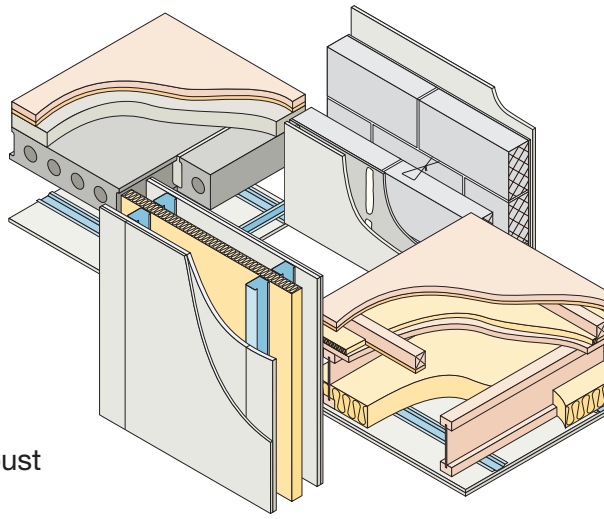
June 2016 Update Pack



Dear Colleague,

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

The popularity and take-up of the online (or electronic) Handbook continues to increase – so much so, that it is no longer viable for us to produce and distribute the hardcopy updates, so this pack will be the last. However, for those still wishing to use the physical Handbook, we will be publishing a free PDF version of all future update packs on our website for you to print off and maintain your up-to-date Handbook. Consequently, the Update Subscription service will also cease at the end of this subscription year (31 August 2016).

In this update pack, we are pleased to include a further new wall type, **E-WM-29**. This uses Porotherm clay blocks with a minimum 75mm fully-filled cavity; Ecoparge and gypsum board finish. This wall has demonstrated consistent performance at 3 dB improvement on Building Regulations. Please see the ratings tables on our website.

Additionally, E-WT-1 is now approved to include full-fill cavity insulation, which means the zero U-value can be achieved without having to apply sheathing that is not structurally necessary. However, this has resulted in the wall now receiving 1 credit (instead of 3) should any new plots be constructed in this way and registered for the Code for Sustainable Homes.

And on a similar theme, URSA Cavity Batt 35 has successfully completed assessment, and can now be used as an alternative cavity insulation for E-WM-22.

Please update your April 2016, 4th Edition Handbook as follows:

1. Remove and replace all pages of the Introduction.
2. Remove and replace all pages of E-WM-22.
3. Insert the new Robust Detail E-WM-29 to the end of the Separating Walls, Masonry section.
4. Remove and replace just the first leaf (pages 1 & 2) of E-WT-1.
5. Remove and replace just the first leaf (pages 1 & 2) of E-FT-6.

Yours sincerely

John Tebbit

Chief Executive,
Robust Details Limited

Changes to the fourth edition following June 2016 update

Section	Page	Amendment
Introduction		
Table 1	3	New Robust Detail separating wall E-WM-29 added.
Table 3a	6	New Robust Detail separating wall E-WM-29 added.
Table 4	8	New Robust Detail separating wall E-WM-29 added.
Table 6a	9	New Robust Detail separating wall E-WM-29 added.
Separating Wall – Masonry		
E-WM-22		
Second bullet point	1	URSA Cavity Batt 35 added as an option.
Diagrams 1-8	2-5	URSA Cavity Batt 35 added as an option.
Check point 8	6	URSA Cavity Batt 35 added as an option.
E-WM-29		
All	1-6	New Robust Detail separating wall added – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 75mm minimum cavity.
Separating Wall – Timber		
E-WT-1		
First bullet point	1	“Without sheathing” changed to “Partial or no sheathing”.
Cavity insulation	1	Optional cavity insulation specification added.
Separating Floor – Timber		
E-FT-6		
Joist type box	1	This previously referenced E-FT-3. Now corrected to E-FT-6.

