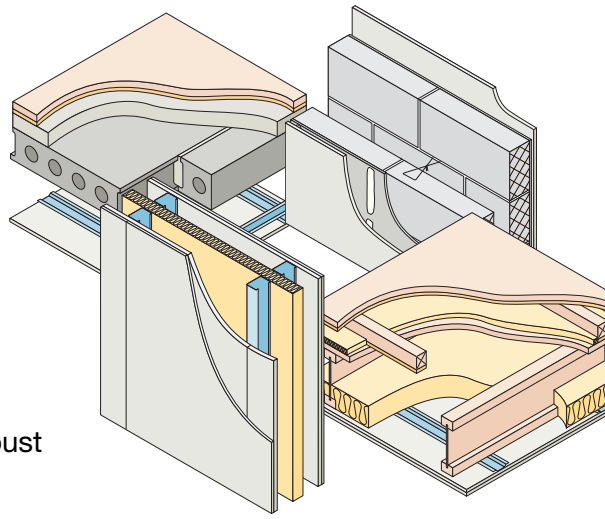
June 2018 Update Pack



Dear Colleague,

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

In this update pack, we have included a new separating wall type:
E-WM-32 uses lightweight aggregate blocks (1350-1600 kg/m^3) and 10 kg/m^2 gypsum-based board. The minimum 75mm cavity is filled with Knauf Earthwool Masonry Party Wall Slab. The testing for this wall enables it to be rated to deliver a 3 dB improvement over the Building Regulations minimum.

Other amendments include the option to use Fusion's Thermashield as an alternative inner leaf to the flanking wall of **E-FS-3**; and a reduction in the gypsum board weight required on **E-WM-17** and **E-WM-20** from 9.8 kg/m^2 to 8 kg/m^2.

Please update your April 2018, 4th Edition Handbook as follows:

1. Remove and replace **all pages** of the Introduction.
2. Remove and replace **just page 1/2** of E-WM-17.
3. Remove and replace **just page 1/2** of E-WM-20.
4. Add the new Detail E-WM-32 to the end of the Separating Wall, Masonry section.
5. Remove and replace **all pages** of E-FS-3.

Yours sincerely

John Thompson

Chief Executive,
Robust Details Limited

Changes to the fourth edition following June 2018 update

Section	Page	Amendment
Introduction		
Table 1	3	New Robust Detail E-WM-32 added.
Table 3a	6	New Robust Detail E-WM-32 added.
Table 4	8	New Robust Detail E-WM-32 added.
Table 6a	9	New Robust Detail E-WM-32 added.
Separating Wall – Masonry		
E-WM-17		
Bullet points	1	9.8 kg/m^2 gypsum-based board amended to 8 kg/m^2.
Isometric	1	9.8 kg/m^2 gypsum-based board amended to 8 kg/m^2.
E-WM-20		
Bullet points	1	9.8 kg/m^2 gypsum-based board amended to 8 kg/m^2.
Isometric	1	9.8 kg/m^2 gypsum-based board amended to 8 kg/m^2.
E-WM-32		
All	1-6	New Robust Detail added - Lightweight aggregate blockwork Knauf Earthwool Masonry Party Wall Slab (gypsum-based board) with minimum 75mm cavity.
Separating Floor – Steel		
E-FS-3		
Diagram 1	2	Fusion Thermashield added as optional inner leaf construction.
Diagram 6	5	Inner leaf insulation specification removed.

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) with 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) with 100mm minimum 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 Party Wall Wool (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 Party Wall Wool (gypsum-based board) with 100mm minimum 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

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-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-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	✔		✔	✔	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 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-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		

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 proprietary flanking constructions contained in Appendix A2

		BRIDGESTOP® system	Smartroof system	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Stewart Milne Sigma® Panel	**NYT**ROOF *RAPID FIT SYSTEM*
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	✔	✔	✔	✔			

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 proprietary 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
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 proprietary flanking constructions contained in Appendix A2

		BRIDGESTOP® system	Smartroof system	Kingspan TEK	Prestoplan PresPeak 60	Wall Cap RDA2	RoofSpace I-Roof	Space4 system
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							
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

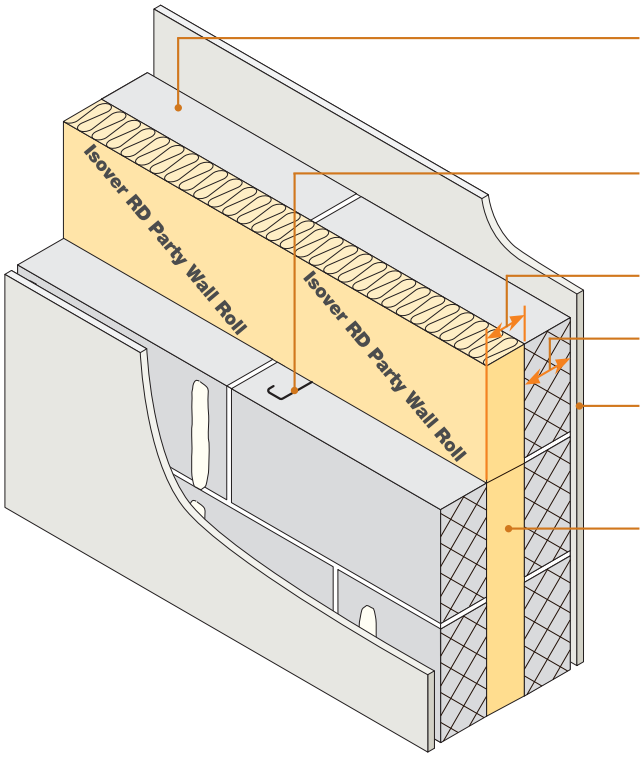
1 Applies only to loadbearing masonry constructions.

