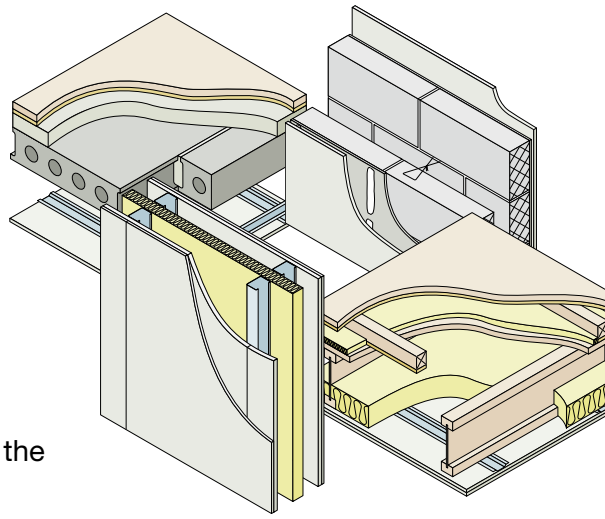
March 2020 Update Pack



Dear Colleague,

Thank you for downloading the March update – the first one of the new decade.

This update includes a new robustdetails® separating floor type:
E-FC-19 uses precast concrete planks with Cellecta's RUBBER*fon*® Impact 6 resilient layer system underneath a minimum 65mm cement:sand screed.

Staying with separating floors, an FFT2 option using resilient cradles and battens has been added to the generic I-joist E-FT-1; and to the generic metal-web joist E-FT-3. Also, the proprietary E-FT-5 floor, using ScreedBoard® 28 can now be specified with 235mm deep I-joists, provided a second ceiling is fitted – the original minimum 240mm I-joists must still be used where there is no second ceiling.

Please update your October 2019, 4th Edition Handbook as follows:

1. Remove and replace **all pages** of the Introduction.
2. Remove and replace **all pages** of E-WM-8, E-WM-14 and E-WM-15.
3. Remove and replace **all pages** of E-WM-31.
4. Remove and replace **page 1/2 and page 5/6** of E-FC-18.
5. Remove and replace **all pages** of E-FC-19.
6. Remove and replace **all pages** of E-FT-1, E-FT-3 and E-FT-5.
7. Remove and replace **page 7/8** of Appendix A2.

Yours sincerely

John Thompson

Chief Executive,
Robust Details Limited

Changes to the fourth edition following March 2020 update

Section	Page	Amendment
Introduction		
Table 2	5	New floor type, E-FC-19 added.
Table 3a	6	New floor type, E-FC-19 added with valid combinations.
Table 5	8	New floor type, E-FC-19 added with relevant note.
Table 6b	11	New floor type, E-FC-19 added with valid combinations.
Table 7	12	New floor type, E-FC-19 added with valid combinations.
Separating Wall – Masonry		
E-WM-8		
All	1	Asterisks and footnote added advising RD35 no longer manufactured.
E-WM-14		
All	1	Asterisks and footnote added advising RD35 no longer manufactured.
E-WM-15		
All	1	Asterisks and footnote added advising RD35 no longer manufactured.
E-WM-31		
Diagram 8	6	Diagram added showing how to form the head detail in a stepped terrace.
All	1-8	Pages renumbered.
Separating Floor – Concrete		
E-FC-18		
Under-screed resilient layers	1	Cellecta RUBBER*fon*® Impact 6 system added as an option.
Resilient layer system box	5	Cellecta RUBBER*fon*® Impact 6 added as an option.
E-FC-19		
All	1-6	New Robust Detail added – Cellecta RUBBER*fon*® Impact 6 system and floating screed.

Section	Page	Amendment
Separating Floor – Timber		
E-FT-1		
Floating floor treatments	5	FFT2 cradle systems added as an option.
Services through floor	6	Section 7 moved from previous page.
E-FT-3		
Floating floor treatments	7	FFT2 cradle systems added as an option.
Services through floor	8	Section 11 moved from previous page.
E-FT-5		
Isometric	1	Minimum joist depth amended.
Ceiling treatments	4	CT3 applicable only to minimum 204mm joists.
Checklist	6	Points 1 and 6 amended to reflect the above.
Appendix A2		
Roofspace I-Roof	7	Diagram added showing how to form the head detail in a stepped terrace. Gypsum board weights added under item j.

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:

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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	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD35 (gypsum-based board)
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	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD35 (gypsum-based board) with 100mm minimum cavity
E-WM-15	masonry – aircrete blockwork Saint Gobain - Isover RD35 (gypsum-based board)
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 Elements (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

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 – Elecoframe 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

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 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 Code layer 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-8 E-WM-11 E-WM-14 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-15	E-WM-23 E-WM-24 E-WM-30	F		✔	✔ see note 1	F	✔
E-WM-12		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/m³).

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-8	F1	E-WM-27	F1
E-WM-10	F1	E-WM-28	F1
E-WM-11	F1	E-WM-29	F1
E-WM-12	F1	E-WM-30	F1
E-WM-13	F1	E-WM-31	F1
E-WM-14	F1	E-WM-32	F1
E-WM-15	F1	E-WM-33	F1
E-WM-16	F1		
E-WM-17	F1		
E-WM-18	F1		
E-WM-20	F1		

Timber frame

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

Light steel frame

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

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

RC frame

E-FC-2	W4
E-FC-10	W4
E-FC-18	W4

Light steel frame

E-FS-1	W4
E-FS-2	W5
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	Stewart Milne Sigma® Panel	NYTROOF *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-8	✔	✔	✔	✔	✔		✔	✔
	E-WM-9								
	E-WM-10		✔	✔	✔				✔
	E-WM-11	✔	✔	✔	✔	✔		✔	✔
	E-WM-12	✔	✔	✔	✔	✔		✔	✔
	E-WM-13		✔	✔	✔				✔
	E-WM-14	✔	✔	✔	✔	✔		✔	✔
	E-WM-15		✔	✔	✔				✔
	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	✔	✔	✔	✔	✔		✔	✔

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	Stewart Milne Sigma® Panel	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

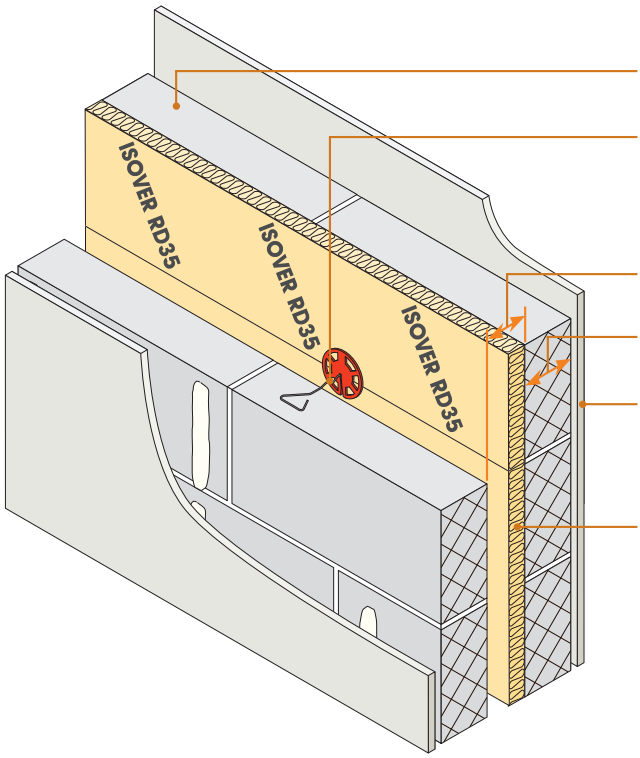
1 Applies only to loadbearing masonry constructions.

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			

Separating Wall – Cavity Masonry E-WM-8

Lightweight aggregate, or nominated hollow or cellular blocks ■
35mm (minimum) Saint Gobain-Isover RD35 Acoustic Batt* ■
Gypsum-based board (nominal 9.8 kg/m²) on dabs ■



Block density	1350 to 1600 kg/m³
Wall ties	Insulation retaining wall ties to Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min) leaf-to-leaf
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 9.8 kg/m²) mounted on dabs
Insulation	35mm (min) Isover RD35 mineral wool acoustic batt*
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

DO

- Keep cavity, insulation batts 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 solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all Isover RD35 acoustic batts* are tightly butted together and half cuts are made with a clean sharp knife
- Ensure that Isover RD35 acoustic batts* are installed against the same face of the cavity wall construction throughout
- Ensure Isover RD35 acoustic batts* are installed in accordance with manufacturer's recommendations
- Ensure Isover RD35 acoustic batts* do not bridge the cavity
- 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

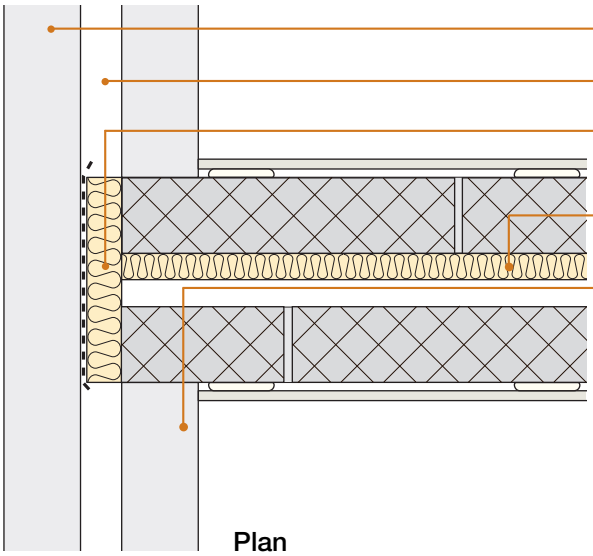
The Besblock Star Performer is the only block of this type currently accepted by Robust Details Limited for use as an alternative to solid blocks in E-WM-8.

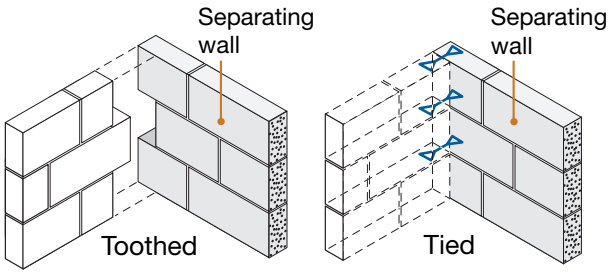
Ensure Star Performer blocks are laid with the cells open to the lower mortar bed only.

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

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

1. External (flanking) wall junction





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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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

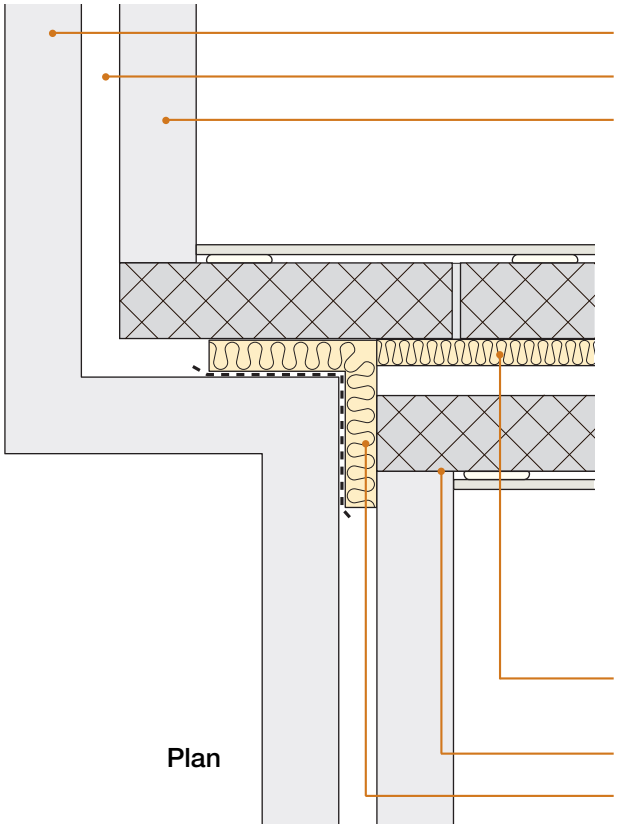
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Besblock "Star Performer" block
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

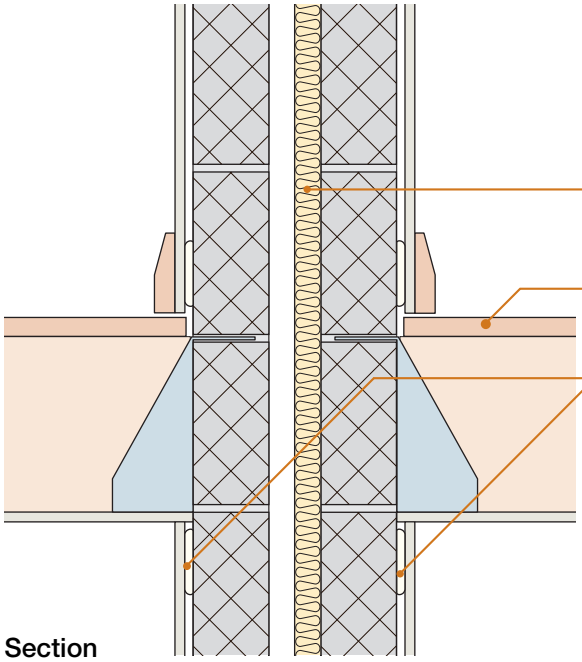
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction or use Besblock "Star Performer" block
- if using floor requiring pre-completion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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Tooth or tie walls together

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

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



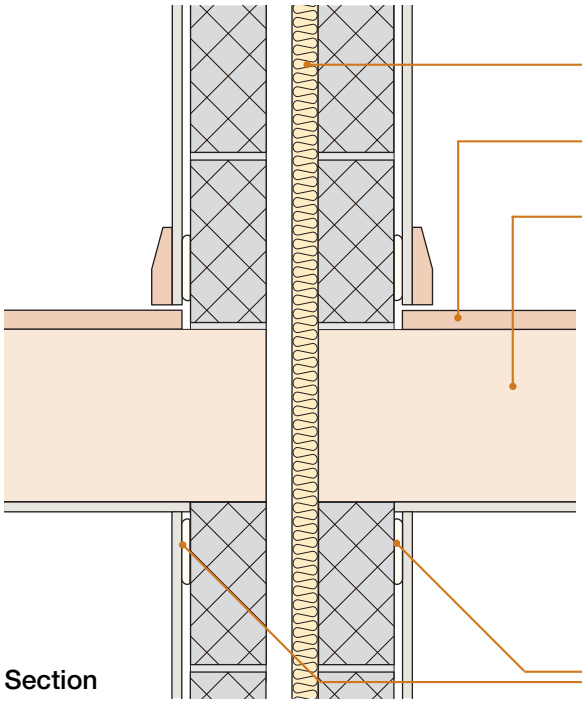
35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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



35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

Floor construction:

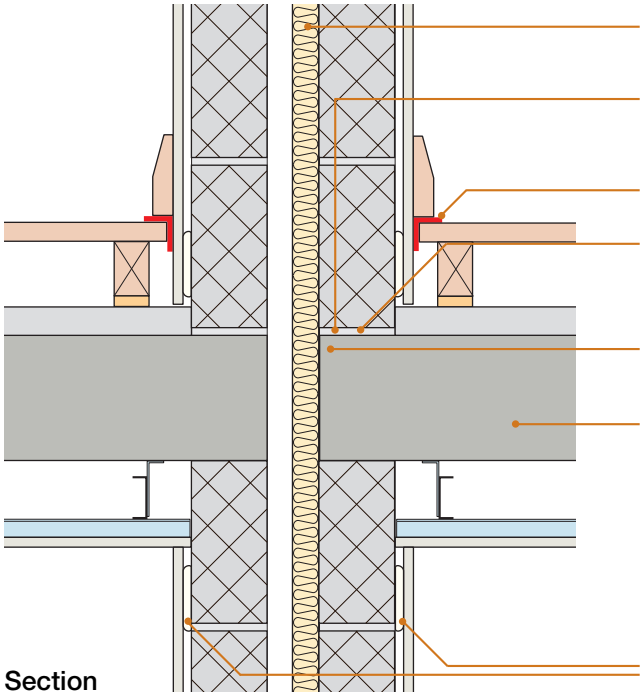
- timber joists built in with:
  - all voids around the joists filled with mortar
  - the joint interface between the joist and the mortar sealed with flexible sealant (see Appendix A for full specification), or
- beam and block floor with all voids filled with mortar, or
- concrete planks with all voids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

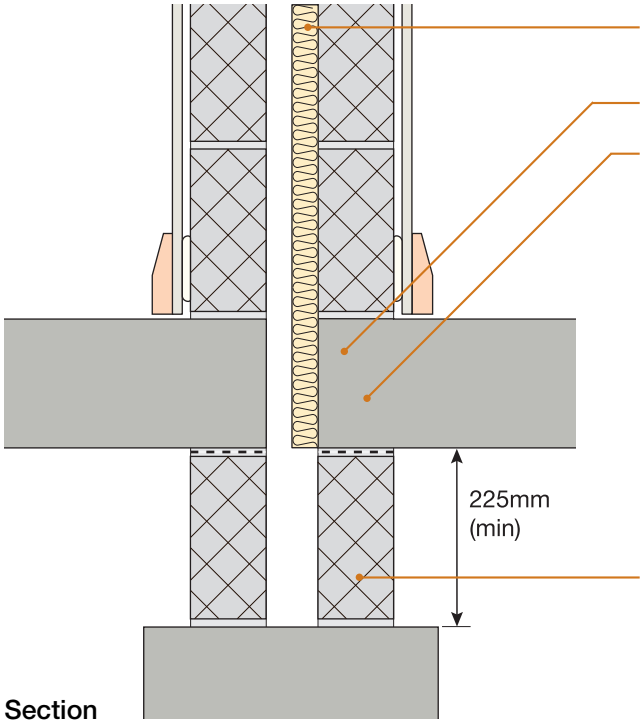


Section

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

- 35mm (min) Isover RD35 mineral wool acoustic batt* (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

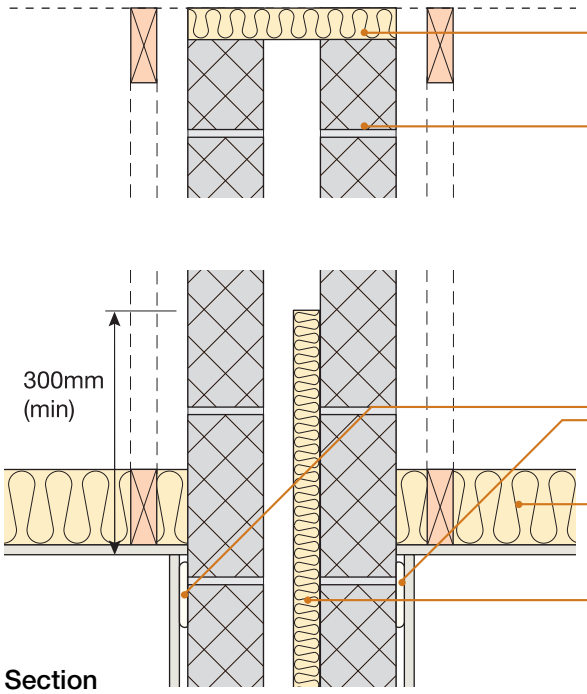
6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



Section

- 35mm (min) Isover RD35 mineral wool acoustic batt* (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.