Introduction

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

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

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

www.robustdetails.com

or from:

Robust Details Limited
Block E
Bletchley Park Science and Innovation Centre
Milton Keynes
Buckinghamshire
MK3 6EB

Telephone: 03300 882140 - Technical
03300 882141 - General
Fax: 01908 363433

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 (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

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

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-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	✔		✔	✔	F	✔
E-WM-6 E-WM-10 E-WM-13	E-WM-15 E-WM-23 E-WM-24	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/m^3).

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

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

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

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

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

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

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

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

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

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

Key for Table 3b and Table 3c

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

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

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

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

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

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

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

Loadbearing masonry

E-WM-1	F1	E-WM-21	F1
E-WM-2	F1	E-WM-22	F1
E-WM-3	F1	E-WM-23	F1
E-WM-4	F1	E-WM-24	F1
E-WM-5	F1	E-WM-25	F1
E-WM-6	F1	E-WM-26	F1
E-WM-8	F1	E-WM-27	F1
E-WM-10	F1	E-WM-28	F1
E-WM-11	F1	E-WM-29	F1
E-WM-12	F1		
E-WM-13	F1		
E-WM-14	F1		
E-WM-15	F1		
E-WM-16	F1		
E-WM-17	F1		
E-WM-18	F1		
E-WM-20	F1		

Timber frame

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

Light steel frame

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

Key

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

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

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

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

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

Loadbearing masonry

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

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	Kingspan TEK	Prestoplan PresPeak 60	Wall Cap RDA2	RoofSpace I-Roof	Space4 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					✔		

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

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

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
Masonry 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					✔		
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.

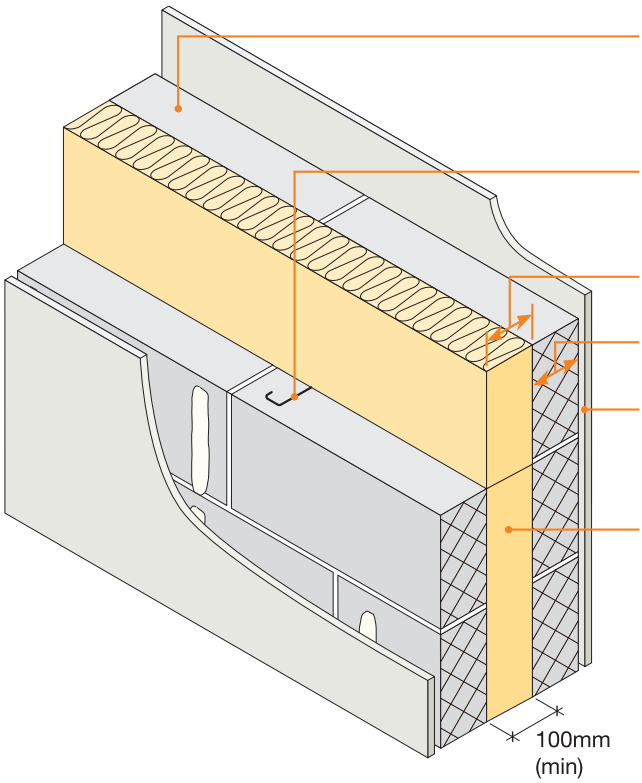
Table 7 – Robust Detail separating floors which can be used together with alternative products contained in Appendix A3

		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		
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-22