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

		British Gypsum GypFloor	Insumate insulation tray
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		
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

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



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

DO

- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid, or approved hollow or cellular blocks are used in the construction of separating and flanking walls
- Ensure all Isover RD Party Wall Rolls or Round The House Rolls are tightly butted together and half cuts are made with a clean sharp knife
- Ensure that either 'Isover RD Party Wall Roll' or 'Isover Round The House Roll' is printed on the insulation material
- Ensure RD Party Wall Roll or Round The House Roll is installed in accordance with manufacturer's recommendations
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A

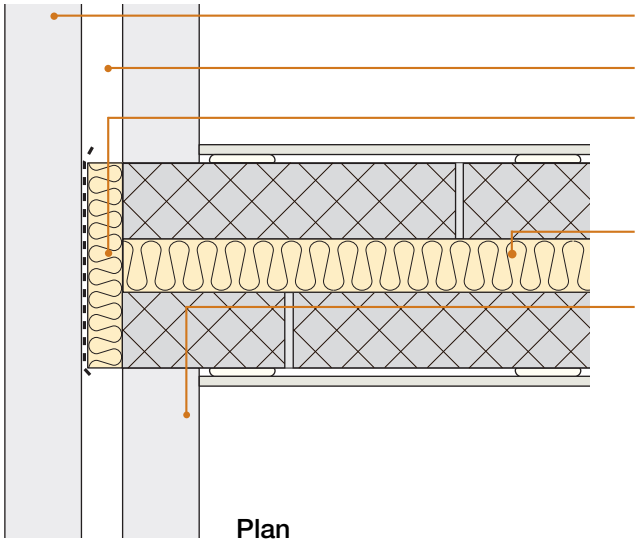
Hollow or Cellular Blocks - only for E-WM-17 100mm (min) cavity walls

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

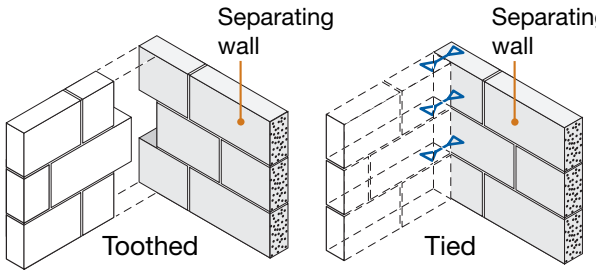
Ensure Star Performer blocks are laid with the cells open to the lower mortar bed only.

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

1. External (flanking) wall junction



Plan



Tooth or tie walls together

Masonry outer leaf

External wall cavity (min 50mm)

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

Isover RD Party Wall Roll or Isover Round The House Roll (no gaps to remain)

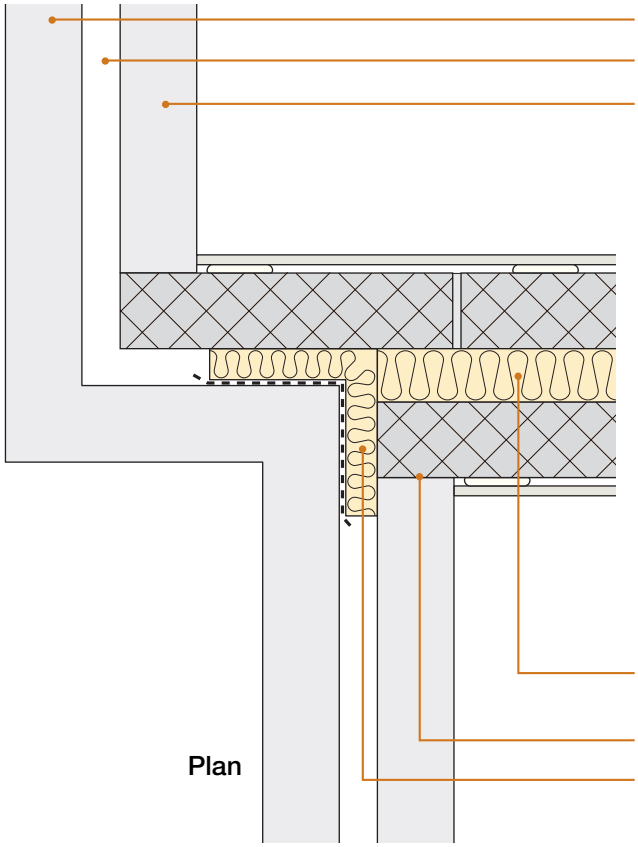
Inner leaf where there is no separating floor e.g. for houses

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

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

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

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

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

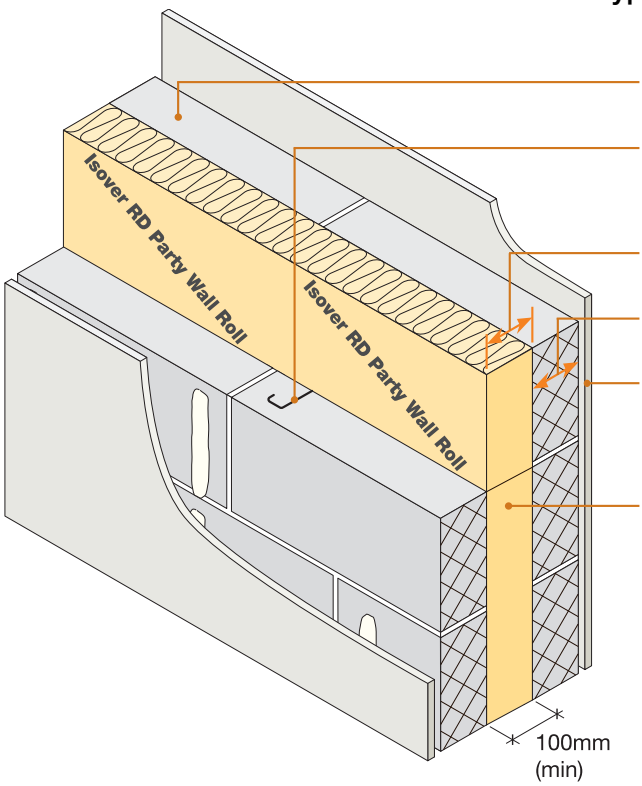
Isover RD Party Wall Roll or Isover Round The House Roll (no gaps to remain)