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

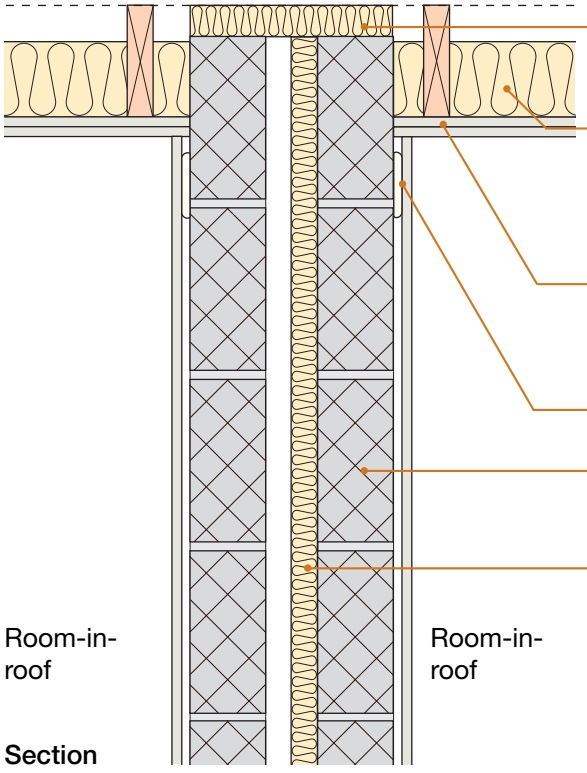
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

35mm (min) Isover RD35 mineral wool acoustic batt* (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

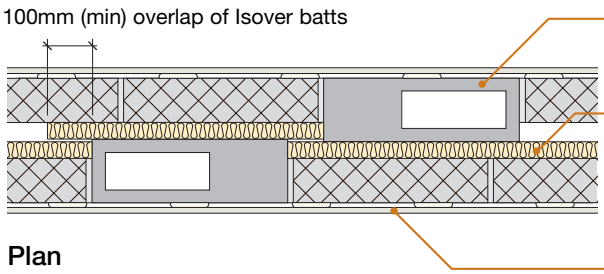
Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

35mm (min) Isover RD35 mineral wool acoustic batt* (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

9. Flue blocks built into separating wall

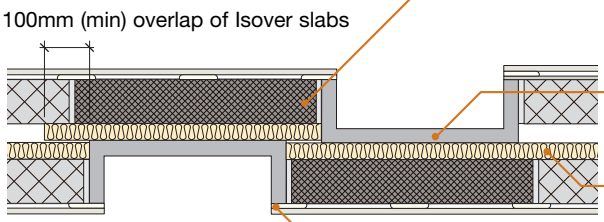


Plan

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Continuous plaster fillet around fire opening

Ensure that mortar and debris does not collect on the insulation batts, to avoid a connection between the wall leaves

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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) or Besblock "Star Performer" block? Are blocks laid with the cells open to the lower bed			
4.	Is cavity free from droppings and debris?			
5.	Are insulation retaining ties in separating wall to Approved Document E "Tie type A" (see Appendix A)?			
6.	Are cavity stops installed?			
7.	Are joints fully filled?			
8.	Is Isover RD35 Acoustic Batt* fixed in the cavity?			
9.	Are insulation batts 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 Isover RD35 acoustic Batt*:

Telephone: 01159 451143 **Fax:** 01159 451915 **E-mail:** isover.enquiries@saint-gobain.com

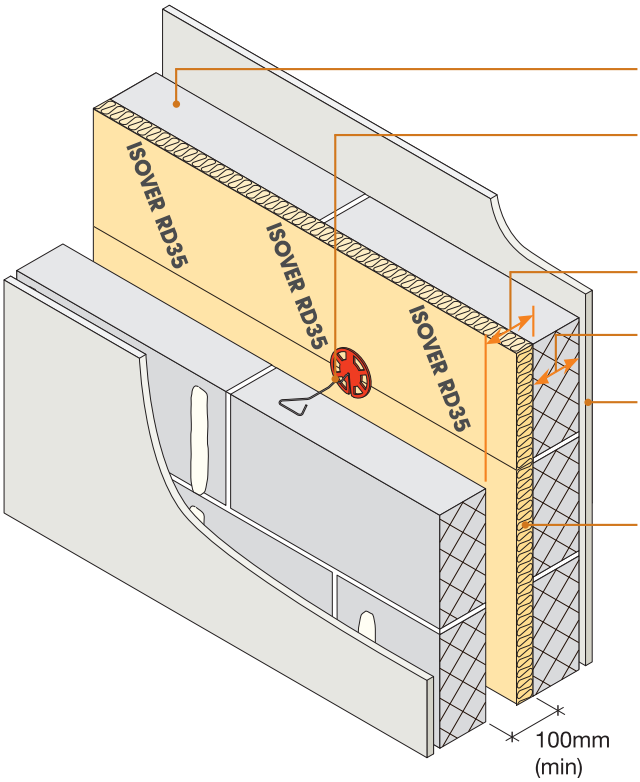
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

Separating Wall – Cavity Masonry E-WM-14

Lightweight aggregate blocks ■
35mm (minimum) Saint Gobain-Isover RD35 Acoustic Batt* ■
Gypsum-based board (nominal 9.8 kg/m²) on dabs ■



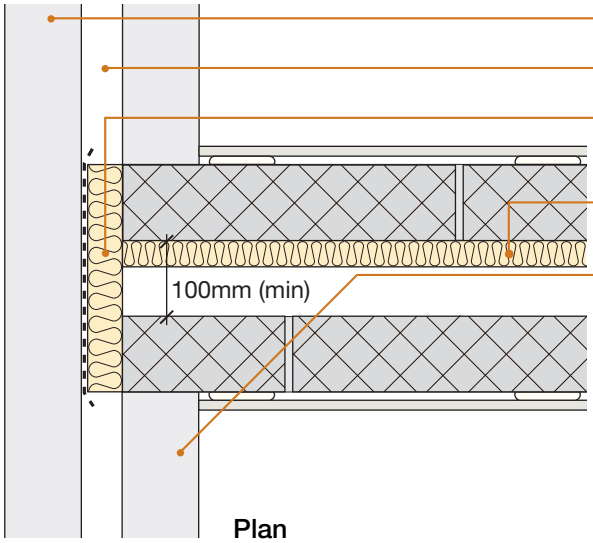
Block density	1350 to 1600 kg/m³
Wall ties	Insulation retaining wall ties to Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min) leaf-to-leaf
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 9.8 kg/m²) mounted on dabs
Insulation	35mm (min) Isover RD35 mineral wool acoustic batt*
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

DO

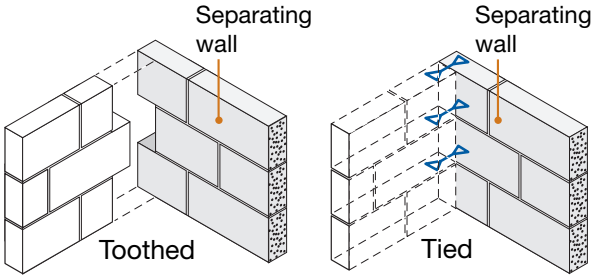
- Keep cavity, insulation batts and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all Isover RD35 acoustic batts* are tightly butted together and half cuts are made with a clean sharp knife
- Ensure that Isover RD35 acoustic batts* are installed against the same face of the cavity wall construction throughout
- Ensure Isover RD35 acoustic batts* are installed in accordance with manufacturer's recommendations
- Ensure Isover RD35 acoustic batts* do not bridge the cavity
- 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

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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

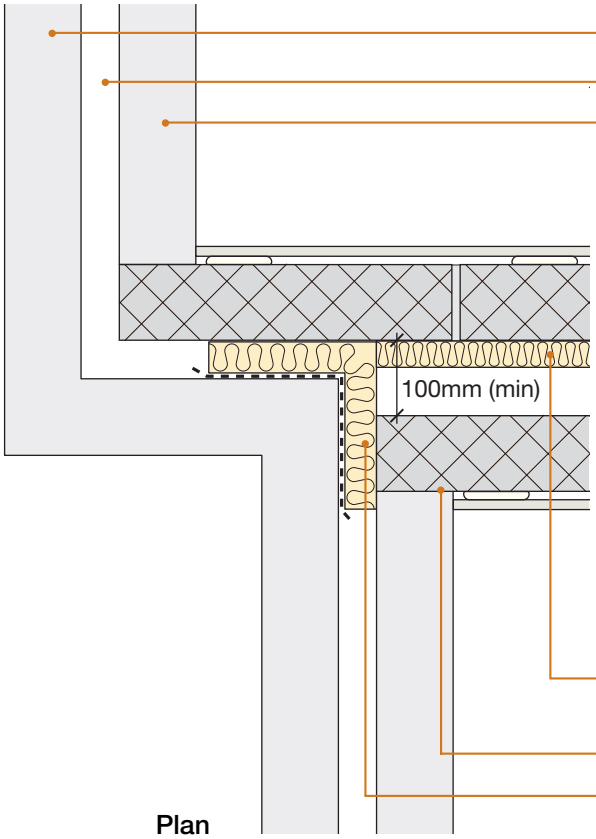
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

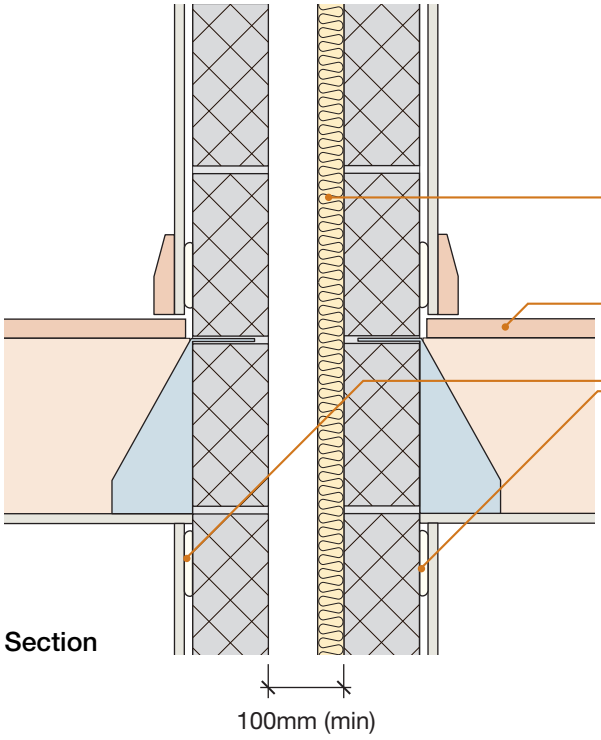
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Tooth or tie walls together

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

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

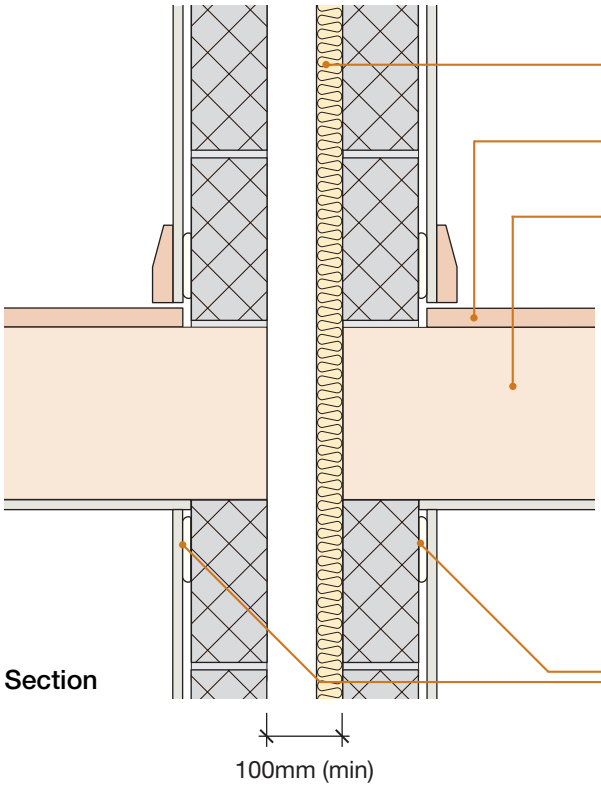


35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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



35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

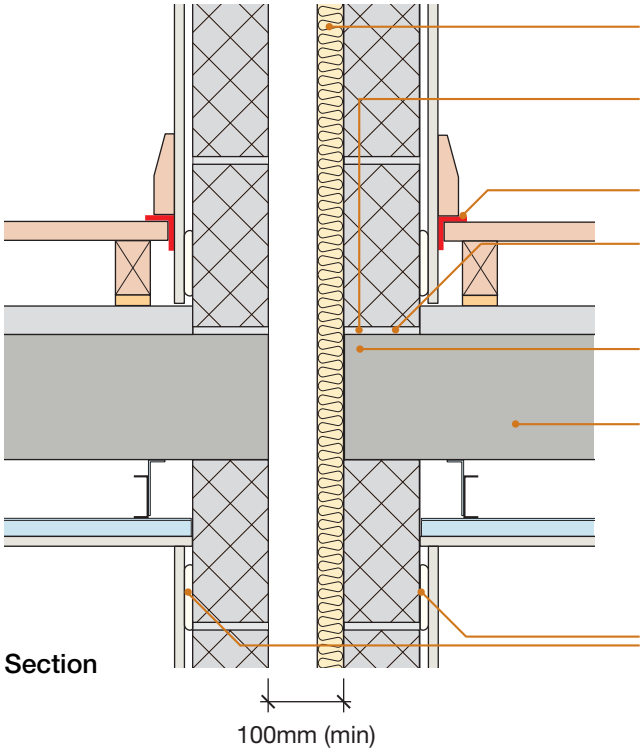
Floor construction:

- 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

35mm (min) Isover RD35 mineral wool acoustic batt* (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

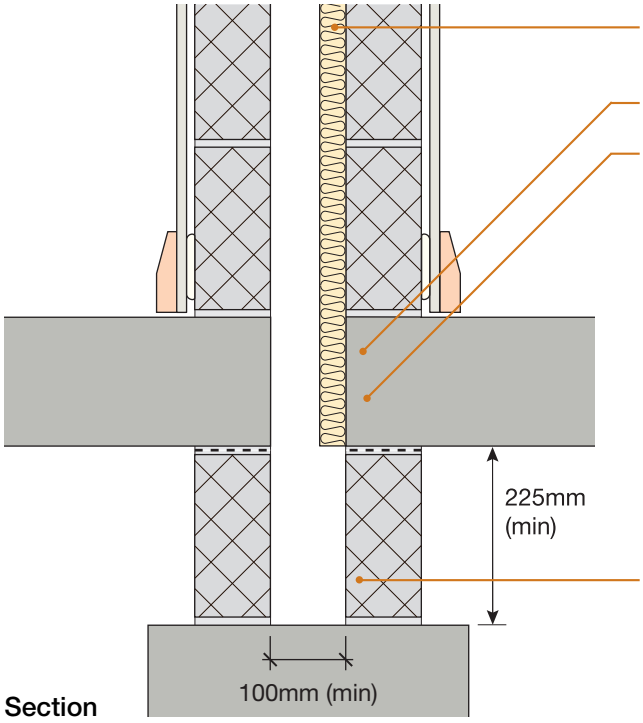
Separating floor:

- 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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

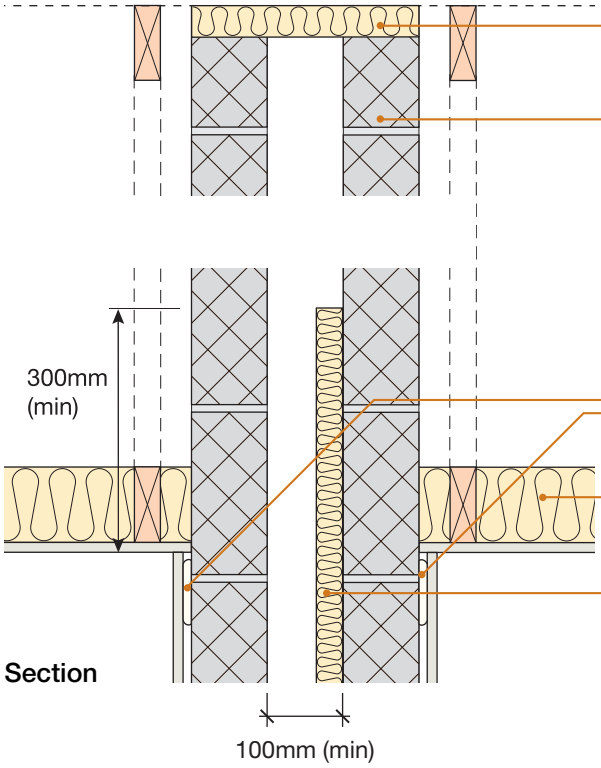
Ground floor not continuous between dwellings

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.