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

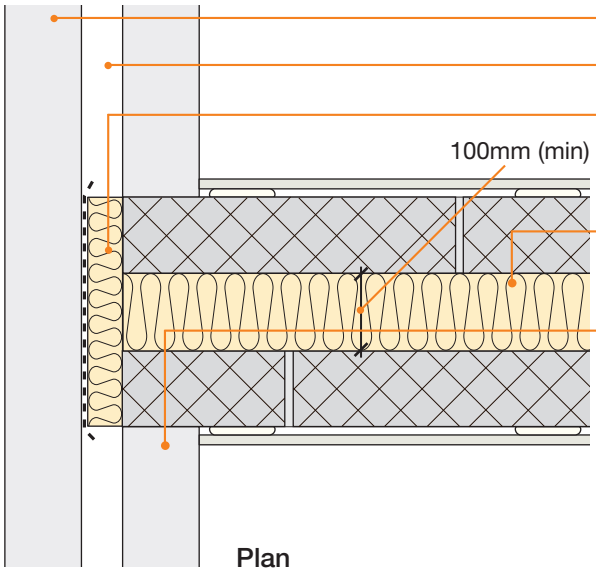


Block density	1350 to 1600 kg/m³ or Plasmor Aglite Ultima 1050 kg/m³
Wall ties	Approved Document E 'Tie type A' (see Appendix A)
Cavity width	100mm (min)
Block thickness	100mm (min), each leaf
Wall finish	Gypsum-based board (nominal 10 kg/m²) mounted on dabs
Insulation	100mm Knauf Earthwool Masonry Party Wall Slab or 100mm Superglass Party Wall Roll or URSA Cavity Batt 35
External (flanking) wall	Masonry (both leaves) with 50mm (min) cavity – clear, fully filled or partially filled with insulation

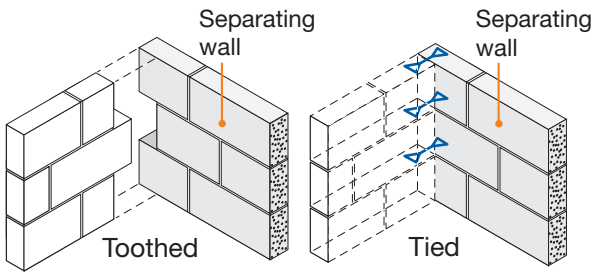
DO

- 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 Knauf Earthwool Masonry Party Wall Slabs or 100mm Superglass Party Wall Rolls or URSA Cavity Batt 35 slabs are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions
- Keep any chases for services to a minimum and fill well with mortar. Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A
- Ensure that either 'KI MPWS' is printed on the insulation material where 100mm Knauf Earthwool Masonry Party Wall Slab is specified; or 'Superglass Party Wall Roll' is printed on the insulation material where this is specified. Where URSA Cavity Batt 35 is used ensure 'URSA Cavity Batt 35/Party Wall Batt' is printed on the insulation material, or it is branded with the URSA logo.

1. External (flanking) wall junction



Plan



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

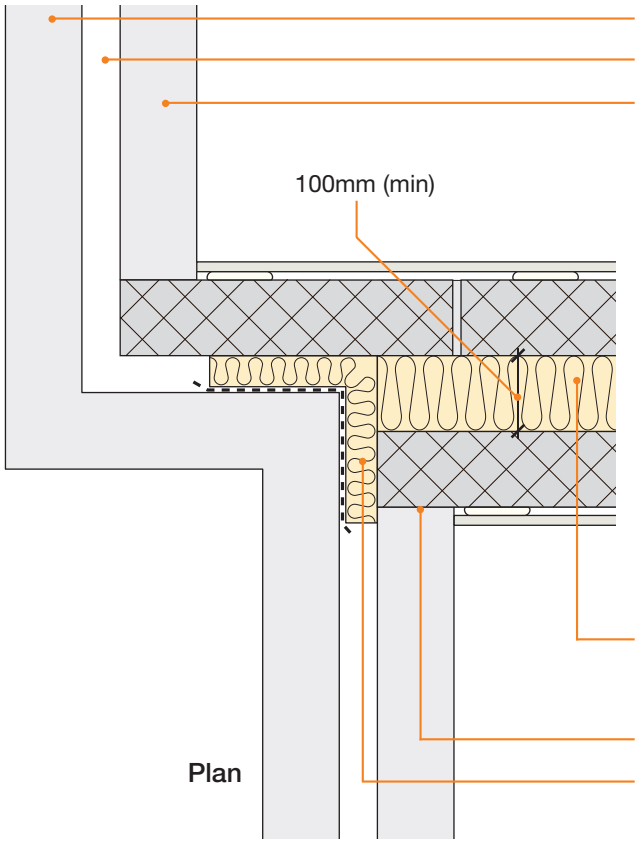
- 100mm (min) concrete block (1350 kg/m³ to 1600 kg/m³) or aircrete block (450 kg/m³ to 800 kg/m³) or Plasmor Aglite Ultima (1050 kg/m³)
- internal finish – 13mm plaster or nominal 8 kg/m² gypsum-based board