Tooth or tie walls together

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

Separating Wall – Cavity Masonry E-WM-20

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

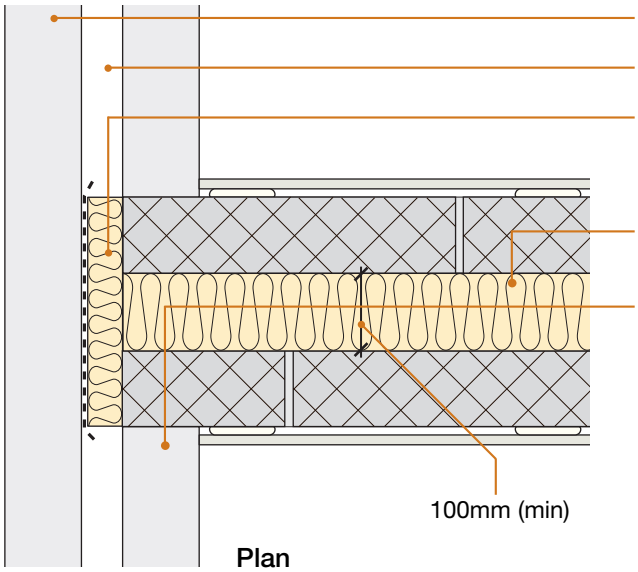


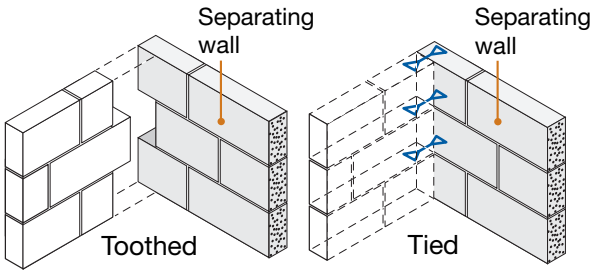
Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E ‘Tie type A’ (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 8 kg/m²) mounted on dabs
Insulation	100mm Isover RD Party Wall Roll or 100mm Isover Round The House Roll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

DO

- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all 100mm Isover RD Party Wall Rolls or 100mm Round The House Rolls are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer’s instructions
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A
- Ensure that either ‘Isover RD Party Wall Roll’ or ‘Isover Round The House Roll’ is printed on the insulation material.

1. External (flanking) wall junction





Masonry outer leaf

External wall cavity (min 50mm)

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

100mm Isover RD Party Wall Roll or 100mm Isover Round The House Roll (no gaps to remain)

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

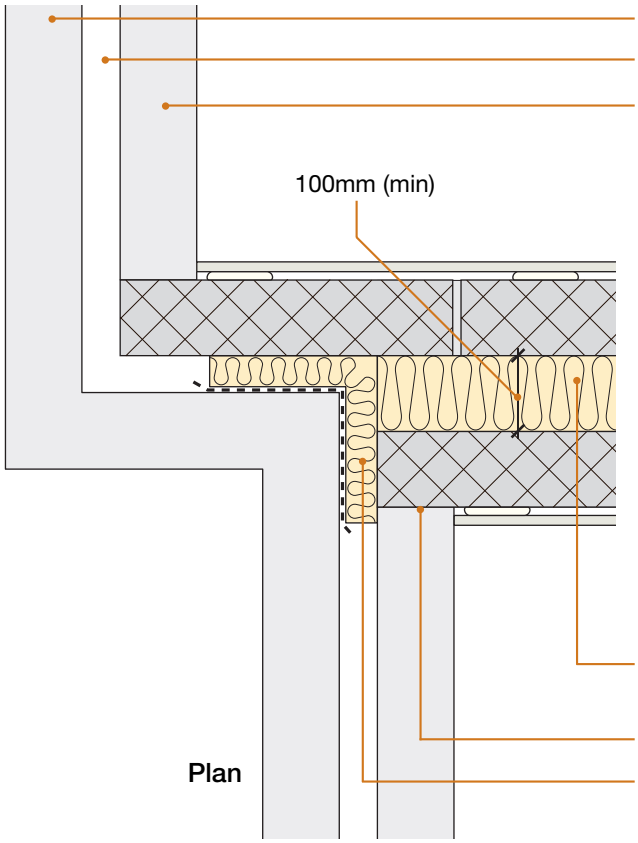
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

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

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

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

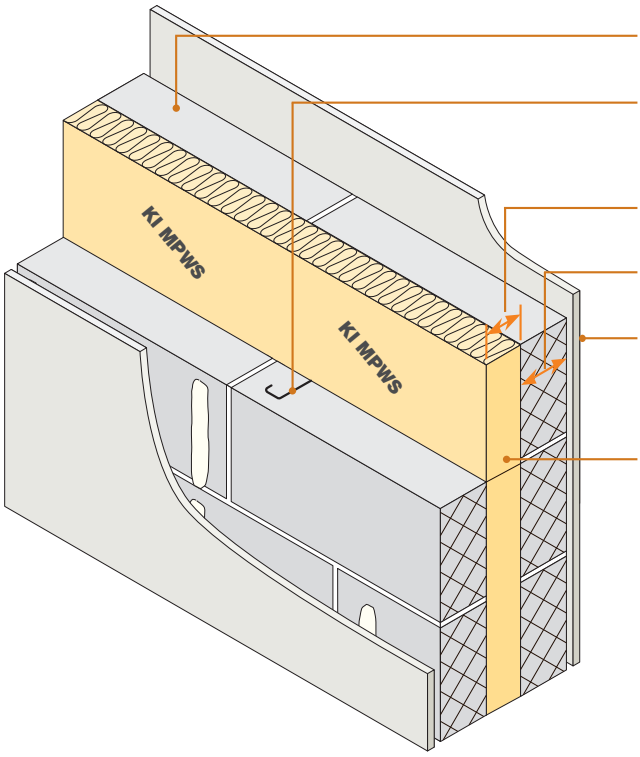
100mm Isover RD Party Wall Roll or 100mm Isover Round The House Roll (no gaps to remain)