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

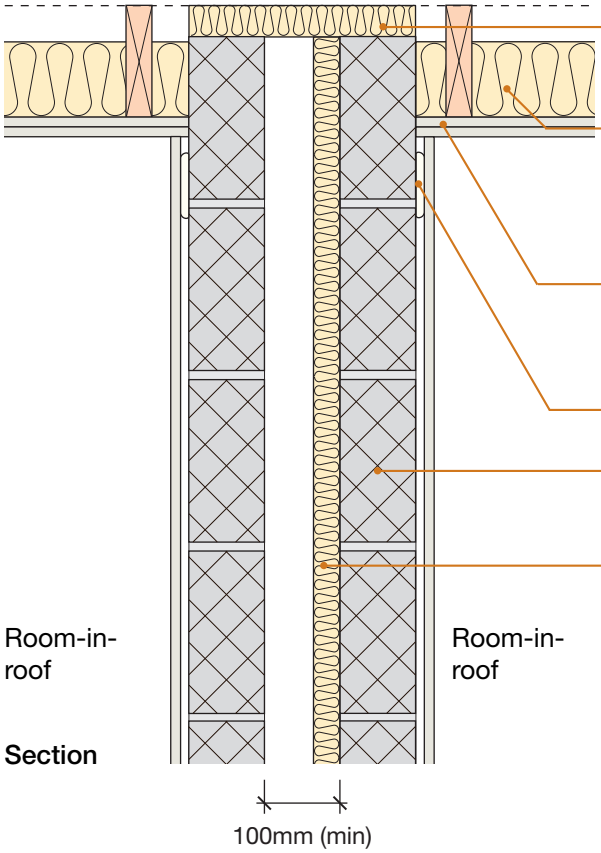
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

35mm (min) Isover RD35 mineral wool acoustic batt* (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

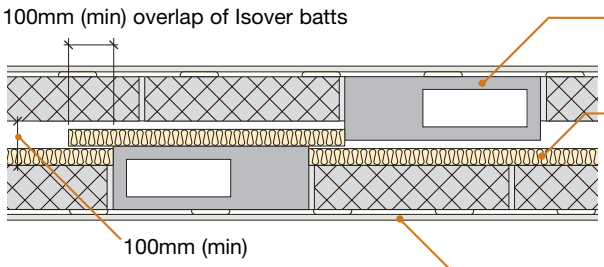
Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

35mm (min) Isover RD35 mineral wool acoustic batt* (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

9. Flue blocks built into separating wall

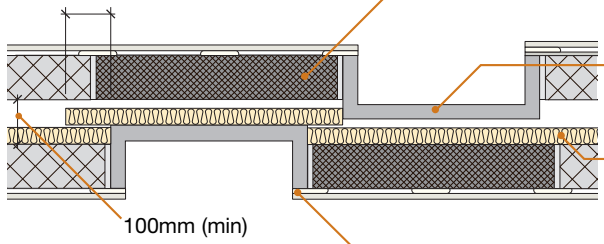


Plan

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Continuous plaster fillet around fire opening

Ensure that mortar and debris does not collect on the insulation batts, to avoid a connection between the wall leaves

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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)?			
4.	Is cavity free from droppings and debris?			
5.	Are insulation retaining ties in separating wall to Approved Document E "Tie type A" (see Appendix A)?			
6.	Are cavity stops installed?			
7.	Are joints fully filled?			
8.	Is Isover RD35 Acoustic Batt* fixed in the cavity?			
9.	Are insulation batts 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 Isover RD35 acoustic Batt:

Telephone: 01159 451143 **Fax:** 01159 451915 **E-mail:** isover.enquiries@saint-gobain.com

Notes (include details of any corrective action)

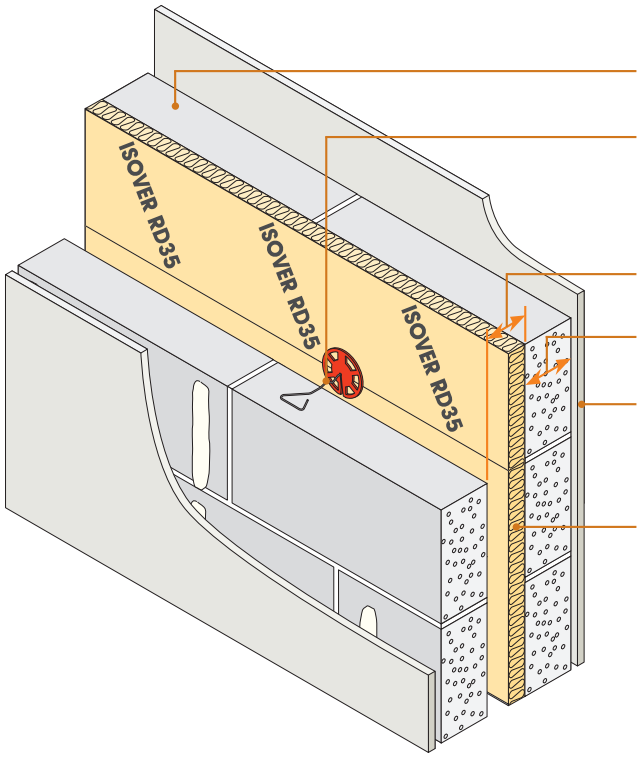
Site manager/supervisor signature . . . . . .

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

Separating Wall – Cavity Masonry

E-WM-15

Aircrete blocks ■
35mm (minimum) Saint Gobain-Isover RD35 Acoustic Batt* ■
Gypsum-based board (nominal 9.8 kg/m²) on dabs ■



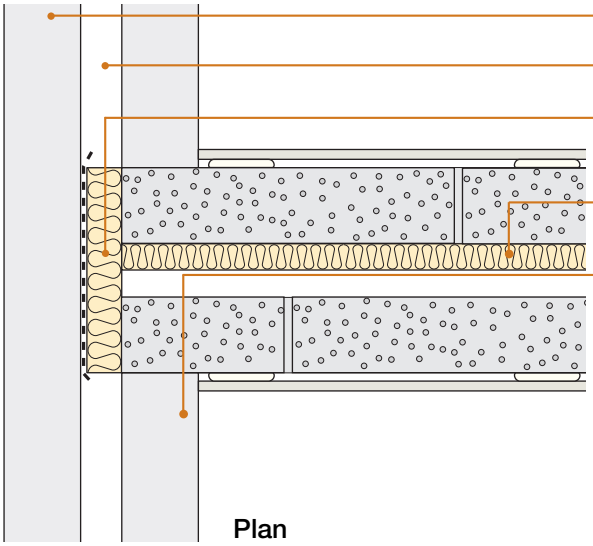
Block density	600 to 800 kg/m³
Wall ties	Insulation retaining wall ties to Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min) leaf-to-leaf
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 9.8 kg/m²) mounted on dabs
Insulation	35mm (min) Isover RD35 mineral wool acoustic batt*
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

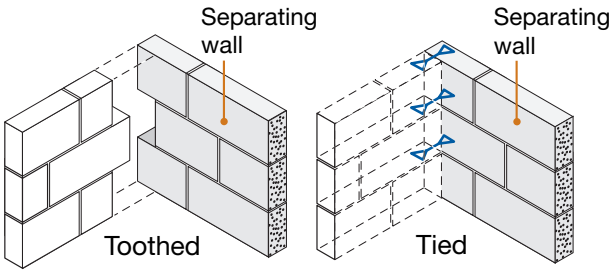
DO

- Keep cavity, insulation batts 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 solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all Isover RD35 acoustic batts* are tightly butted together and half cuts are made with a clean sharp knife
- Ensure that Isover RD35 acoustic batts* are installed against the same face of the cavity wall construction throughout
- Ensure Isover RD35 acoustic batts* are installed in accordance with manufacturer's recommendations
- Ensure Isover RD35 acoustic batts* do not bridge the cavity
- 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 wall ties do not coincide with bed reinforcement
- Ensure flues are not integrated within the separating wall
- Refer to Appendix A

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

1. External (flanking) wall junction





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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

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

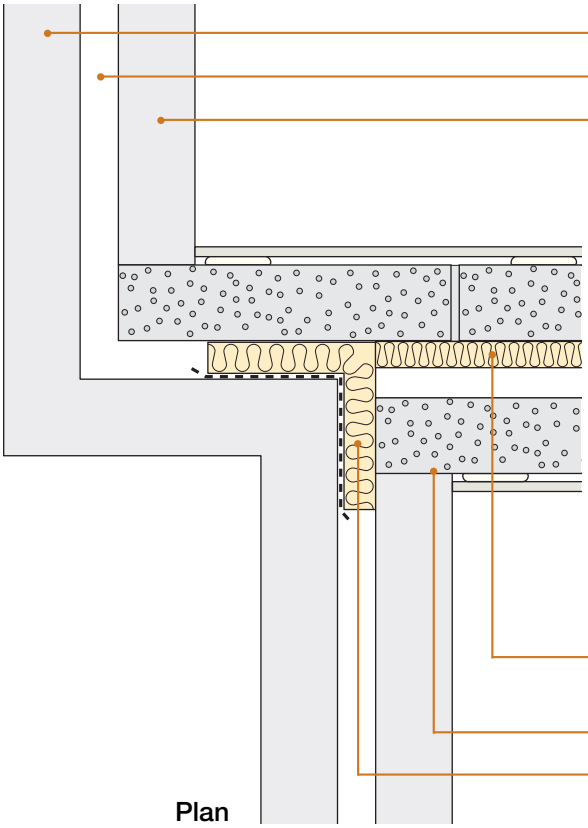
- 100mm (min) aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish 13mm plaster or nominal 8 kg/m² gypsum-based board

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



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

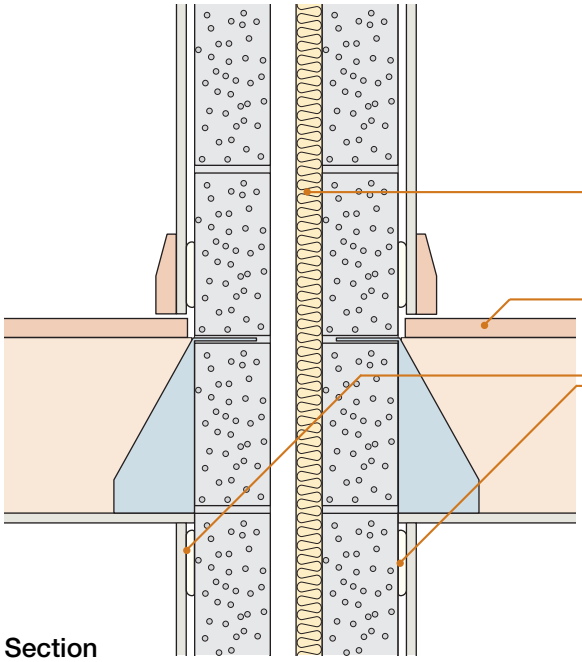
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Tooth or tie walls together

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

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



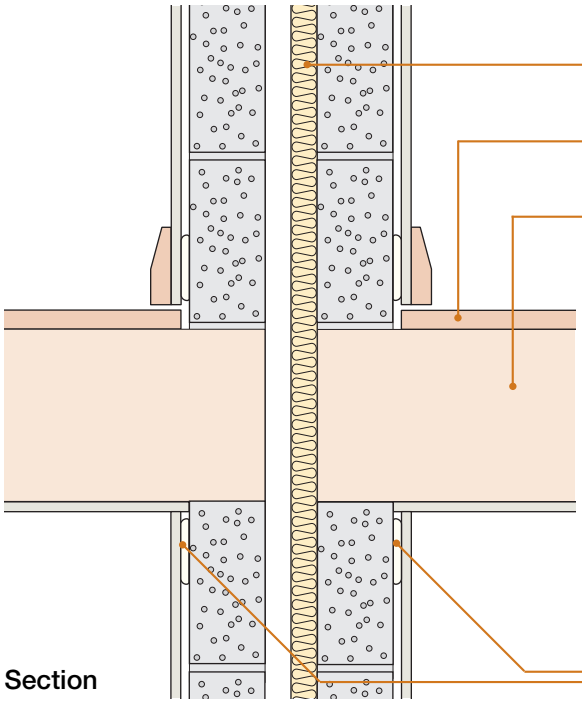
Section

35mm (min) Isover RD35 mineral wool acoustic batt* (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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

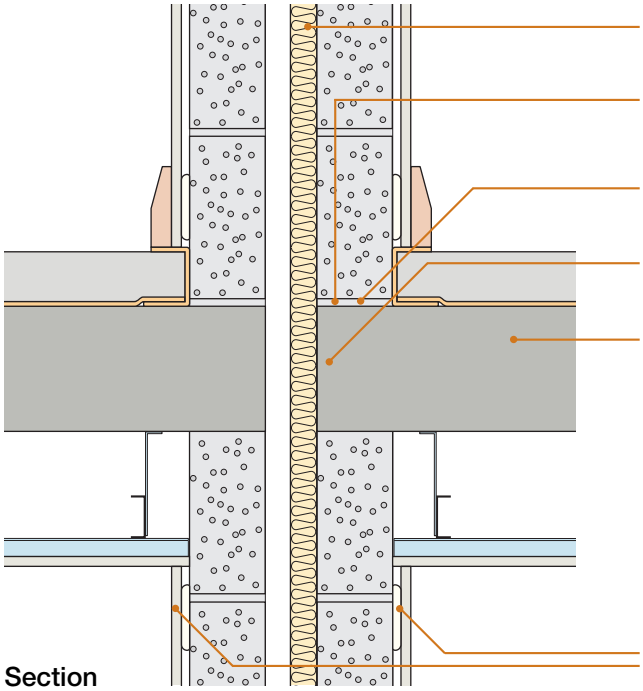
Floor construction:

- 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-5 type separating floor and CT5 type ceiling treatment

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

Separating wall must not be continuous between storeys

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

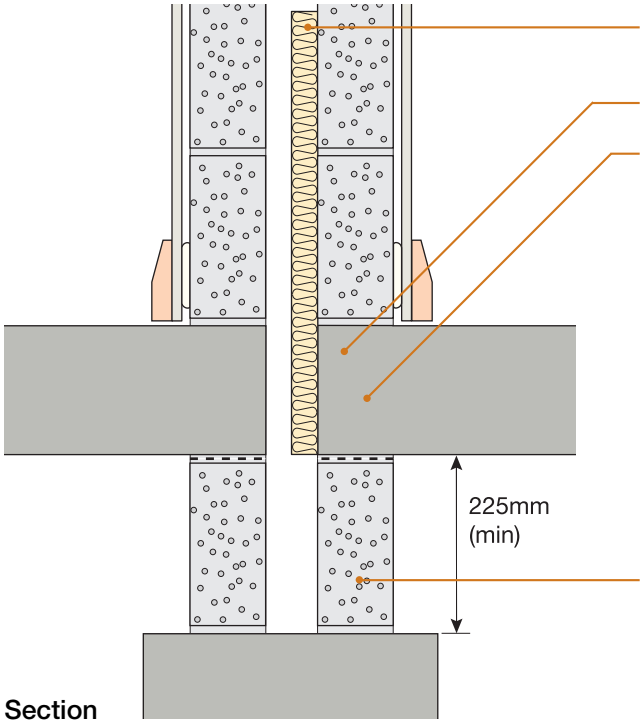
Separating floor must not be continuous between dwellings

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

35mm (min) Isover RD35 mineral wool acoustic batt* (no gaps to remain)

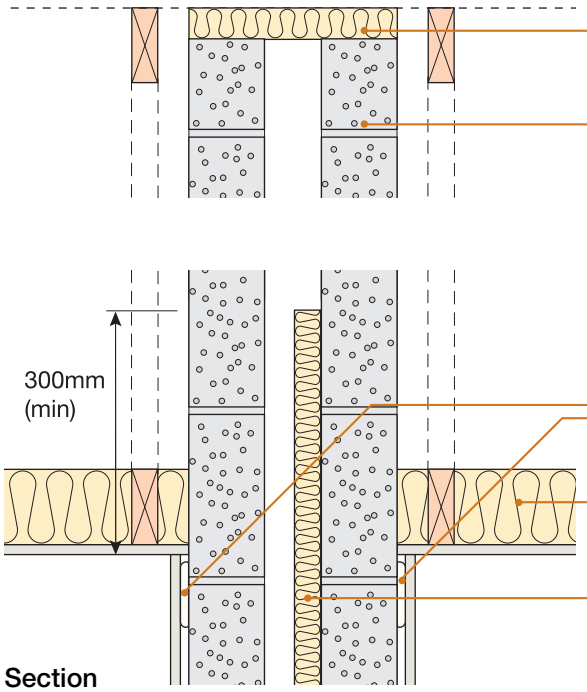
Ground floor not continuous between dwellings

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.

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

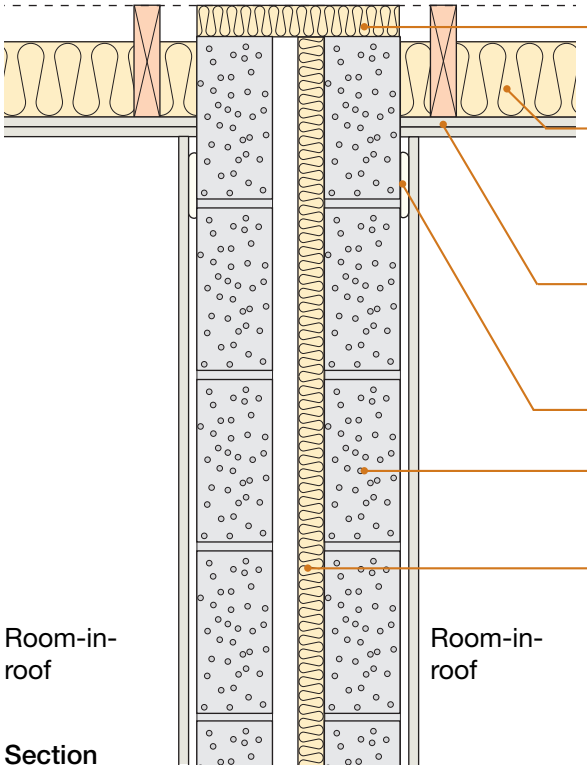
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

35mm (min) Isover RD35 mineral wool acoustic batt* (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/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

35mm (min) Isover RD35 mineral wool acoustic batt* (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.	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 insulation retaining ties in separating wall to Approved Document E “Tie type A” (see Appendix A)?			
7.	Are cavity stops installed?			
8.	Are joints fully filled?			
9.	Is Isover RD35 Acoustic Batt* fixed in the cavity?			
10.	Are insulation batts 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 Isover RD35 acoustic Batt:

Telephone: 01159 451143 **Fax:** 01159 451915 **E-mail:** isover.enquiries@saint-gobain.com

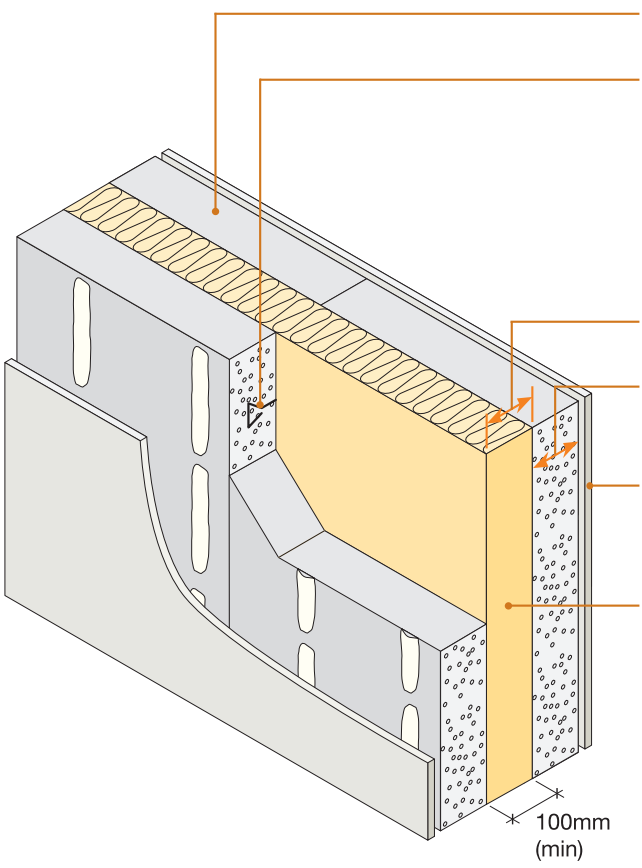
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