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
- if using floor requiring pre-completion testing, seek specialist advice

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

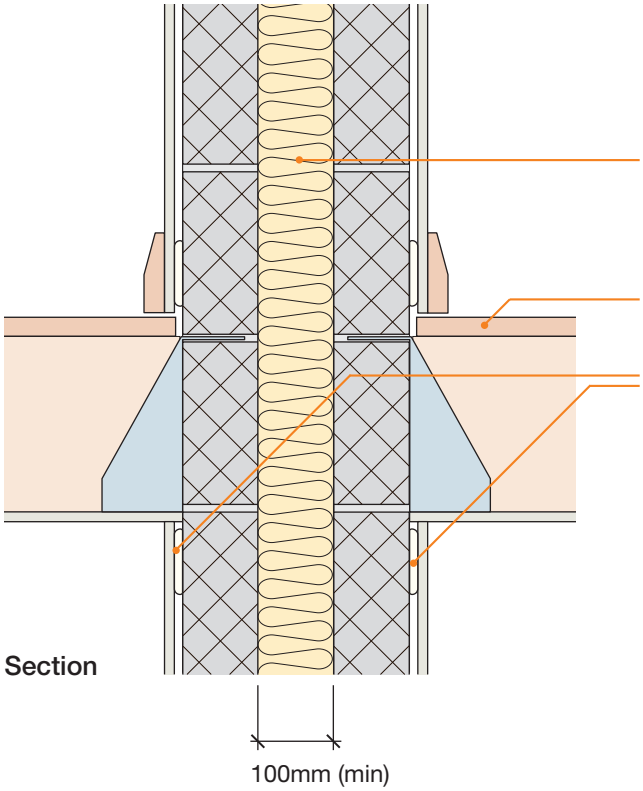
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction or use Plasmor Aglite Ultima
- if using floor requiring pre-completion testing, seek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

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

Tooth or tie walls together

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

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

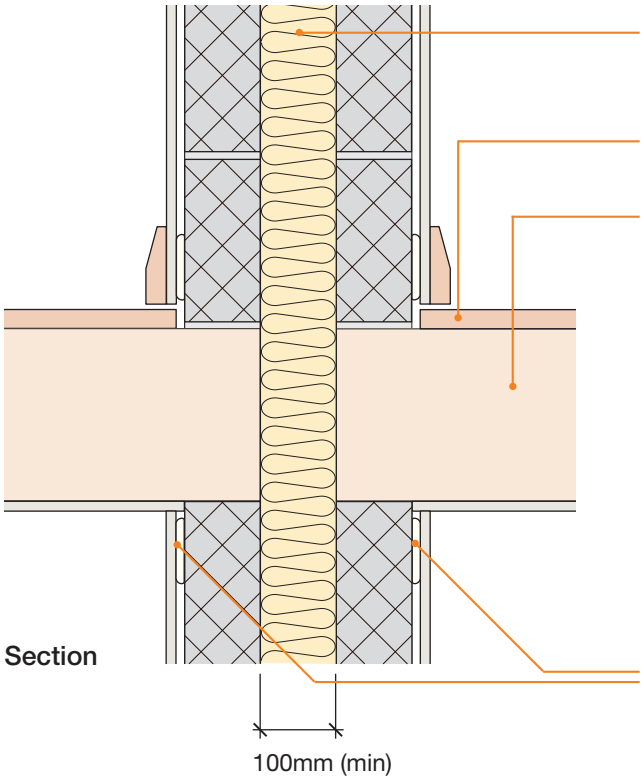


100mm Knauf Earthwool Masonry Party Wall Slab or 100mm Superglass Party Wall Roll or URSA Cavity Batt 35 (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Continuous horizontal ribbon of adhesive