Tooth or tie walls together

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

Separating Wall – Cavity Masonry E-WM-32

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

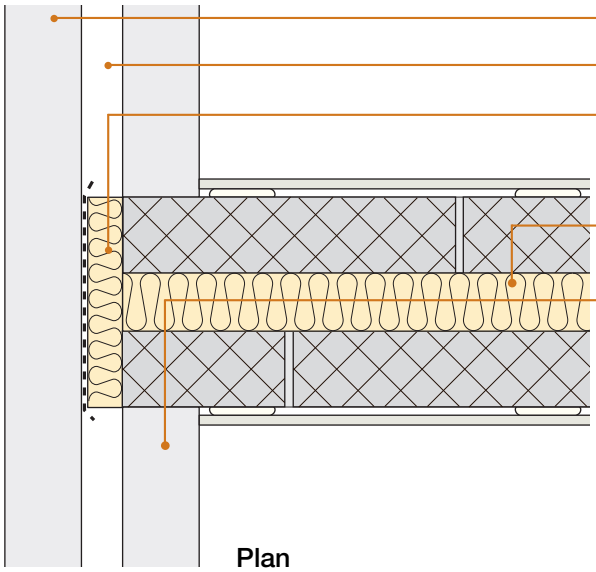


Block density	1350 to 1600 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	75mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	75mm Knauf Earthwool Masonry Party Wall Slab
External (flanking) wall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

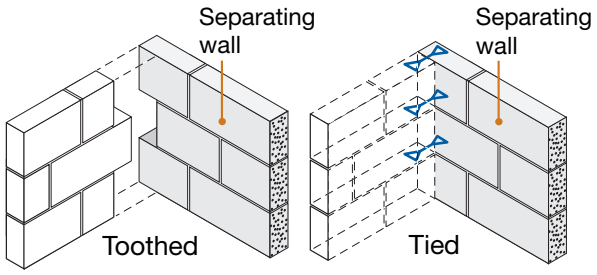
DO

- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A
- Ensure that 'KI MPWS' is printed on the insulation material

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

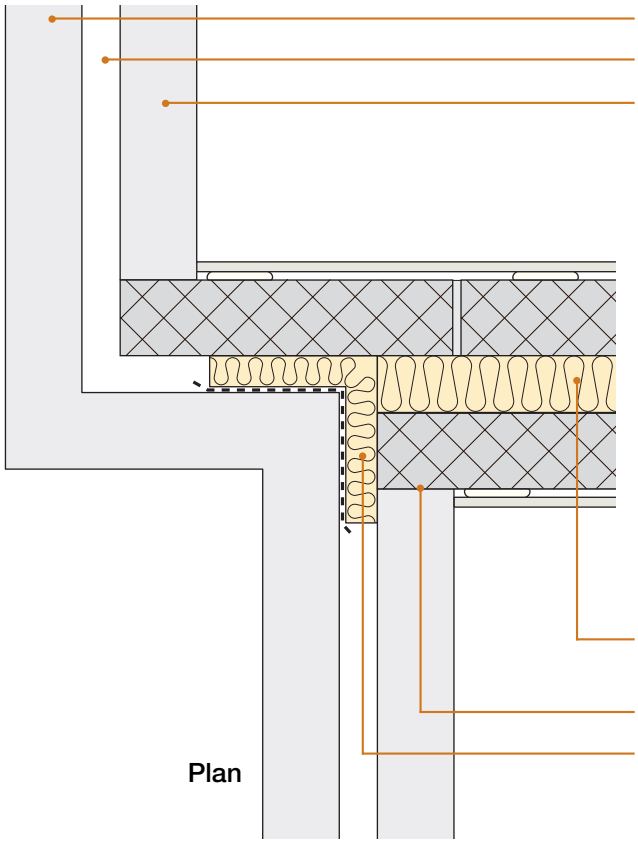
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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

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

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

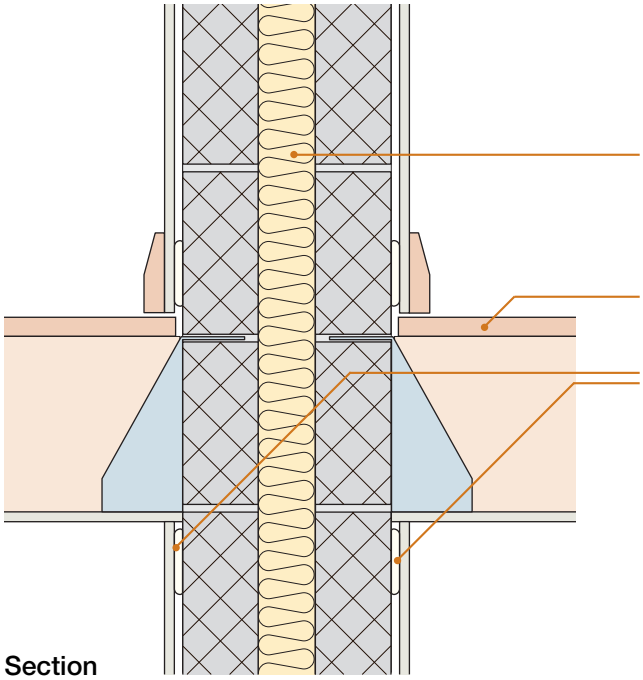
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