* Saint Gobain-Isover RD35 Acoustic Batt is no longer being manufactured

Separating Wall – Cavity Masonry E-WM-31

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

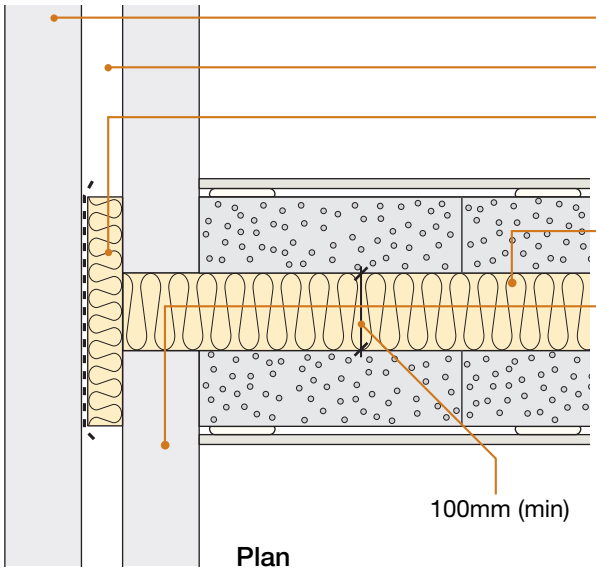


Element density	575 kg/m³
Wall ties	Wall ties must be Vista VE4, Ancon Building Products Staifix HRT4 or Clan PWT4 installed at no more than 3 ties per storey height (see section 3)
Cavity width	100mm (min)
Element thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	100mm mineral wool maximum density 40 kg/m³
External (flanking) wall	Celcon Elements 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

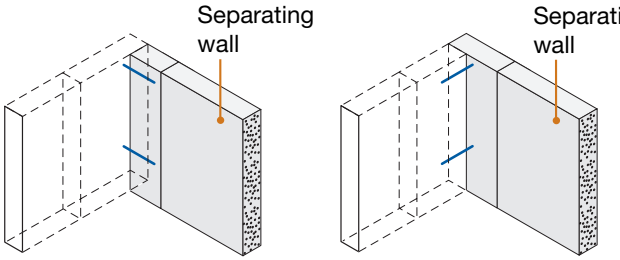
External wall cavity (min 50mm)

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

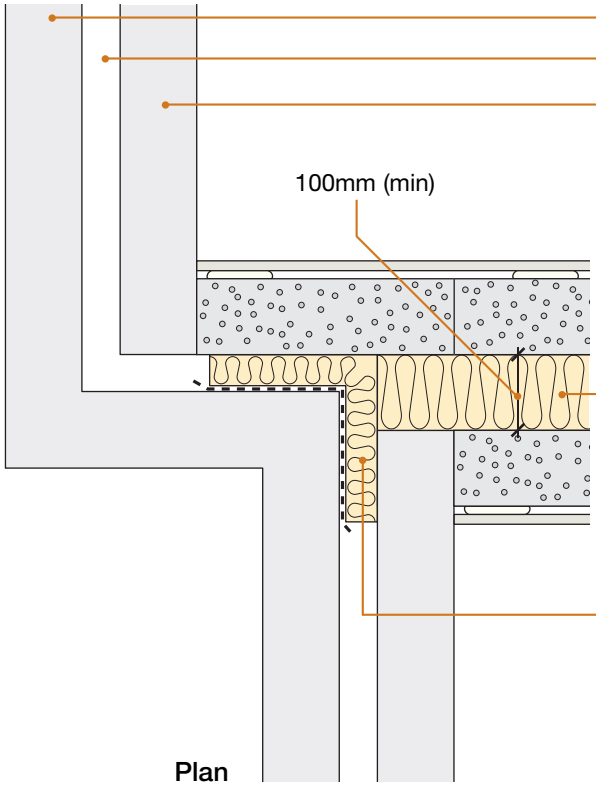
- Celcon Elements or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 8 kg/m² gypsum-based board



Abutting inner leaf Through inner leaf

Separating wall Elements may abutt, 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

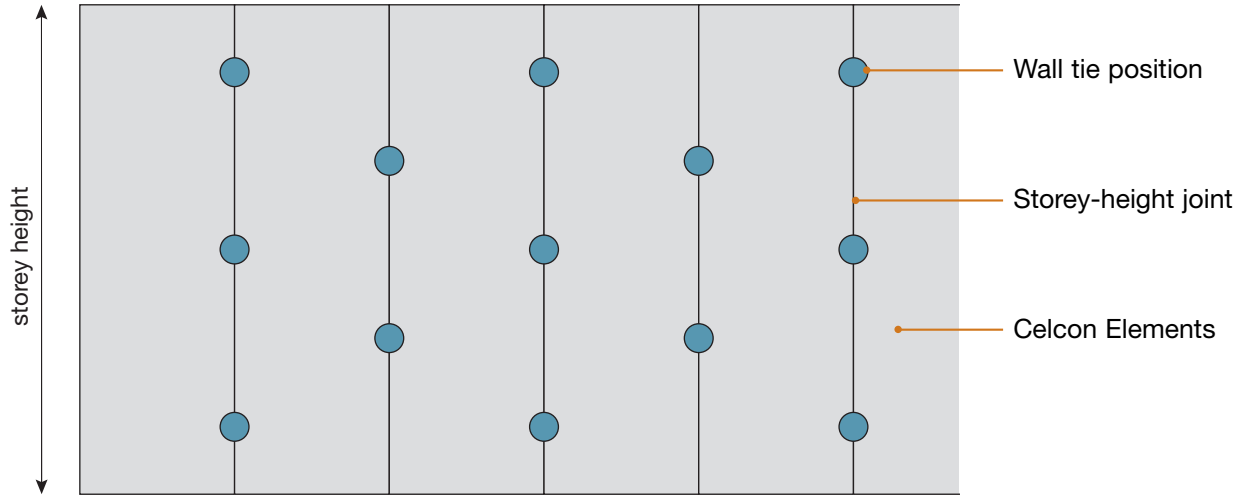
- Celcon Elements or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 8 kg/m² gypsum-based board

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

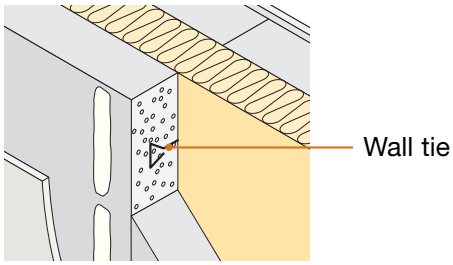


Only the following wall ties are permitted:

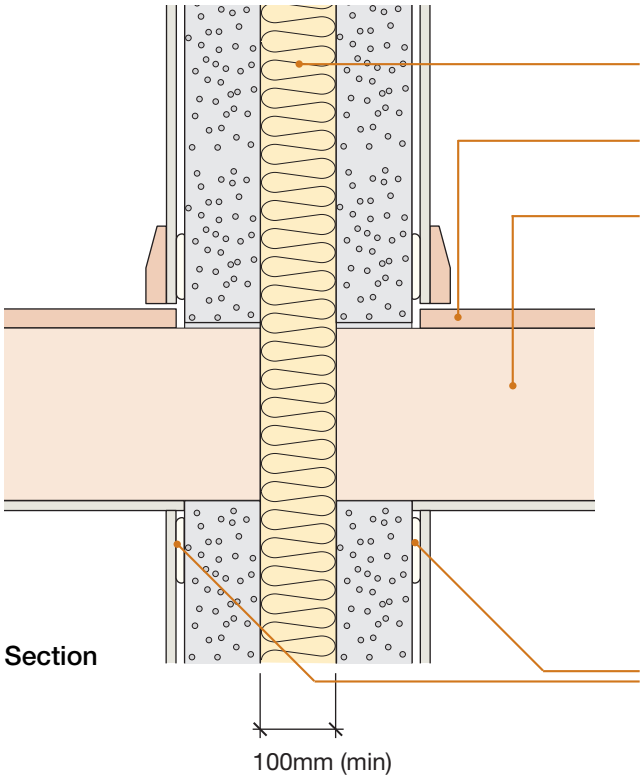
- Vista VE4
- Ancon Building Products Staifix HRT4
- Clan PWT4

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

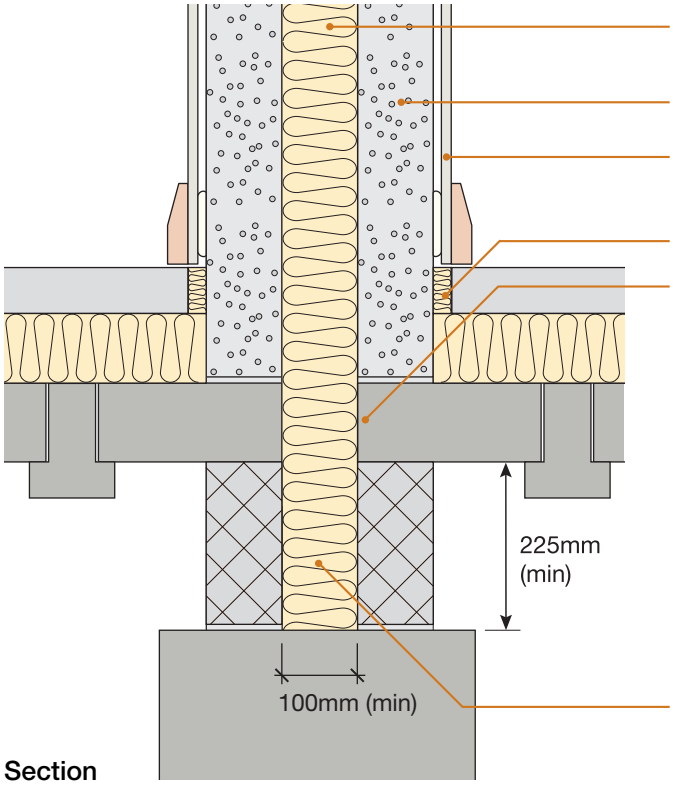
Internal floors should not be continuous between dwellings

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)

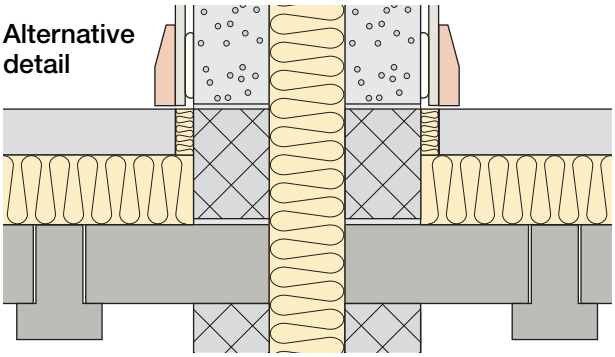
Celcon Elements

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

Perimeter insulation isolating screed from wall

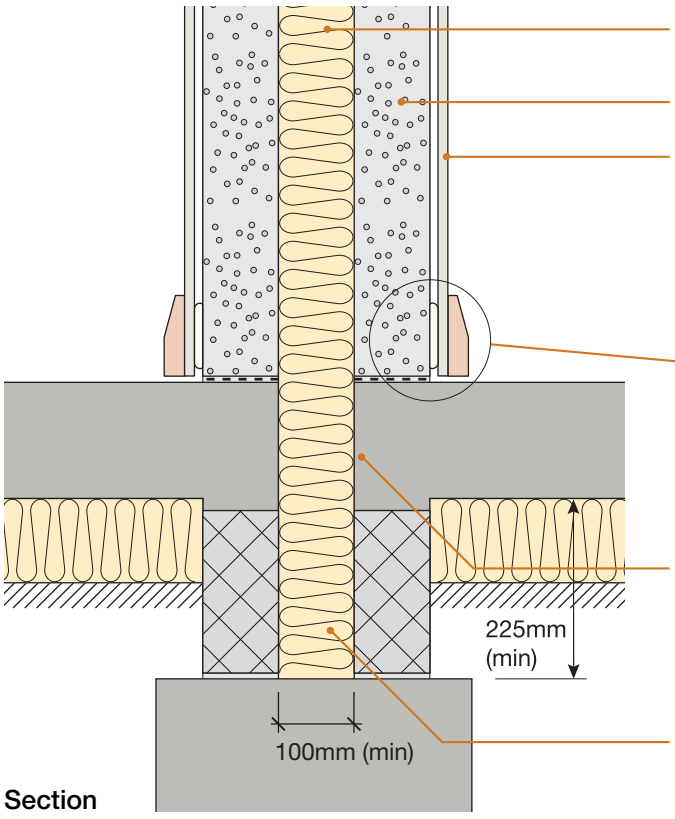
Ground floor not continuous between dwellings

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

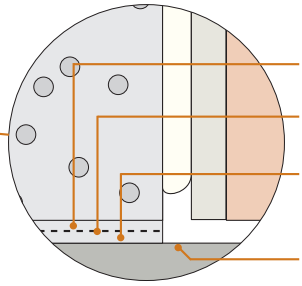


Section

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

Celcon Elements

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



Thin layer mortar

DPM

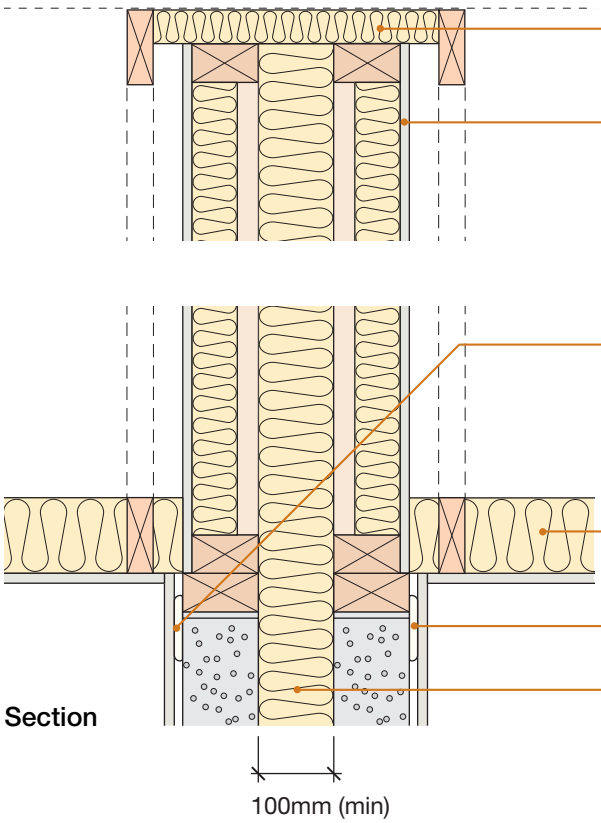
Levelling mortar bed as appropriate

Floor slab

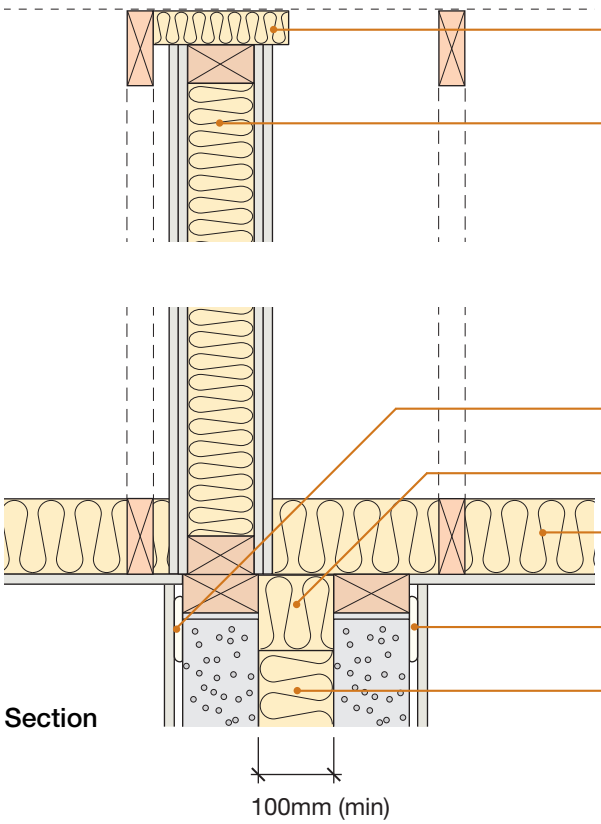
Ground floor not continuous between dwellings

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

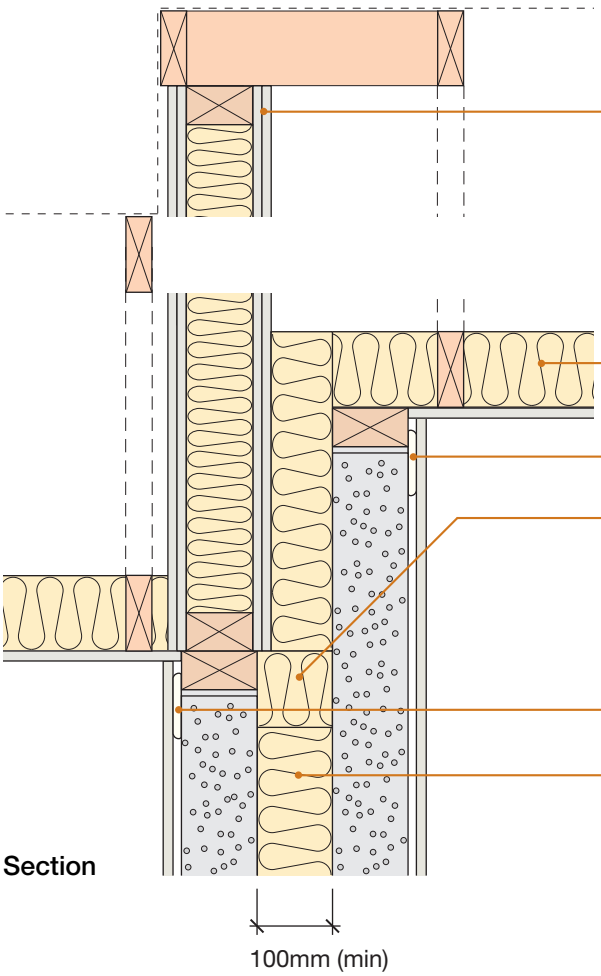
7. Roof junction – pitched roof without room-in-roof



Alternative detail with single spandrel panel



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



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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 Elements or aircrete (450 to 800 kg/m^3)?			
4.	Are separating wall leafs constructed from Celcon Elements 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 880580 **Fax:** 01732 887013 **E-mail:** technical@hhcelcon.co.uk

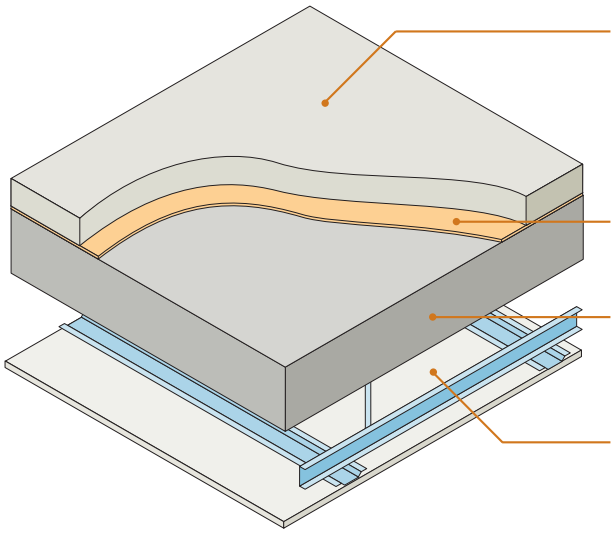
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Concrete

E-FC-18

Insitu concrete slab with flat soffit ■
For use in reinforced concrete frame construction ■
Bonded resilient floor covering, or screed laid on resilient layer system ■



