floor test structure except that downlighters have been installed into the ceiling. The downlighters should be spaced at a minimum of 1 downlighter per 2m^2 of ceiling area and at not less than 0.75m spacings. (e.g. 10m^2 of ceiling area equates to at least 5 downlighters). The test results must indicate the number per unit area and the spacings used in the tests and, if successful manufacturers are expected to include this information in their test reports and fitting instructions.

Appendix F

F.3 Testing Required

For the purposes of evaluating the influence on performance due to downlighters for robustdetails® lightweight separating floors, four different measurements are required (2 airborne and 2 impact measurements). The following measurements are required:

Airborne

Test 1 Determination of R_w+C_{tr} for the initial timber floor

Test 2 Determination of R_w+C_{tr} for the initial timber floor plus downlighters

Impact

Test 3 Determination of $L_{n,w}$ for the initial timber floor.

Test 4 Determination of $L_{n,w}$ for the initial timber floor plus downlighters

F.4 Performance Required for robustdetails® Lightweight Separating Floors

For airborne sound insulation performance the difference between Test 2 and Test 1 (Test 2 -Test 1) should be no worse than (-1dB)

For impact sound transmission performance the difference between Test 3 and Test 4 (Test 3 -Test 4) should be no worse than (-1dB).

NOTE: Downlighters which qualify for the above performance requirements must also be of suitable integrity to meet the appropriate Building Regulations for Fire.

Appendix G

Determination of the acoustic performance for "bonded" resilient floor coverings used with robustdetails® concrete separating floor E-FC-8.

To determine the acoustic performance of bonded resilient floor coverings on robustdetails® concrete separating floors, impact measurements **should be** undertaken in an acoustic test laboratory. The following test procedure may be used for robustdetails® concrete separating floor E-FC-8. The following sections G.1 to G.4 outline the measurement and performance rating criteria. For the purposes of the laboratory test evaluation, the resilient floor covering **should not be bonded** to the laboratory heavyweight standard core floor.

G.1 Test Laboratory Requirements

The test facility must have UKAS Accreditation (or EC equivalent) for the measurement of sound insulation in the laboratory for impact sound transmission. The measurements should be undertaken in a laboratory with suppressed flanking transmission and in accordance with BS EN ISO 140-1 and BS EN IS0 140-2.

G.2 Core (or base) Concrete Floor and Resilient Floor Covering

Testing should be undertaken using the heavyweight reference floor as defined within BS EN ISO 10140-5 Annex C, paragraphs C2 to C2.2.

No ceiling treatments are permitted and no additional ceiling layers should be applied.

Resilient Floor Covering

Polyethylene foams are not suitable as resilient floor coverings.

The Resilient Floor Covering sample specimens should be:

- the same size as each other
- sufficiently large to support the whole tapping machine (including the tapping machine supports/legs)
- at least 1200mm x 600mm
- laid onto the core floor surface in accordance with the manufacturer's instructions.

Refer to BS EN ISO 10140-1 Annex H

G.3 Testing Required

Tests should be conducted using the method described in BS EN ISO 140-8 and the performance of each measurement rated in accordance with BS EN ISO 717-2.

For the purposes of evaluating the performance of a bonded resilient floor covering used with robustdetails® concrete separating floor E-FC-8, three different impact measurements are required as follows.

Impact

Test 1 Determination of Ln,w for the core (or base) concrete floor.

Test 2 Determination of Ln,w for the core (or base) concrete floor with the resilient floor covering applied to the core floor surface*.

Test 3 Determination of Ln,w for the core (or base) concrete floor with the resilient floor covering applied to the core floor and a wood board layer† laid over the upper surface.

* ***The resilient floor covering samples should be tested as Category I (small specimens) - as Section 5.3.1.1 of ISO 140-8.***

† ***The wood board layer should have a thickness of 8mm (min) to 16mm (max), a density of 600kg/m³ (±30 kg/m³) and be the same shape and no larger than the resilient floor cover sample, such that when laid over the resilient floor cover sample it does not directly touch the core floor surface. The wood board layer should be of suitable size to support the whole tapping machine and oversized by minimum 150mm around the footprint.***

G.4 Expression of Performance

The impact sound transmission performance of the resilient floor covering should be expressed in accordance with BS EN ISO 140-8 and BS EN ISO 717-2 as:

Result 1 reduction in impact sound transmission (ΔLw 17dB) as a result of the application of the resilient floor covering to the core floor

Result 2 reduction in impact sound transmission (rdΔLw 17dB) as a result of the application of the wood board layer and resilient floor covering to the core floor (where the wood layer is on top of the resilient floor material).

G.5 Replacement Products

Any replacement product will be regarded as a 'new product' and will therefore have to be tested in full, in accordance with the requirements of this Appendix G.

Appendix H

Determination of the acoustic performance for "putty pads" and other proprietary socket or switch box liners, or proprietary backboxes used with robustdetails® light frame separating walls

To determine the acoustic performance of putty pads and other proprietary socket or switch box liners on robustdetails® light frame separating walls, airborne measurements should be undertaken in an acoustic test laboratory. The following sections H.1 to H.4 outline the measurement and performance rating criteria. For the purposes of all twin timber or light steel frame robustdetails® separating floors the following test procedure may be used.

H.1 Test Laboratory Requirements

The test facility must have UKAS Accreditation (or European equivalent) for the measurement of airborne sound insulation in the laboratory. The measurements should be undertaken in a laboratory with suppressed flanking insulation and in accordance with the ISO series ISO 10140.

H.2 Core (or base) Wall Structure

Testing should be undertaken on a core wall structure with the following construction specification:

Wall Structure	Twin leaf 89mm timber stud frame or 70mm light steel stud frame with 50mm cavity between frames
Wall linings	2 layers 15mm gypsum-based board (combined total of min. 24 kg/m^2) each side
Insulation	Min. 25mm mineral wool (min. 10 kg/m^3) between studs in each leaf

Refer to ISO 10140-1 Annex A

H.3 Testing Required

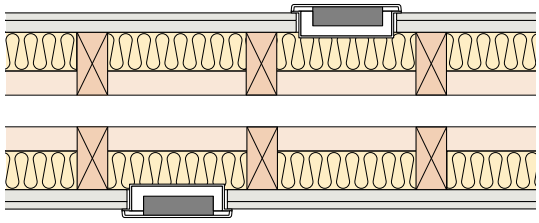
Tests should be conducted using the method described in ISO 10140-2 and the performance of each measurement rated in accordance with BS EN ISO 717-1: 2020.

For the purposes of putty pads and other proprietary socket or switch box liners on robustdetails® light frame separating walls, two different airborne measurements are required as follows:

Airborne

Test 1 Determination of R_w+C_{tr} for the core wall structure

Test 2 Determination of R_w+C_{tr} for the core wall structure with 2 double* sockets complete with liners cut into the wall on both sides of the wall, offset horizontally by 150mm max. so as to be in separate stud bays. A length of electrical cable or similar passing through the liner should be included



* ***Single sockets can be used if the manufacturer does not intend to supply a product suitable for double sockets.***

H.4 Expression of Performance

The airborne sound insulation performance of the putty pads and other proprietary liners should be expressed in accordance with ISO 10140 and BS EN ISO 717-1 (2020) as:

Result: difference in airborne sound insulation performance (ΔR_w+C_{tr}) as a result of the inclusion of the treated sockets

Outcome: for compliance the difference between the two tests should be no worse than –1 dB.

H.5 Replacement Products

Any replacement product will be regarded as a 'new product' and will therefore have to be tested in full, in accordance with the requirements of this Appendix H.