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

Tooth or tie walls together

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

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



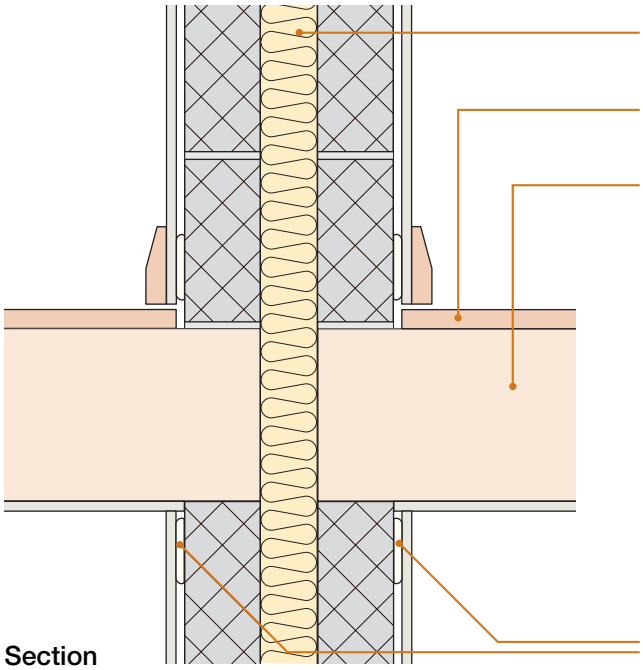
Section

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

Floor to comply with Building Regulations Requirement E2

Continuous horizontal ribbon of adhesive

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



Section

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

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

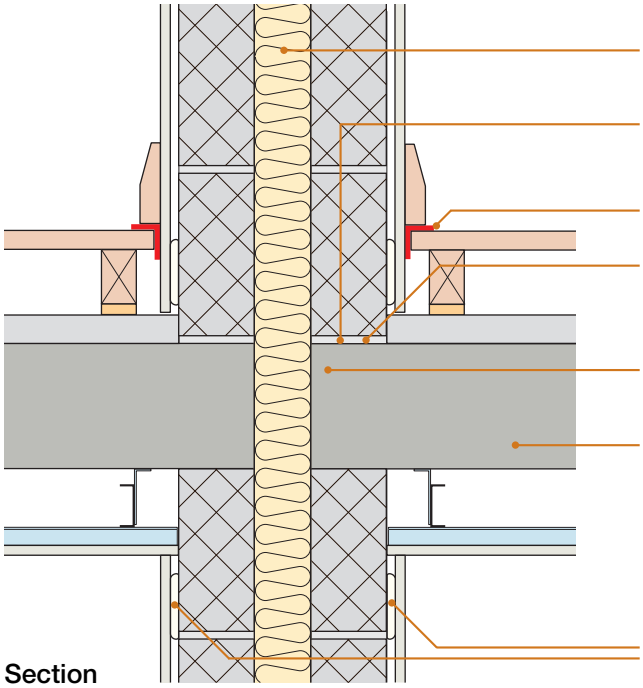
Floor construction:

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

Continuous horizontal ribbon of adhesive

Sketch shows timber joists built in

5. Separating floor junction



Section

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

Separating wall must not be continuous between storeys

5mm (min) resilient flanking strip

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

Separating floor must not be continuous between dwellings

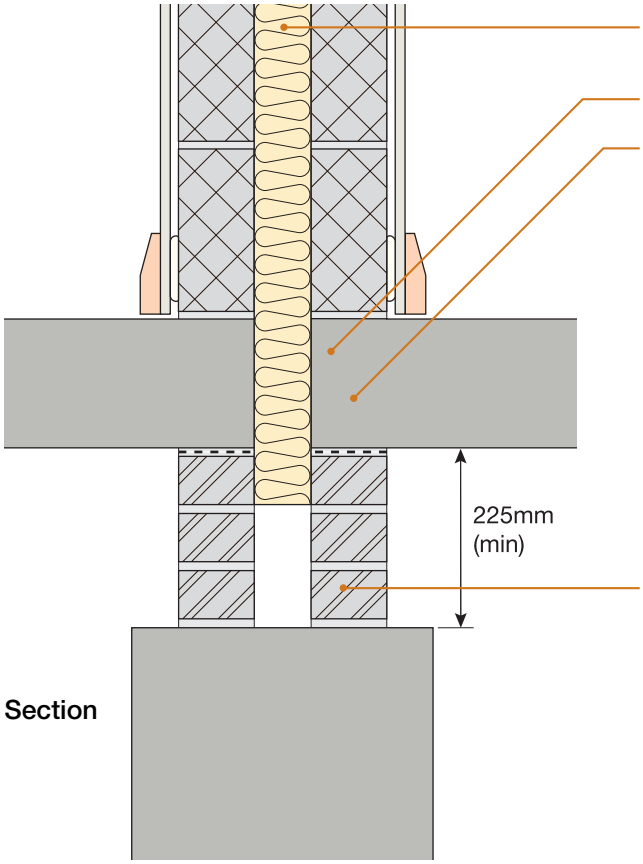
Separating floor:

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

Continuous horizontal ribbon of adhesive

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

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



Section

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

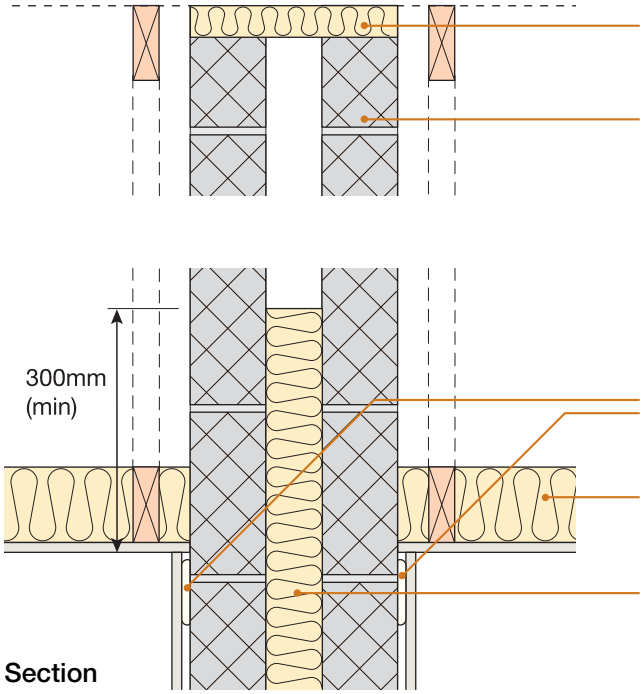
Ground floor not continuous between dwellings