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

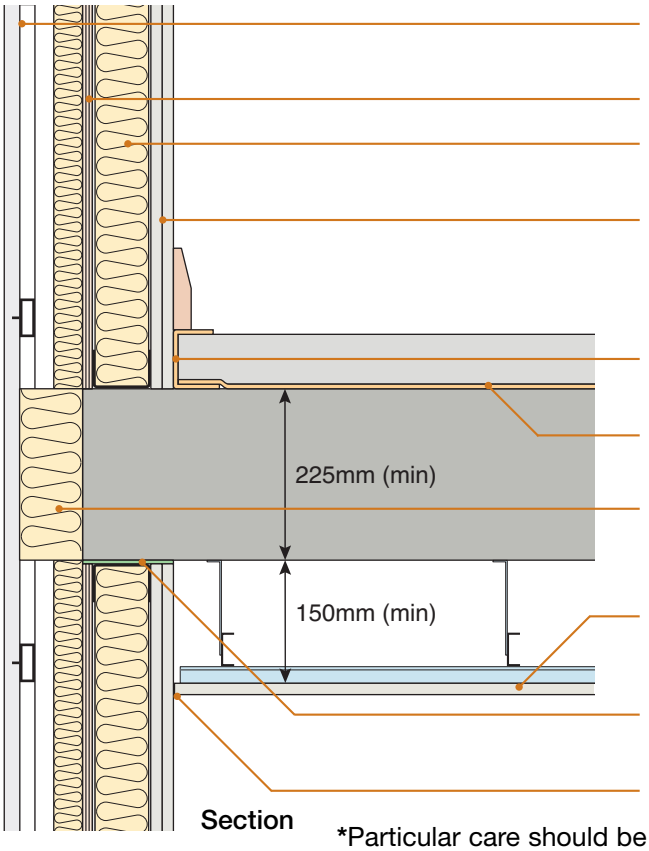
When using under-screed resilient layer systems:

- 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 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 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

Refer to Section 8 for bonded resilient floor covering requirements

1. External (flanking) wall junction – lightweight external

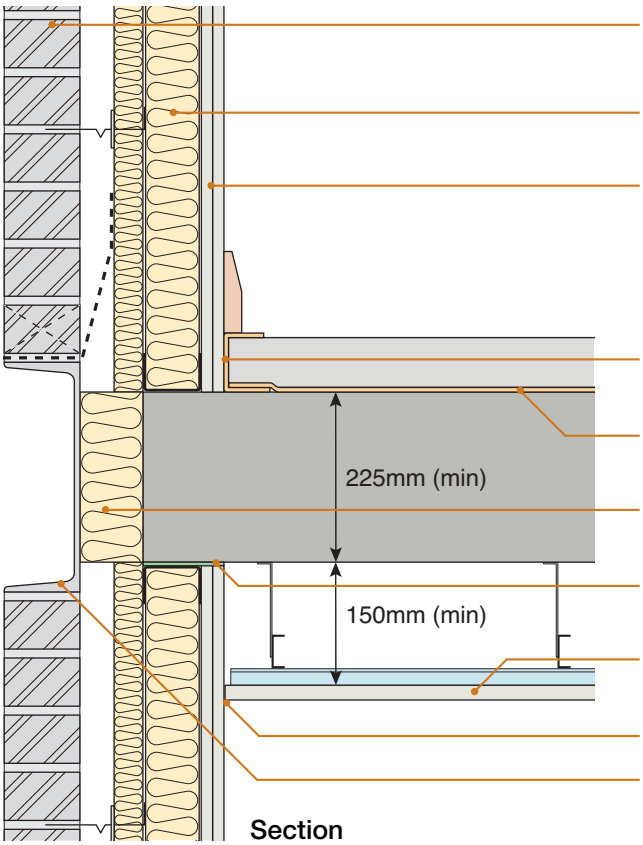


Section

- 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

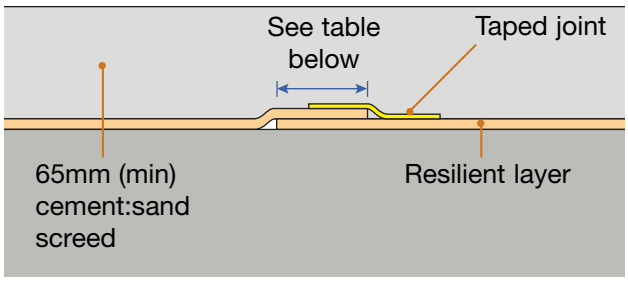
2. External (flanking) wall junction – masonry outer leaf

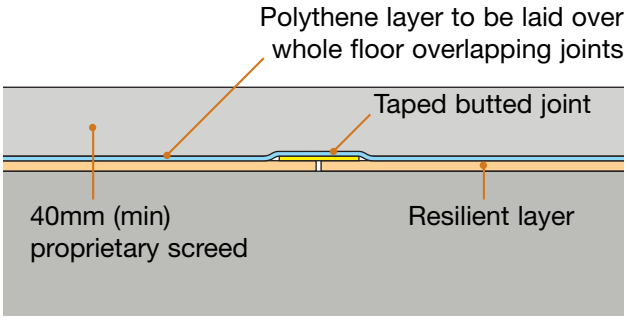


Section

- 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’

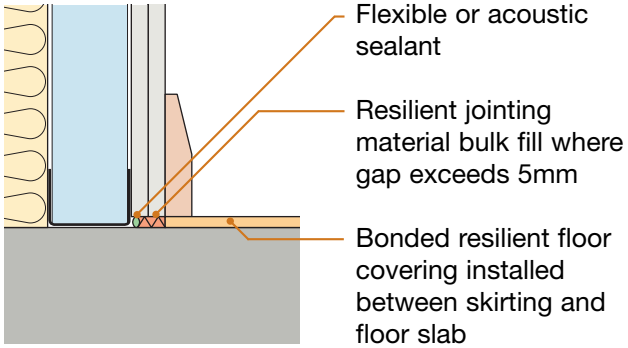
7. Resilient layer installation and screed types



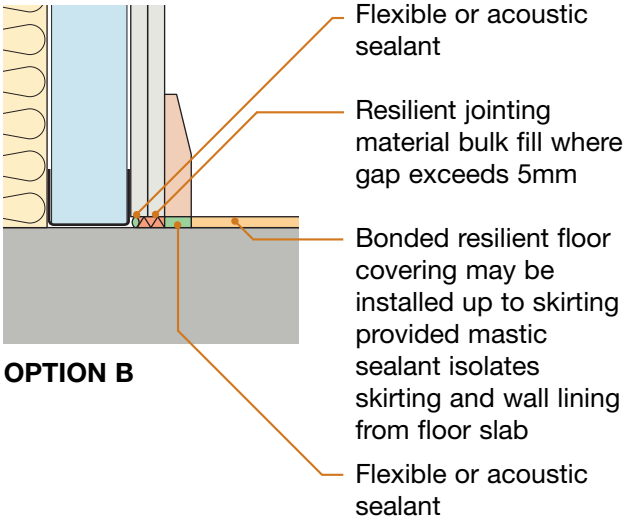


Resilient layer system	Minimum overlap	Jointing method
Thermal Economics 6mm Iso Rubber & IsoEdge	50mm	Generic tape
Cellecta® YELO*fon*® HD10+ and E-strip	150mm	J-strip
Icopal-MONARFLOOR® TRANQUILT® system	Integrated	Monarfloor Acoustic Adhesive
Thermal Economics IsoRubber Base HP3 & IsoEdge	50mm	Generic 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



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

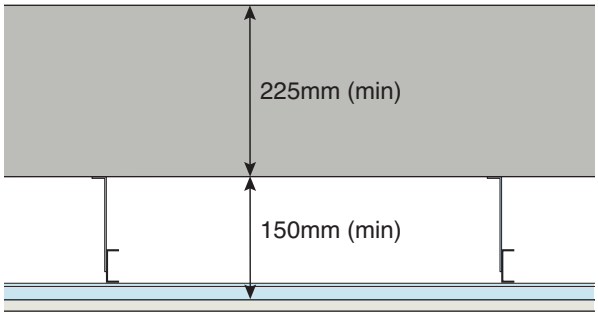
Ceiling treatments must be installed in accordance with the manufacturer's instructions.

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

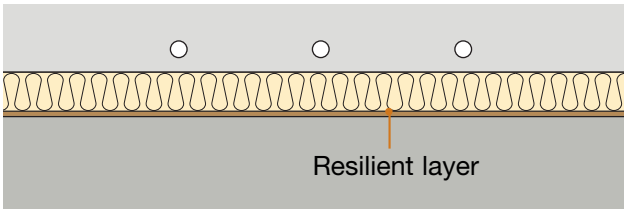
10. Underfloor heating systems within screeds

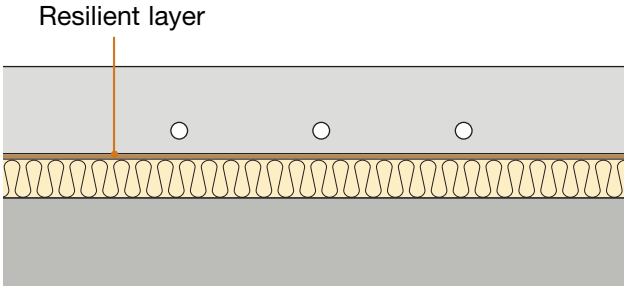
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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

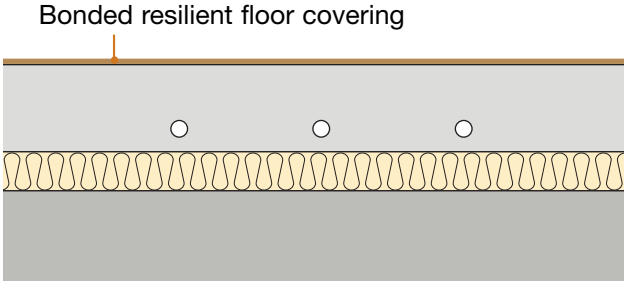
An insulation layer may be positioned on top of, or beneath, the resilient layer.

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





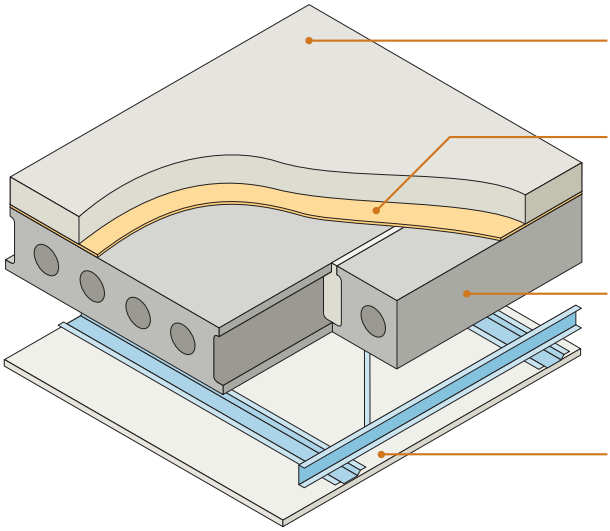
A bonded resilient floor covering can be applied to the top of the screed instead of the under-screed resilient layer shown here. Refer to section 8.



Separating Floor – Concrete

E-FC-19

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



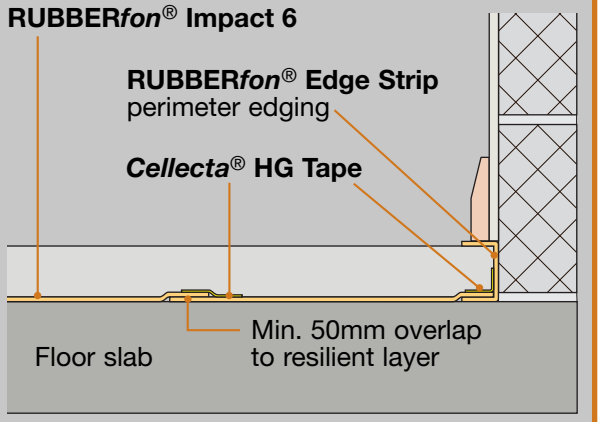
Sketch shows CT0 type ceiling treatment

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**



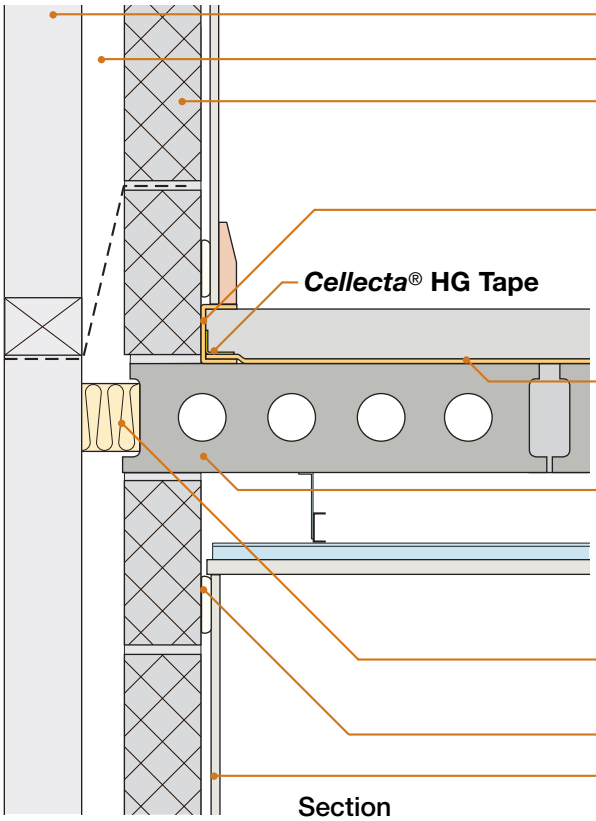
- **RUBBER*fon*® Edge Strip** to be installed at all room perimeters. See manufacturer's guidance.

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

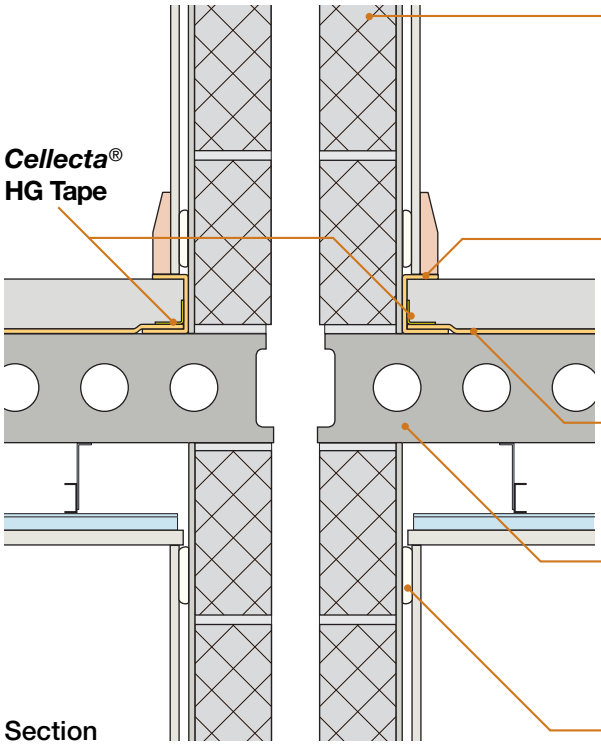
Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

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:

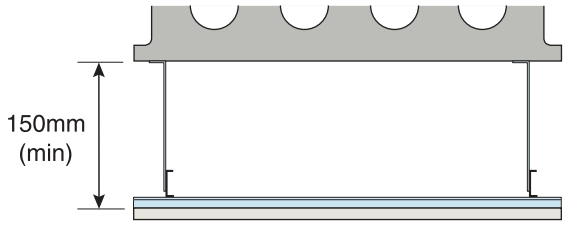
- 25mm (min.) mineral fibre quilt is placed in the ceiling void, and/or
- resilient hangers are used.

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:

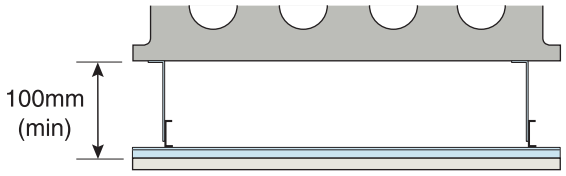
- in accordance with the manufacturer's instructions
- at no more than one light per 2m^2 of ceiling area in each room or see Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

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

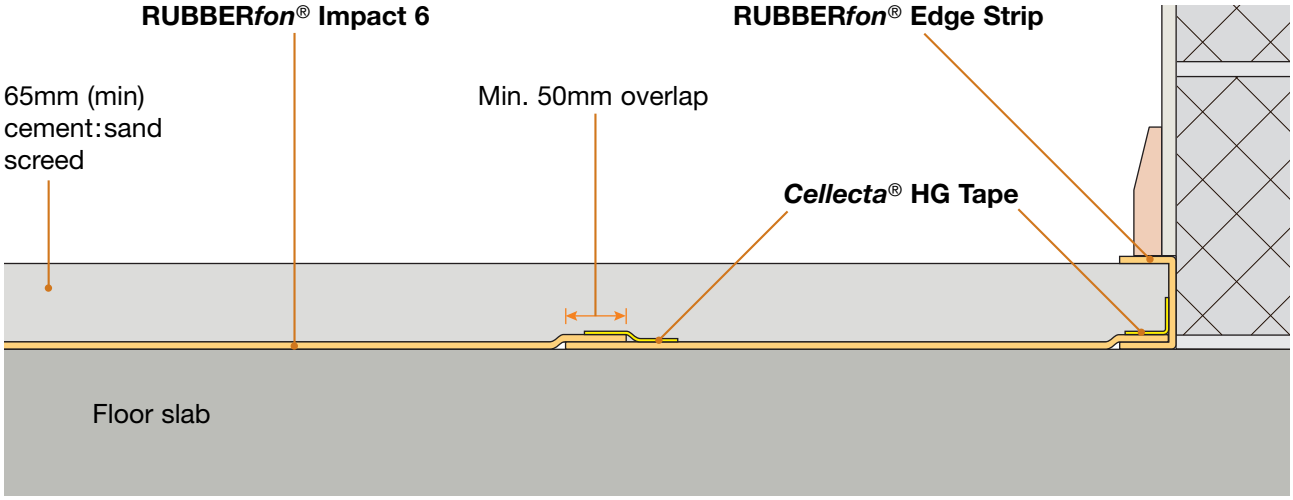
- any metal ceiling system providing 150mm (min) ceiling void
- one layer of nominal 8 kg/m^2 gypsum-based board



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

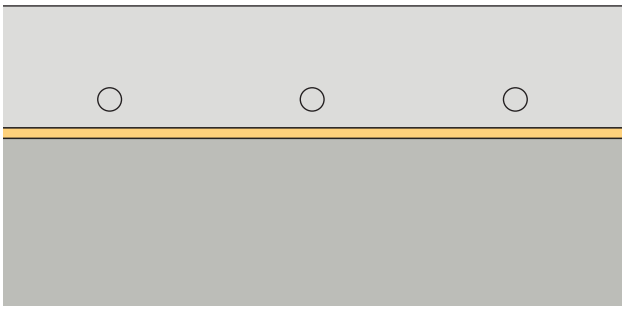
- **RUBBER*fon*® Impact 6** resilient layer must have 150mm (min) overlapped joints and be sealed with ***Cellecta*® HG Tape**.
- **RUBBER*fon*® Edge Strip** must be overlapped by **RUBBER*fon*® Impact 6** resilient layer with joints sealed with ***Cellecta*® HG Tape** to isolate screed from perimeter 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