Ground floor construction:

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

Cavity separating wall continuous to foundation, cavity fill may be provided below minimum clear cavity indicated. 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

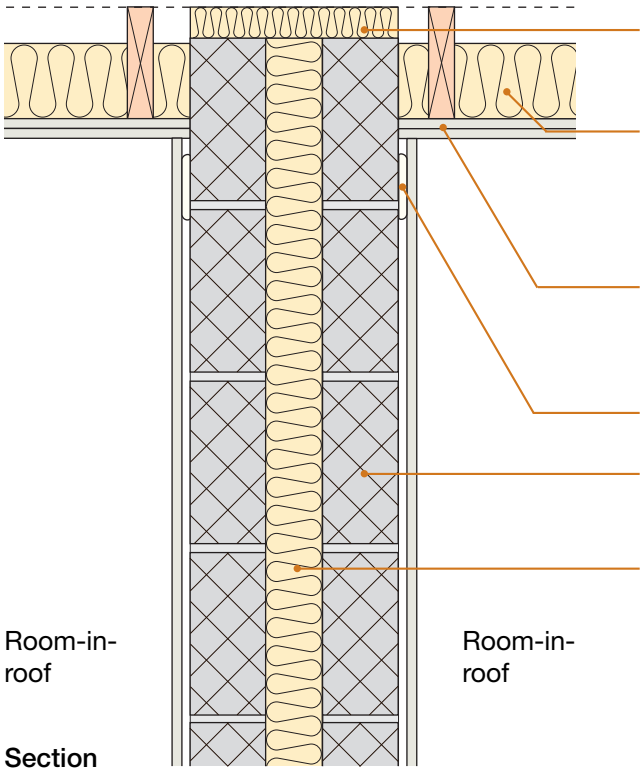
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

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

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



Section

Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

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

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

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 75mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3)			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties to Approved Document E “Tie type A” (see Appendix A)?			
6.	Are cavity stops installed where specified in the Robust Detail?			
7.	Are joints fully filled?			
8.	Is 75mm Knauf Earthwool Masonry Party Wall Slab used?			
9.	Are insulation sections tightly butted together?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
13.	Is separating wall satisfactorily complete?			

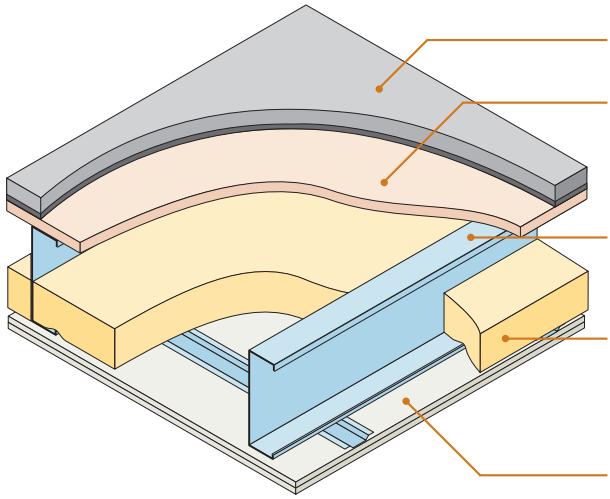
Contact details for technical assistance from Knauf Insulation Ltd, manufacturer of Earthwool Masonry Party Wall Slab:

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

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Cellecta ScreedBoard® 28 on timber sub-floor ■
Use with lightweight metal frame walls only ■



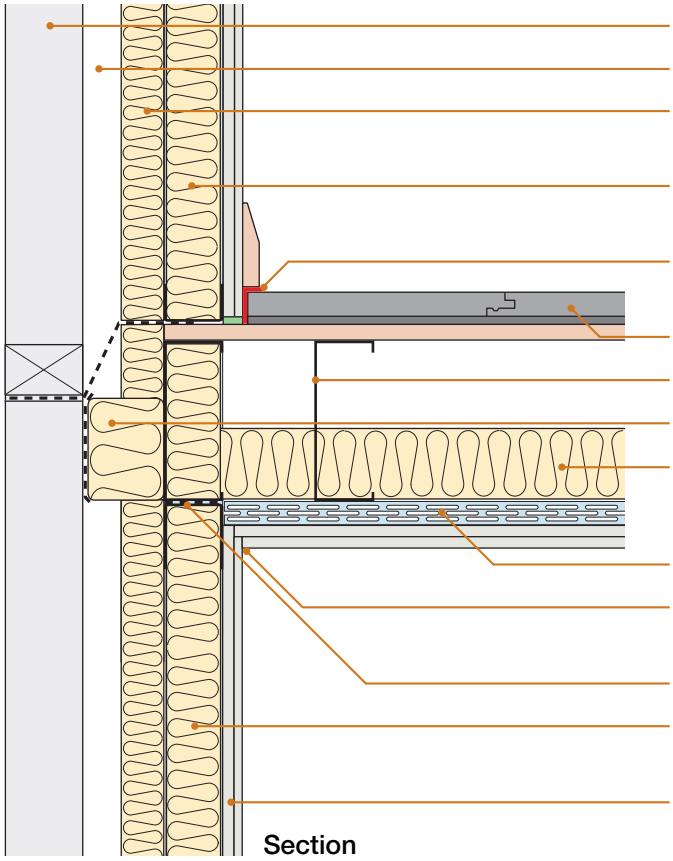
Floating floor	Cellecta ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density 600 kg/m³ (min)
Joists	254mm (min) deep metal joists
Absorbent material	100mm (min) mineral wool quilt insulation (10-36 kg/m³) between joists
Ceiling	See section 4 for suitable ceiling treatment