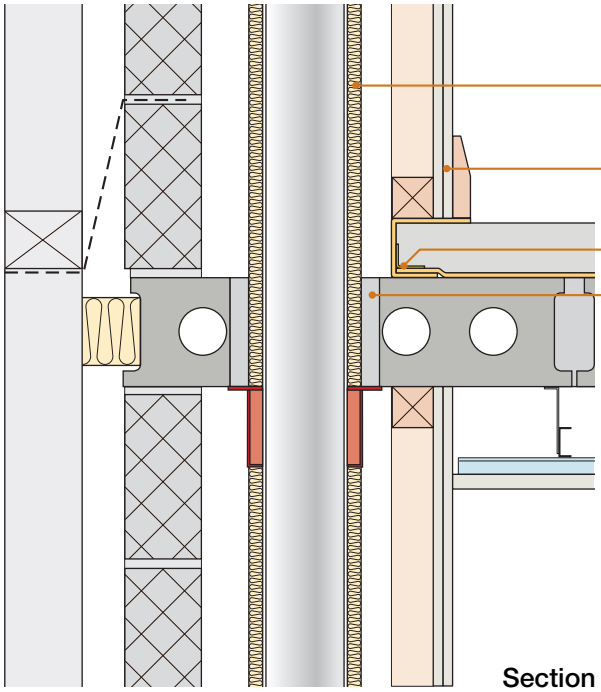
Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

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:

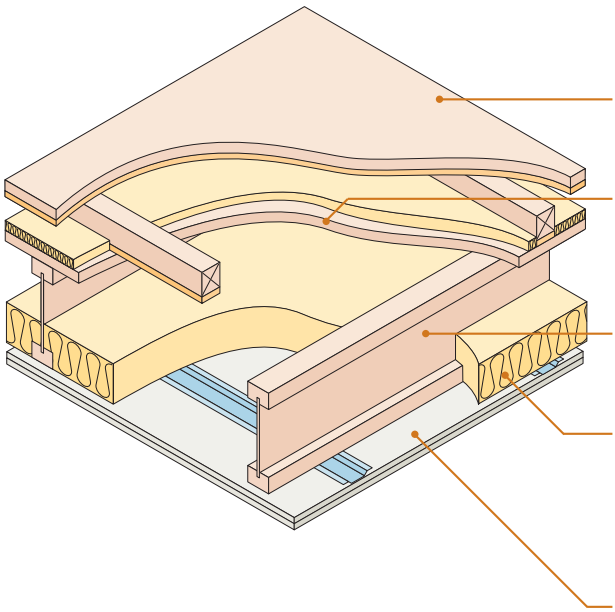
Telephone: 01634 296677 **Fax:** 01634 226630 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Floor – Timber I-Joists E-FT-1

Timber I-Joists ■
Use with timber frame walls only ■



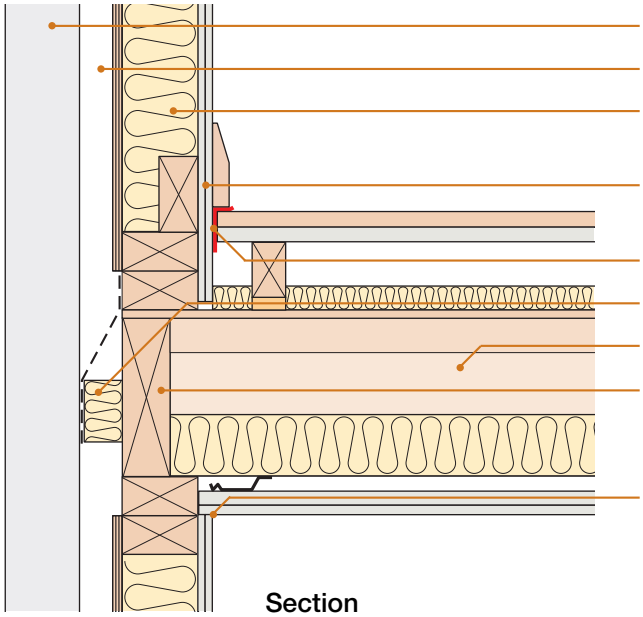
Floating floor	See section 6 for suitable floating floor treatment
Floor decking	15mm thick (min) wood based board, density 600 kg/m^3 (min)
Joists	235mm (min) timber I-Joists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m^3) or Cellecta MICRO 50 between joists
Ceiling	See section 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



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)

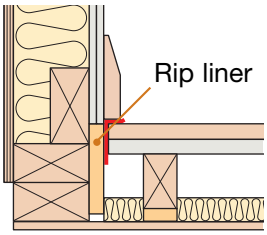
Joists may span in either direction

Close spaces between floor joists with full depth timber blocking or continuous header joist where joists are at right angles to the wall

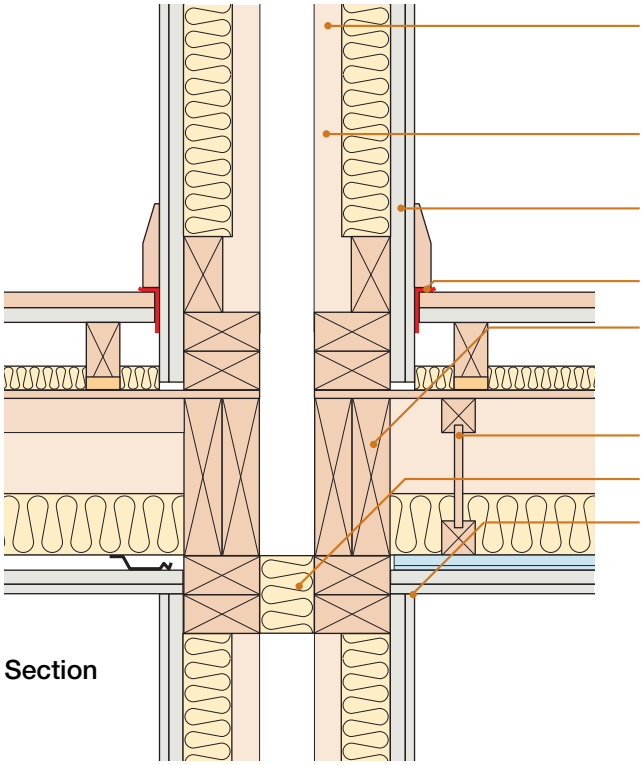
Seal all perimeter joints with tape or caulk with sealant

Section

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

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

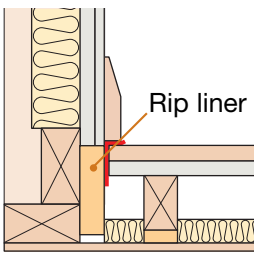
Joists may span in either direction

Close cavity with a cavity stop (see Appendix A)

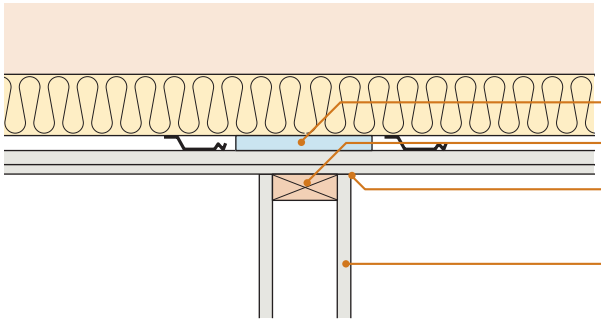
Seal all perimeter joints with tape or caulk with sealant

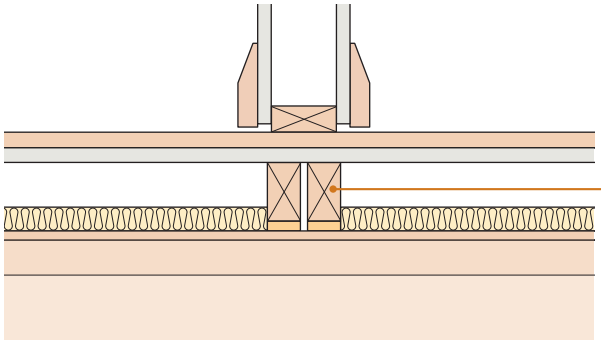
Section

Alternative detail

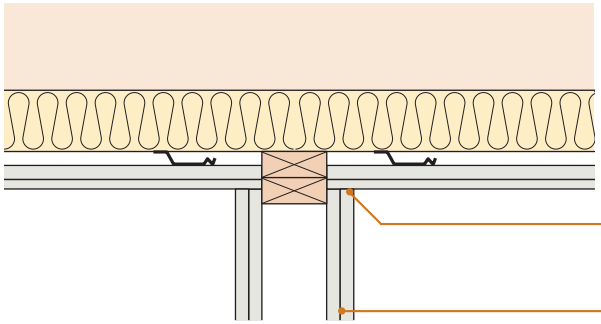


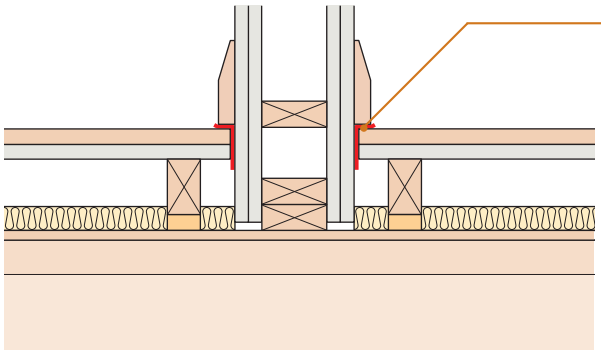
3. Internal wall junction (non loadbearing)



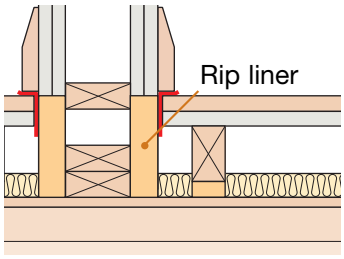


4. Internal wall junction (loadbearing)





Alternative detail



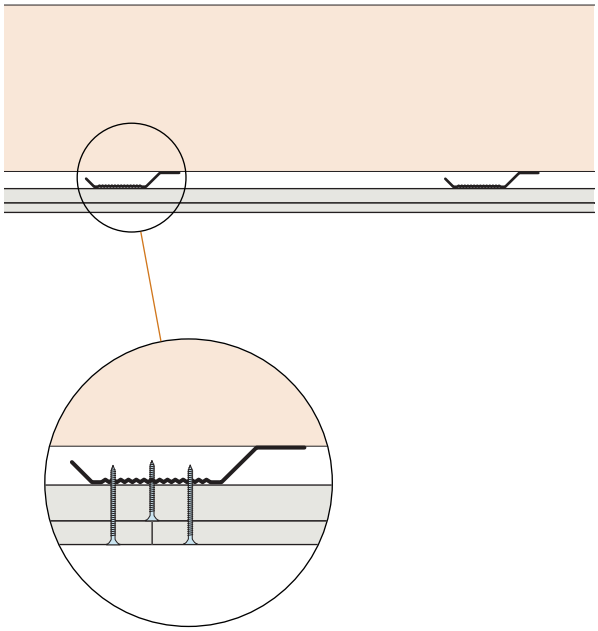
5. Ceiling treatment for E-FT-1

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:

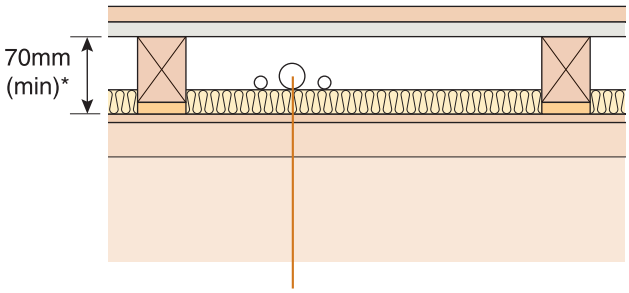
a) Must achieve a minimum laboratory performance of rd$\Delta R_w + C_{tr}$ = 13dB and rdΔL_w = 15dB - see Appendix C.

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.



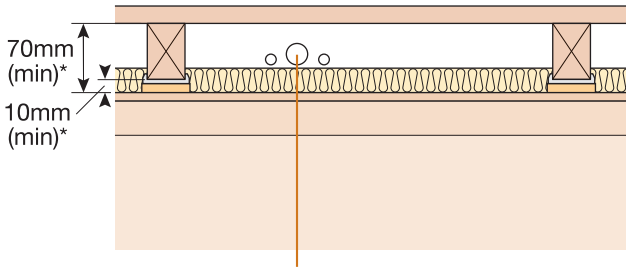
Services, where required, may be located above or below quilt

FFT1 – Resilient composite deep batten system for E-FT-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



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

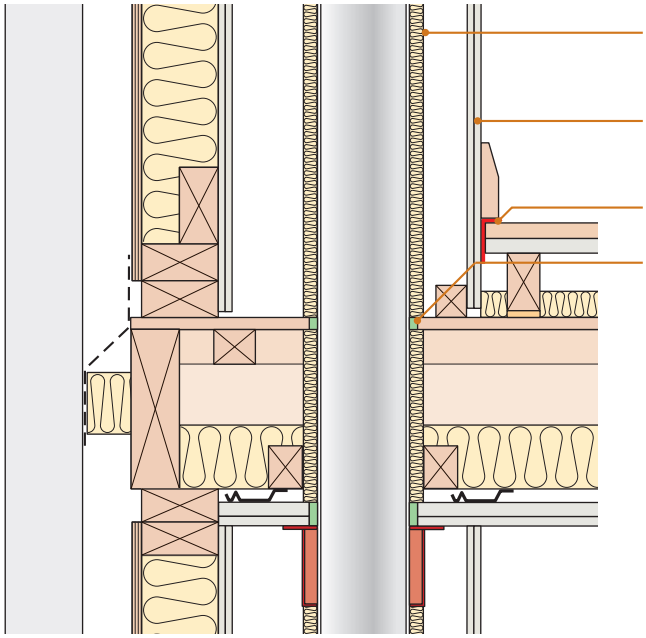
FFT2 – Resilient cradle and batten system for E-FT-1
Ensure cradles are aligned over joist positions

- 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

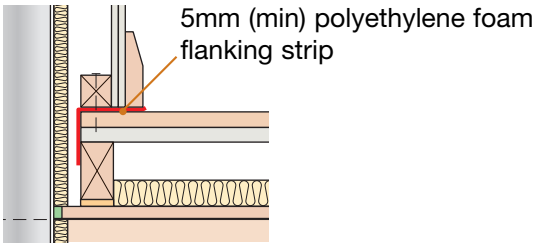
Cellecta HiDECK Structural system

- 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:

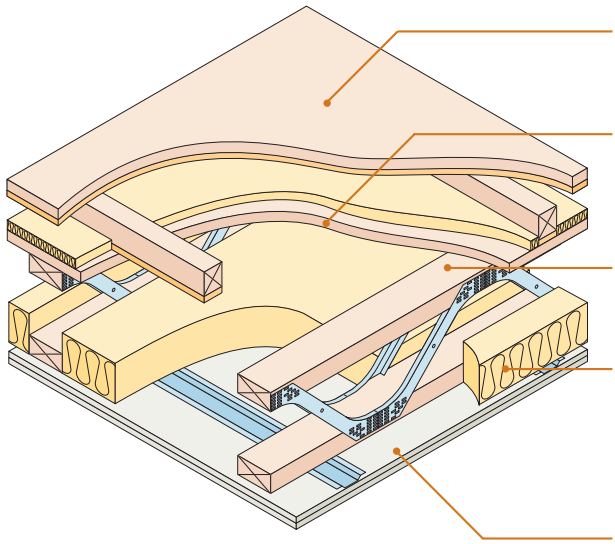
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are timber I-Joists at least 235mm deep?			
2.	Has the specified quilt been fitted between the joists?			
3.	Are resilient ceiling bars fitted at right angles to the joists?			
4.	Has ceiling system been fitted in accordance with the manufacturer's 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 – 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:

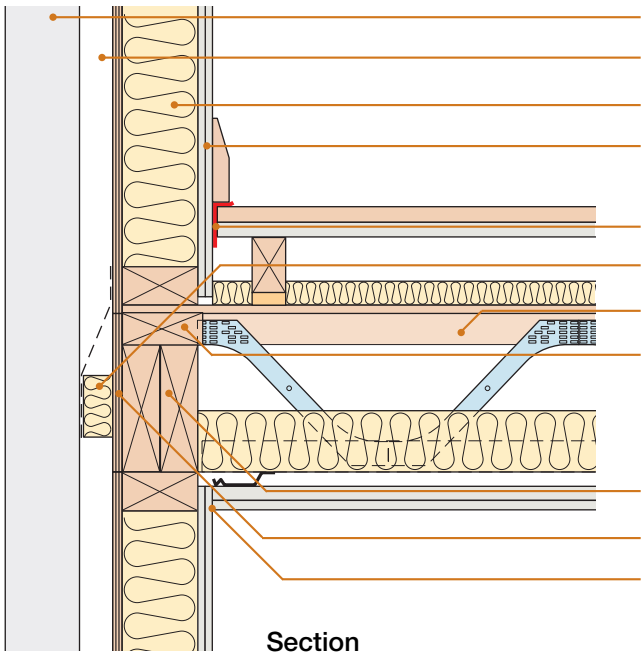
Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

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

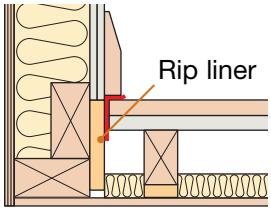
1. External (flanking) wall junction (top chord supported)



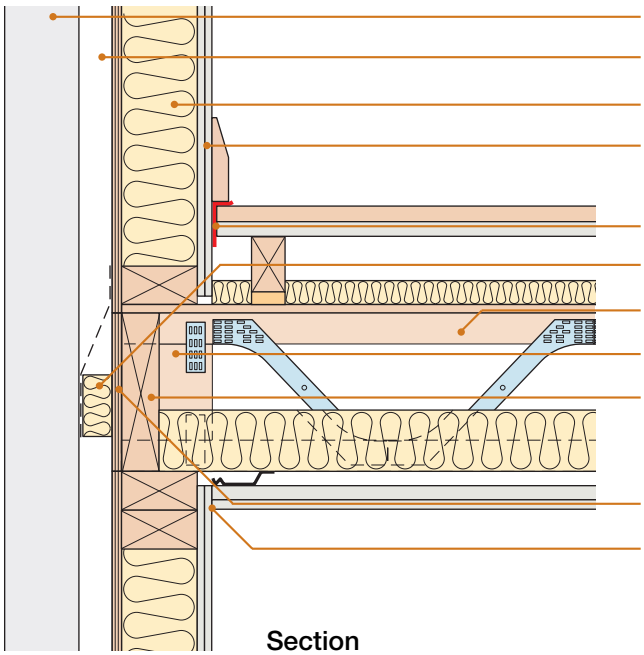
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Softwood timber infill 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