DO

- Lay quilt (min 100mm thick) between all joists, including doubled up joists, ensuring no gaps remain
- Apply Cellecta SB adhesive to all ScreedBoard® 28 decking joints
- Install YELO*fon*® FS50 flanking angle around the perimeter of the ScreedBoard® 28 to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure ceiling treatment is fixed correctly (see section 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

E-FS-3 Separating Floor – Metal Joists

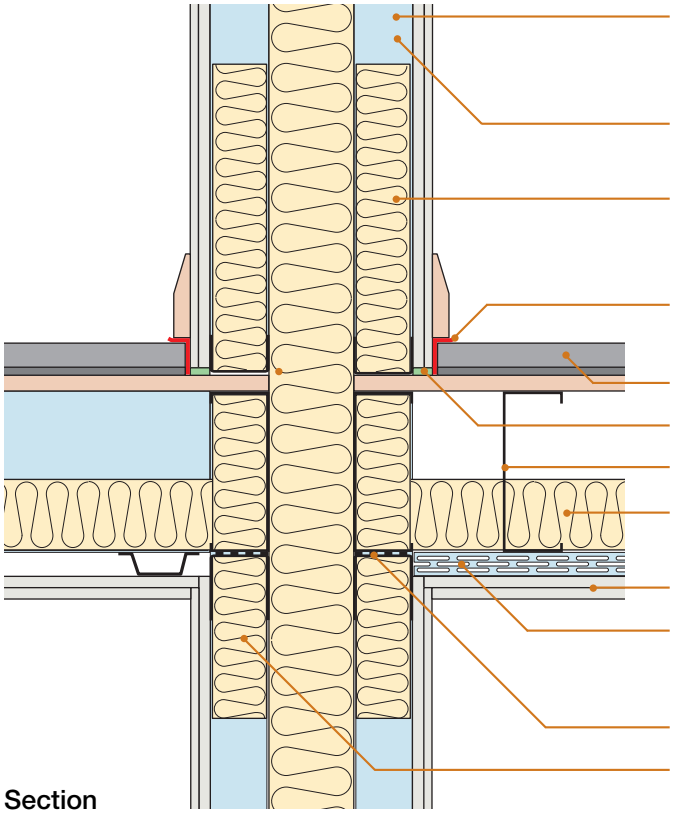
1. External (flanking) wall junction – masonry outer leaf



Section

- Masonry outer leaf (min 100mm thick)
- 50mm (min) cavity
- 55mm (min) rigid insulation board (not required if using Fusion Thermashield)
- Mineral wool insulation batts, 33-60 kg/m³ between studs;or Fusion Thermashield
- YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- 100mm mineral wool insulation quilt, 10-36 kg/m³ (min)
- Cellecta HP30 resilient bar
- Seal all perimeter joints with tape or caulk with sealant
- 2mm resilient strip on top of wall panels
- Mineral wool insulation batts, 33-60 kg/m³, between studs
- Two layers gypsum-based board fixed to external steel frame nominal 25 kg/m² combined

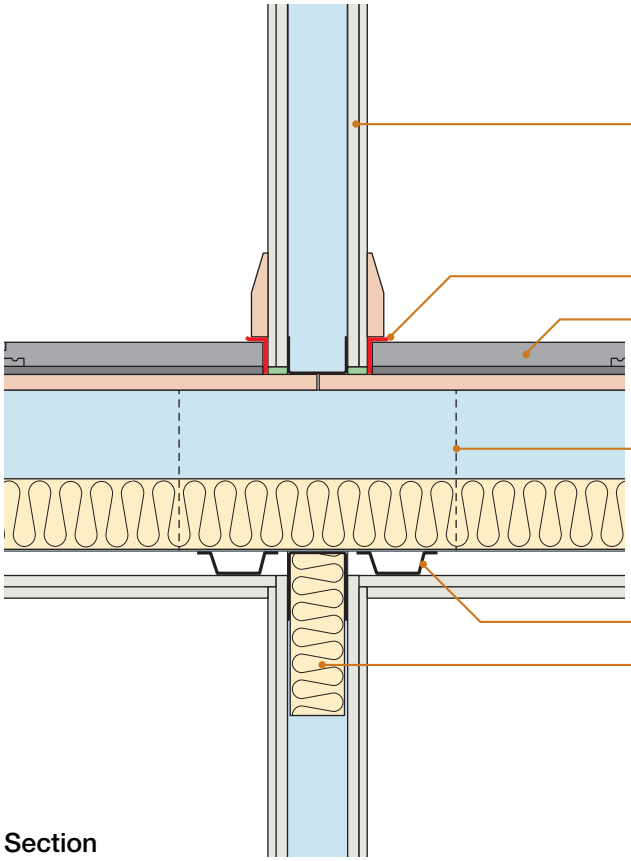
2. Separating wall junction



Section

- If using robustdetails® for wall - refer to Table 3c in Introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) above bottom rail of steel frame
- YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Flexible acoustic sealant below plasterboard
- 254mm (min) deep metal joists
- 100mm mineral wool insulation quilt, 10-36 kg/m³ (min)
- Ceiling treatment (see section 4)
- Resilient bar below joists at 600mm (max) centres fixed through joist flange to manufacturer's detail
- 2mm resilient strip on top of wall panels
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level

3. Internal wall junction



Section

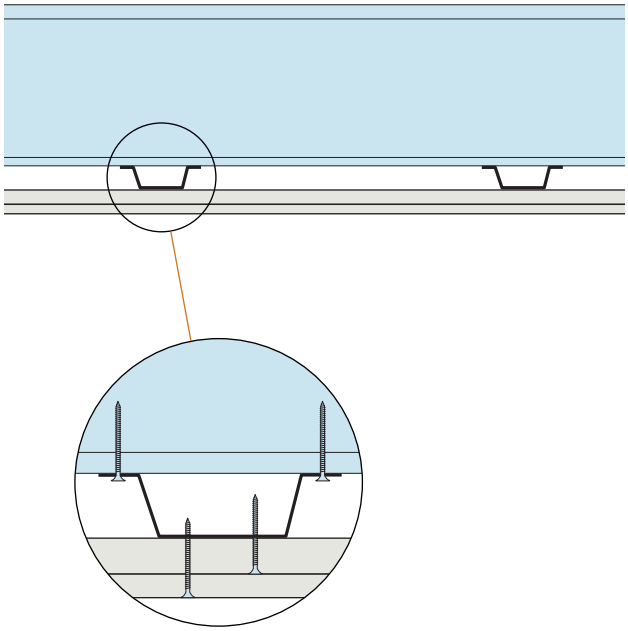
4. Ceiling treatment for E-FS-3

Metal floor ceiling treatment must be as shown below. All joints to outer layers of ceiling must be sealed with tape or caulked with sealant.