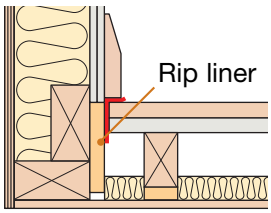
2. External (flanking) wall junction (fully built-in)



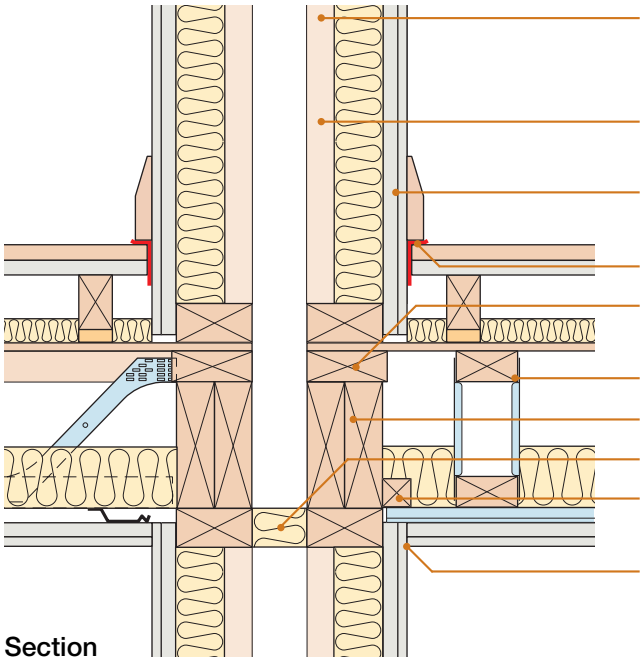
- Masonry outer leaf
- External wall cavity (min 50mm)
- Mineral wool insulation 10 kg/m³ (min)
- Two layers gypsum-based board nominal 8 kg/m² each layer
- 5mm (min) resilient flanking strip
- Close cavity with a cavity stop (see Appendix A)
- Joists may span in either direction
- Trimmable blocking 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

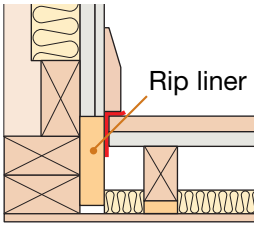


3. Separating wall junction (top chord supported)



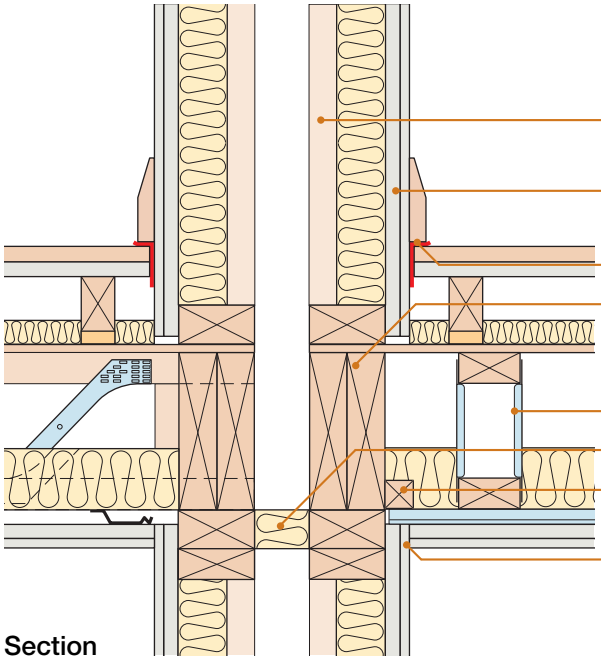
Section

- 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



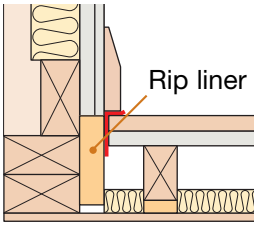
Alternative detail

4. Separating wall junction (fully built-in)



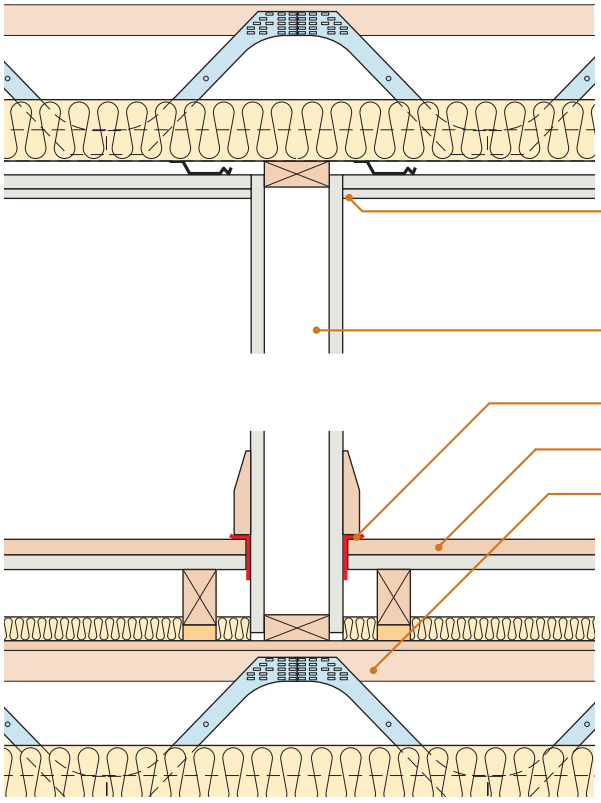
Section

- 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

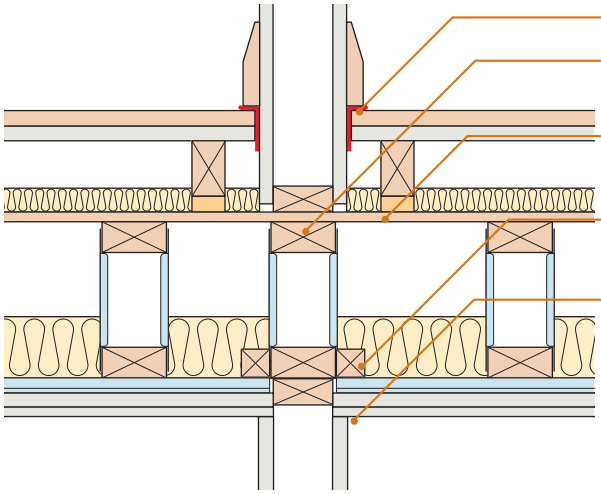
5mm (min) resilient flanking strip

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

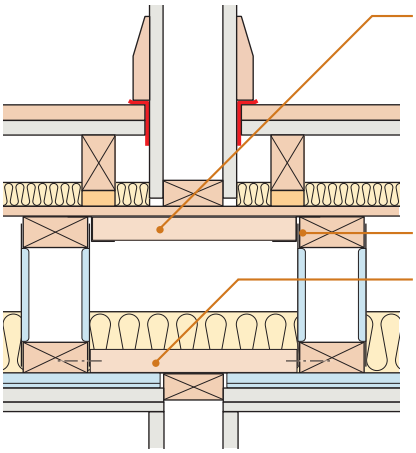
Floor decking

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

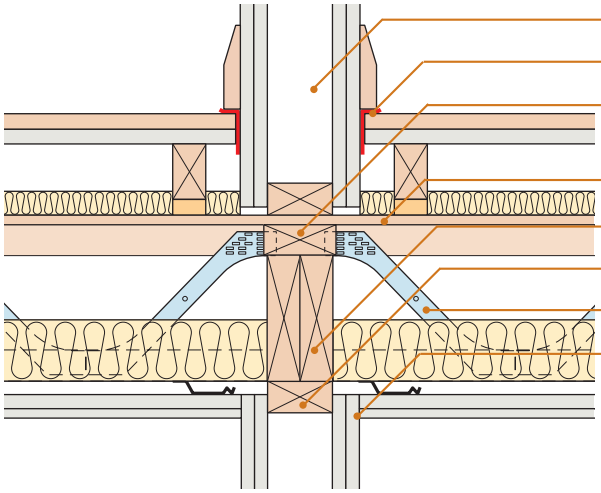


89 x 38mm (min) noggings hung on Z Clips at each end at 600mm c/c (max)

Z Clip

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

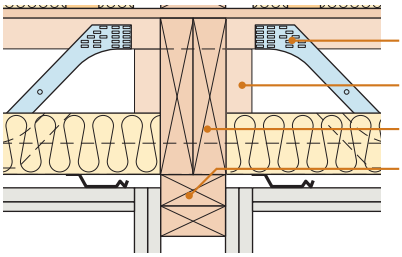
7. Loadbearing internal wall perpendicular to joists



- 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

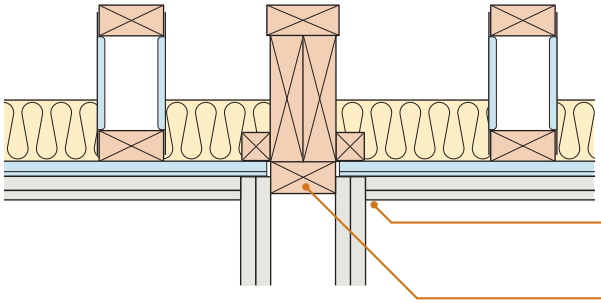
Note: Detail shows top chord/flange supported

Alternative detail

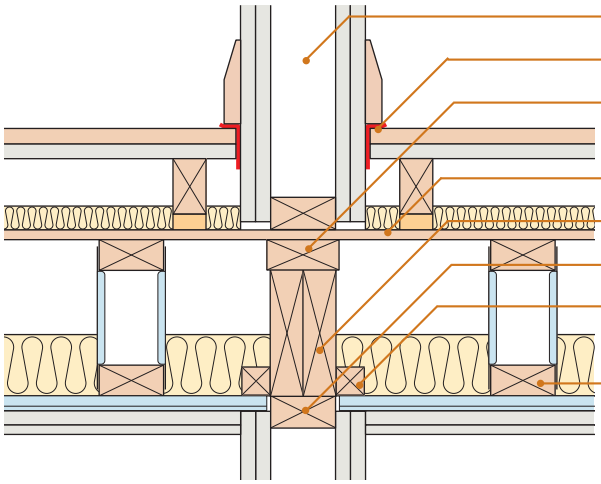


- Metal web joist (see joist type, page 1)
- Timber blocking to joist
- Internal wall beam
- Headplate fixed to internal wall beams

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

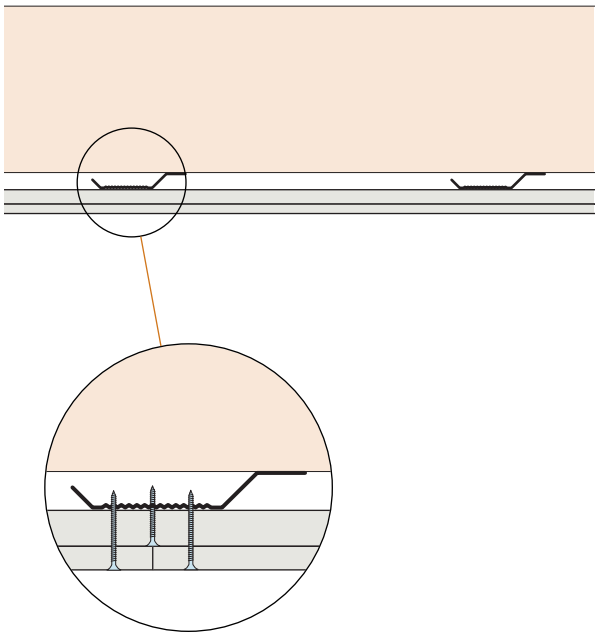
9. Ceiling treatment for E-FT-3

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:

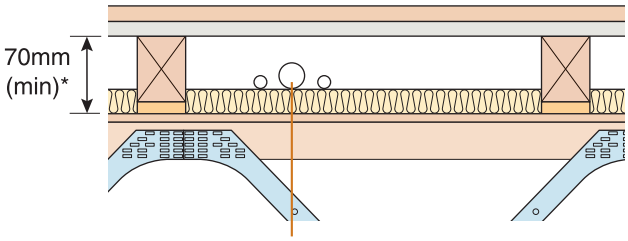
a) Must achieve a minimum laboratory performance of rd $\Delta R_w + C_{tr} = 13$dB and rd $\Delta L_w = 15$dB - see Appendix C.

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.



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

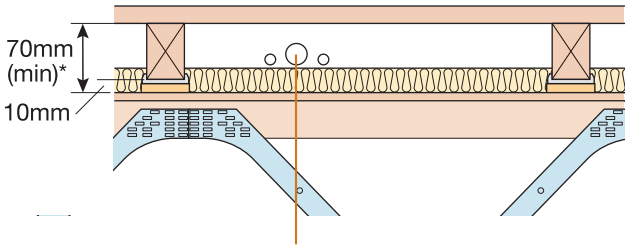
FFT1 – Resilient composite deep batten system for E-FT-3

- 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

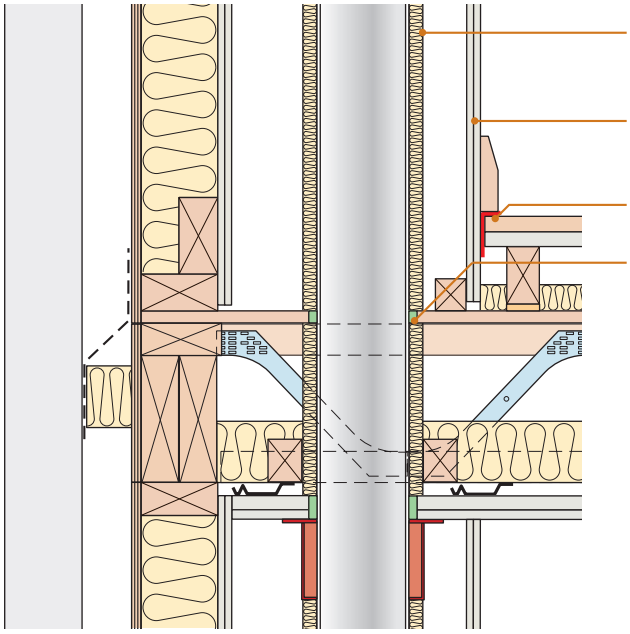
FFT2 – Resilient cradle and batten system for E-FT-3
Ensure cradles are aligned over joist positions

- 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

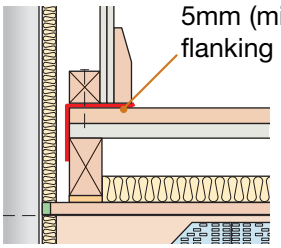
- refer to Appendix A3

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:

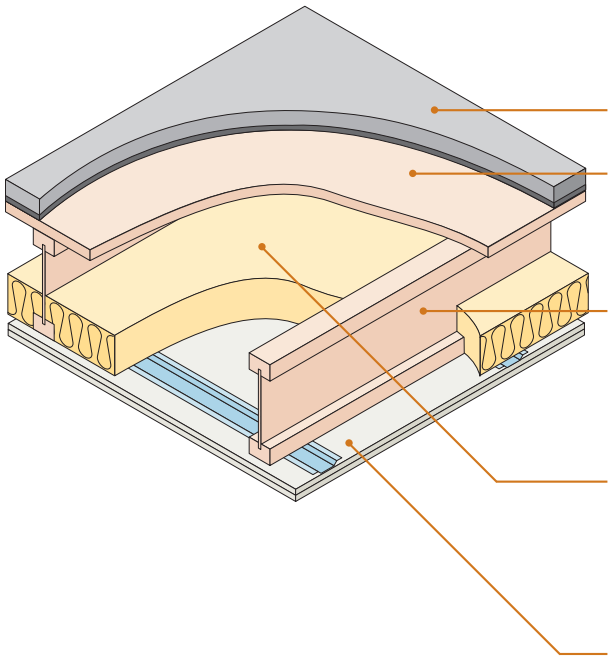
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are correct metal web joists being used (see page 1 of Robust Detail)?			
2.	Which of the permitted metal web joist types are being used?			
3.	Are joists at least 253mm deep?			
4.	Has the specified quilt been fitted between the joists?			
5.	Are 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-5

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



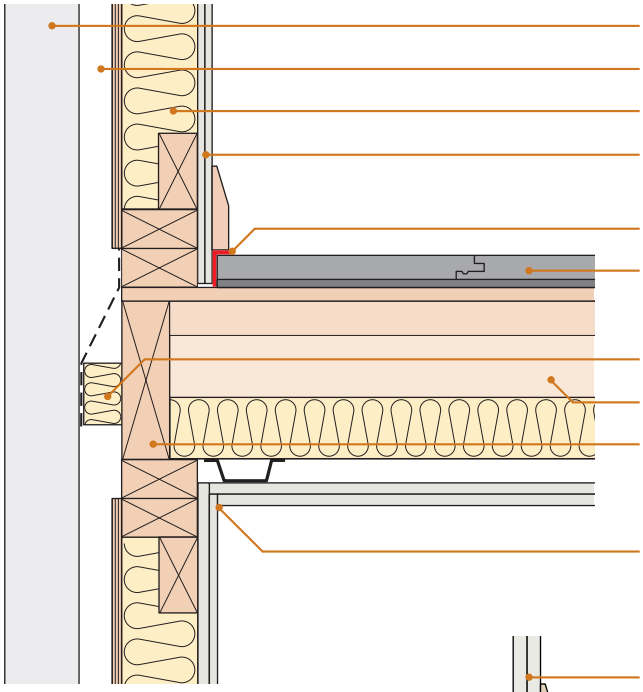
Floating floor	*Cellecta*® ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	235mm (min) timber I-joist, 240mm (min) where no second ceiling is included. See section 5
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) or *Cellecta*®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

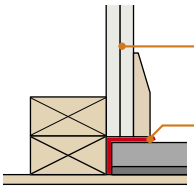
- Lay quilt (min 100mm thick) or *Cellecta*® MICRO 50 between all joists, including doubled up timber I-joists, ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all *Cellecta*® ScreedBoard® 28 decking joints
- Install *Cellecta*® YELO*fon*® FS50 flanking angle around the perimeter of the *Cellecta*® 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

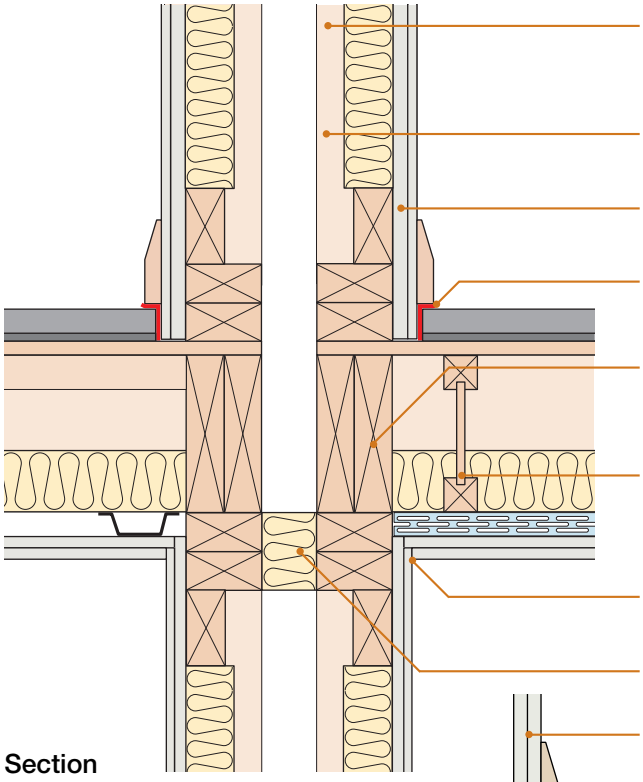
Section



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

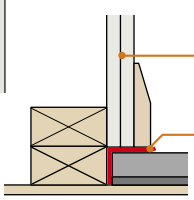
Alternative detail

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)

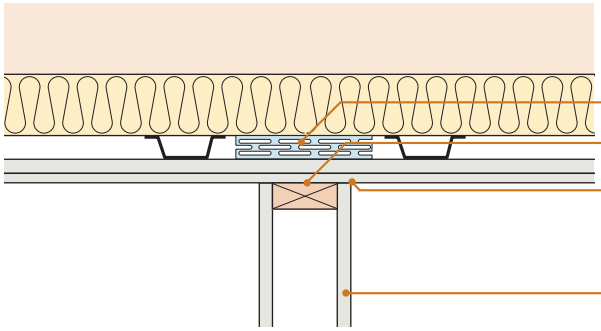
Section

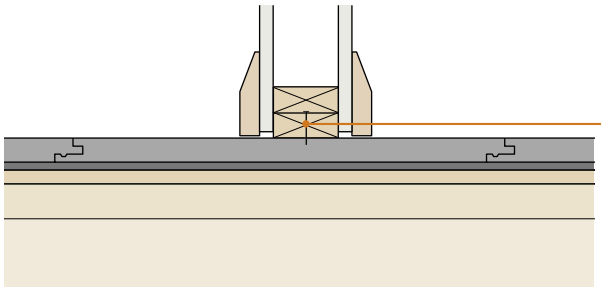


Two layers gypsum-based board nominal 8 kg/m² each layer
YELO*fon*® FS50 flanking angle

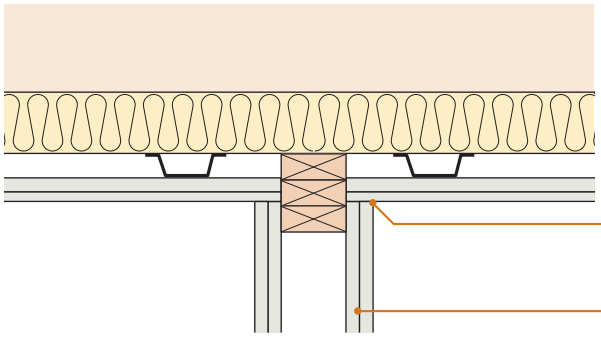
Alternative detail

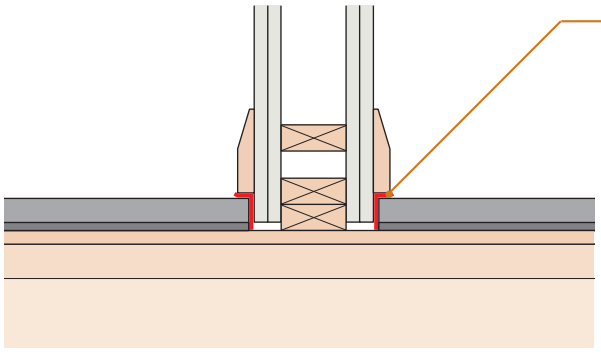
3. Internal wall junction (non loadbearing)



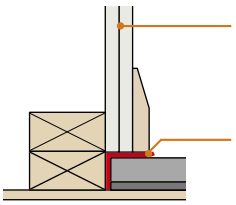


4. Internal wall junction (loadbearing)





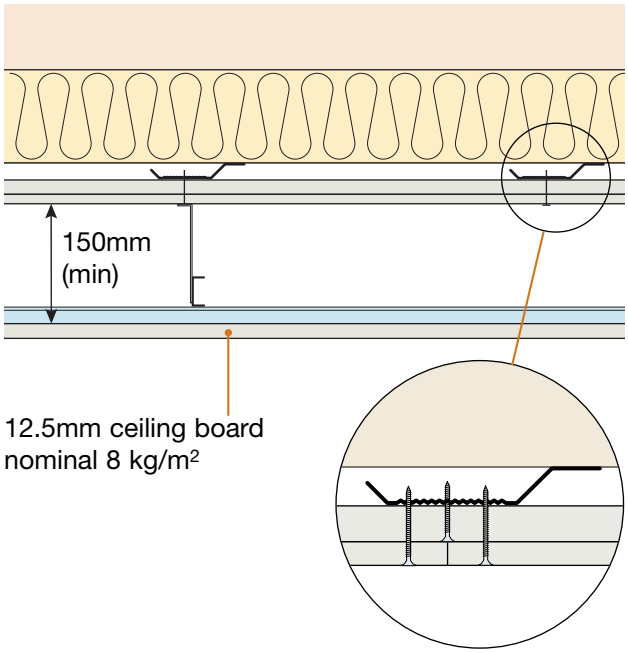
Alternative detail



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

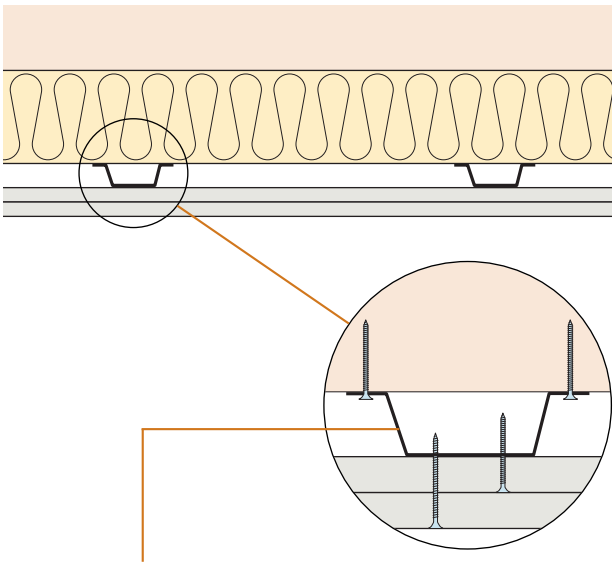
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

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

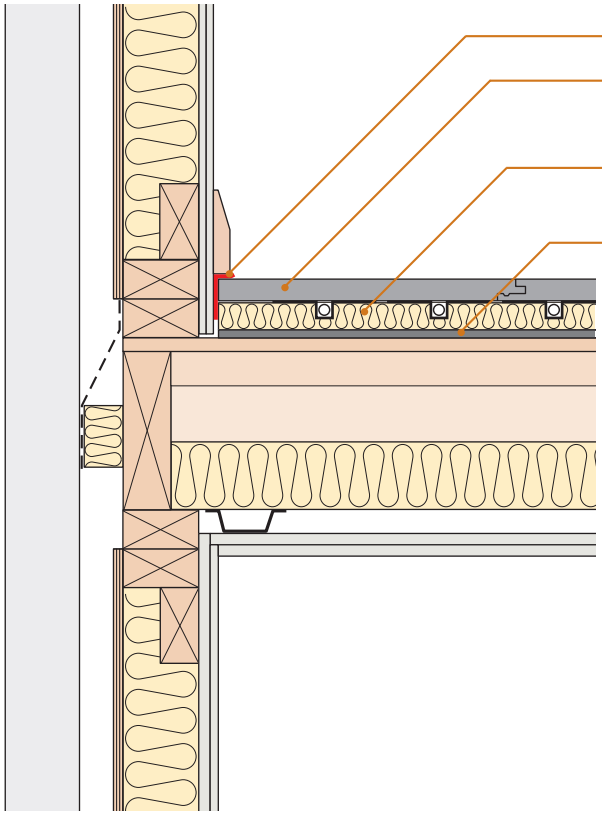
Downlighters or recessed lighting may be installed in the primary ceiling:

- 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

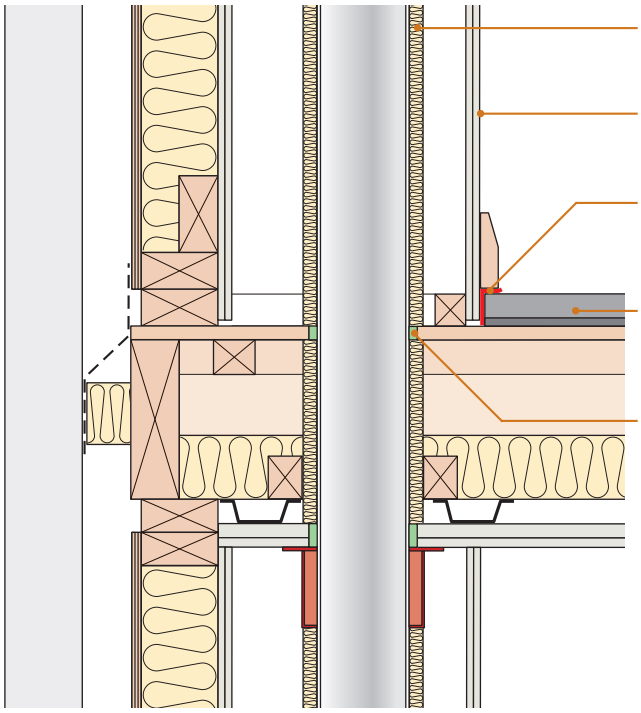
Note: Only downlighters which have been satisfactorily assessed in accordance with the procedure described in Appendix F *"Determination of the acoustic performance of downlighters and recessed lighting in lightweight separating floors"* are acceptable.

6. Underfloor heating systems below ScreedBoard®



Section

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 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)

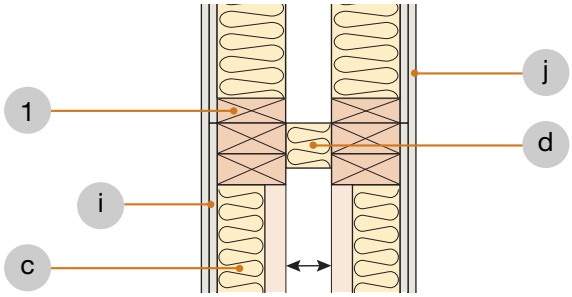
Site manager/supervisor signature . . . . . .

® UK registered trade mark no. 2291665

Appendix A2 – Specific Flanking Conditions

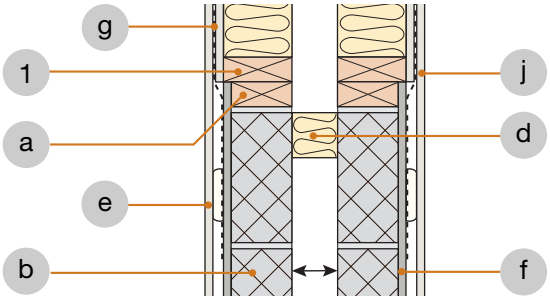
RoofSpace I-Roof™ "room-in-roof" panel system using robustdetails® timber or masonry cavity walls. Refer to Table 6 in Introduction.

1. Room-in-roof junction with timber frame cavity walls



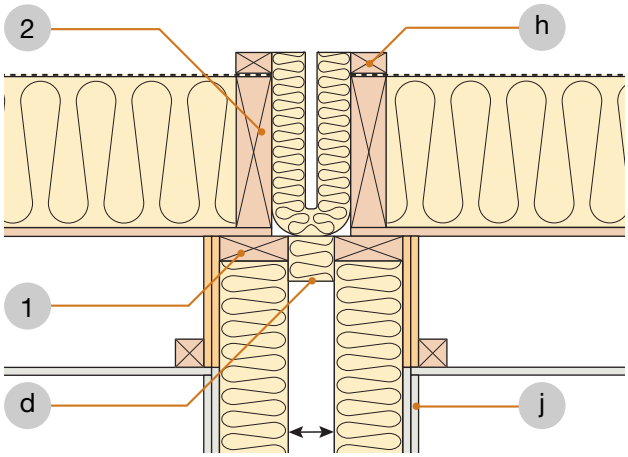
Min 50mm

2. Room-in-roof junction with masonry cavity walls



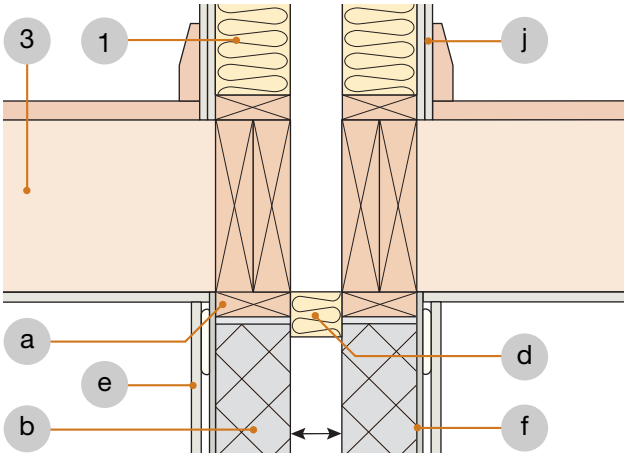
Min 75mm

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.

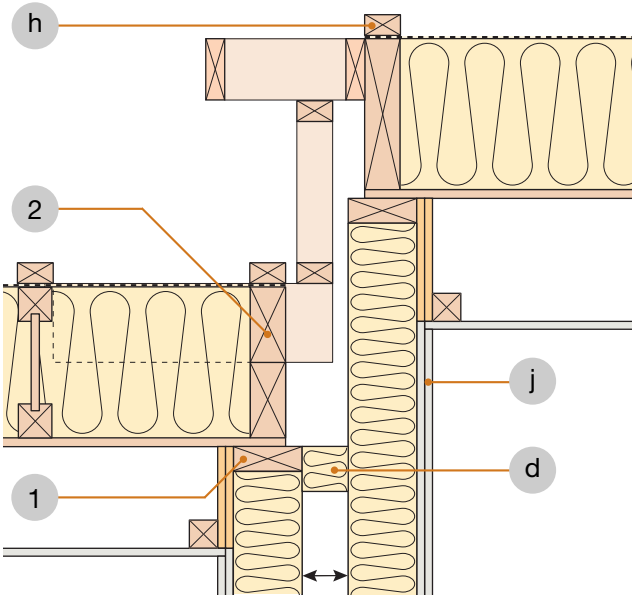
i 2 layers gypsum-based board total nominal 22 kg/m².

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

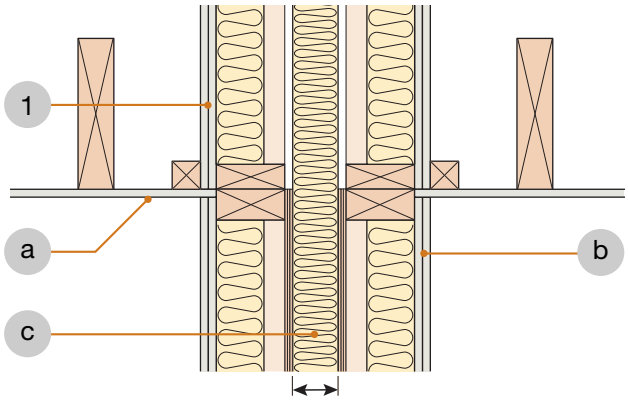
Contact details for Roofspace Solutions:

Telephone: 01789 768000
E-mail: technical@roofspacesolutions.co.uk
Web: www.roofspacesolutions.co.uk

Appendix A2 – Specific Flanking Conditions

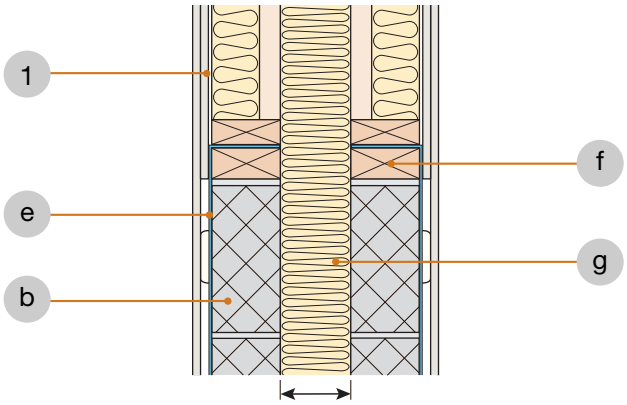
Space4 "room-in-roof" panel system using robustdetails® timber or masonry cavity walls. Refer to Table 6 in Introduction.

1. Non room-in-roof spandrel panel to timber separating wall junction



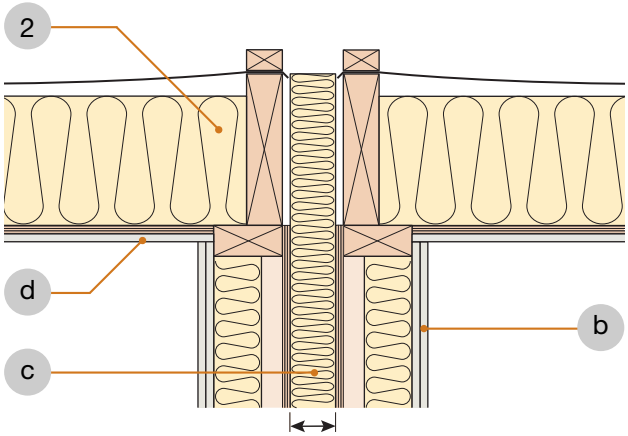
Min 50mm

2. Spandrel panel to masonry separating wall junction



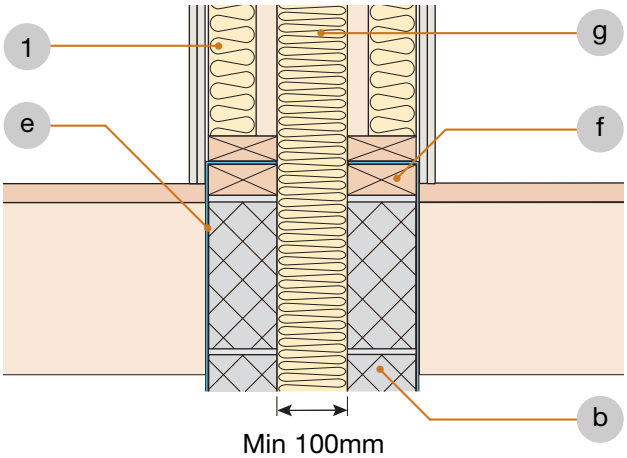
Min 100mm

3. Roof cassette to timber separating wall junction for room-in-roof



Min 50mm

4. Internal floor junction for room-in-roof



Min 100mm

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.

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.

Contact details for Space4:

Telephone: 0121 748 8383
Fax: 0121 776 7369
E-mail: technical@space4.co.uk
Web: www.space4.co.uk