The maximum load on resilient bars should not exceed 50 kg/m^2.

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 lightweight separating floors*" are acceptable.

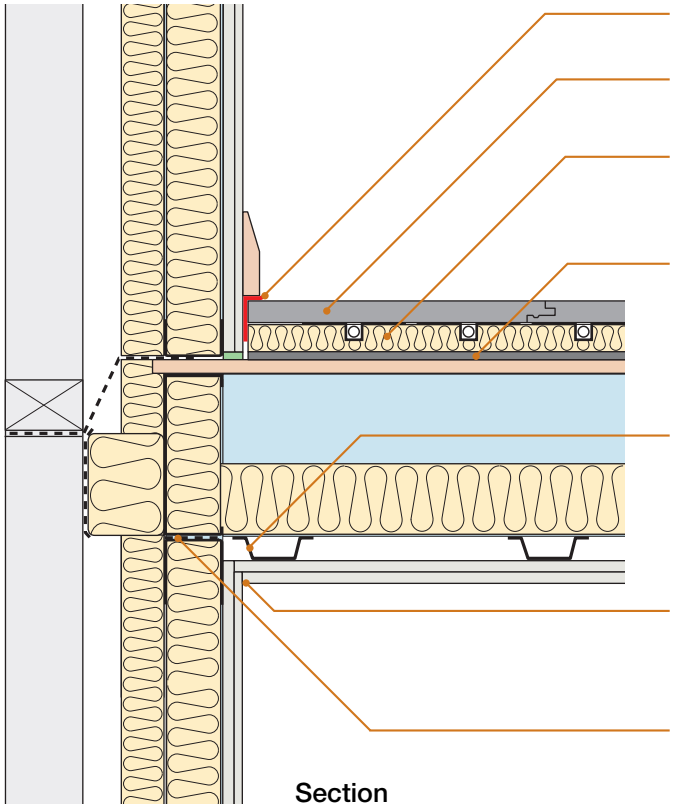
CEILING BOARD FIXINGS MUST NOT PENETRATE OR TOUCH JOISTS

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

Ceiling treatment CT1

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

5. Underfloor heating systems below ScreedBoard®



YELO*fon*® FS50 flanking angle

20mm ScreedBoard® 20

25mm (min) extruded or expanded polystyrene panel with underfloor heating pipes

8mm FIBRE*fon*® resilient layer

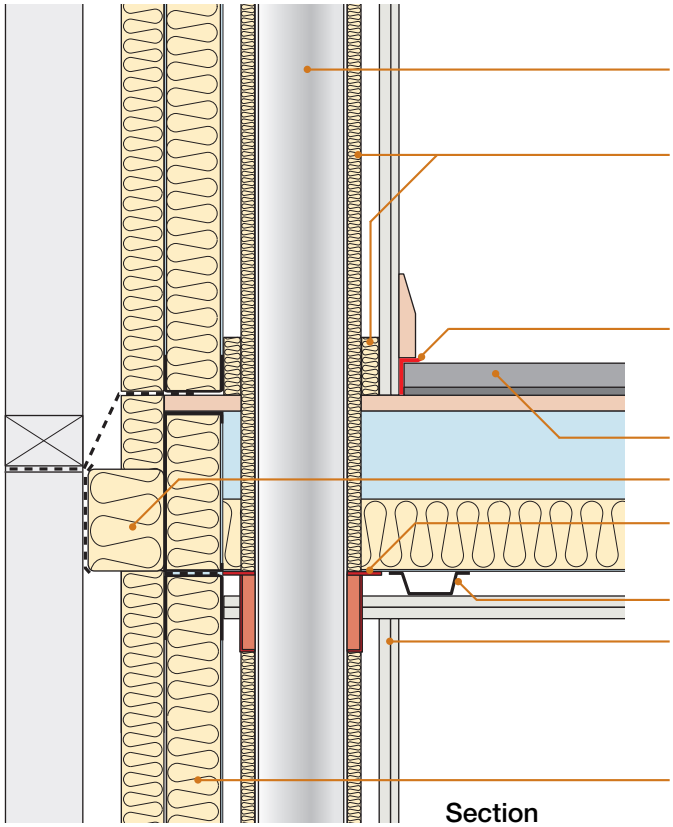
Cellecta HP30 resilient bar

Seal all perimeter joints with tape or caulk with sealant

2mm resilient strip on top of wall panels

Section

6. Services – pipes through separating floor



Service pipe

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

YELO*fon*® FS50 flanking angle installed at perimeter and turned under skirting board

ScreedBoard® 28

Close cavity with a cavity stop (see Appendix A)

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

Cellecta HP30 resilient bar

2 layers of gypsum-based board nominal 16 kg/m^2 combined fixed to 45mm metal frame stud forming duct. Joints to be staggered and taped

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

Section

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are metal joists minimum 254mm deep?			
2.	Is sub-deck minimum 18mm, 600 kg/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 Cellecta HP30 30mm deep metal resilient ceiling bars fitted at right angles to the joists?			
7.	Has quilt (min 100mm thick) been fitted between the joists?			
8.	Has ceiling system been fitted in accordance with the manufacturer's instructions?			
9.	Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?			
10.	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: 08456 717174 **Fax:** 08456 717172 **E-mail:** technical@cellecta.co.uk

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

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