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



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

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

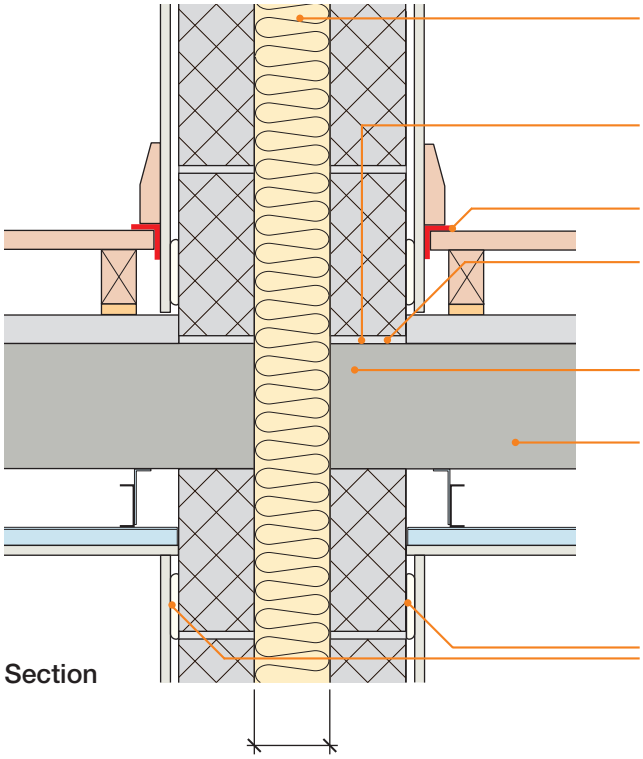
Floor construction:

- 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



100mm Knauf Earthwool Masonry Party Wall Slab or 100mm Superglass Party Wall Roll or URSA Cavity Batt 35 (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

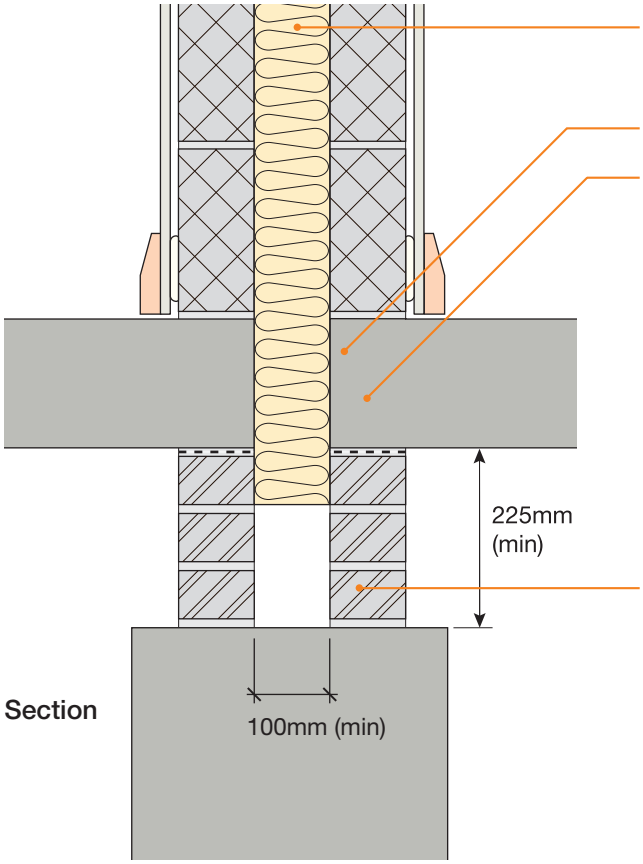
Separating floor must not be continuous between dwellings

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



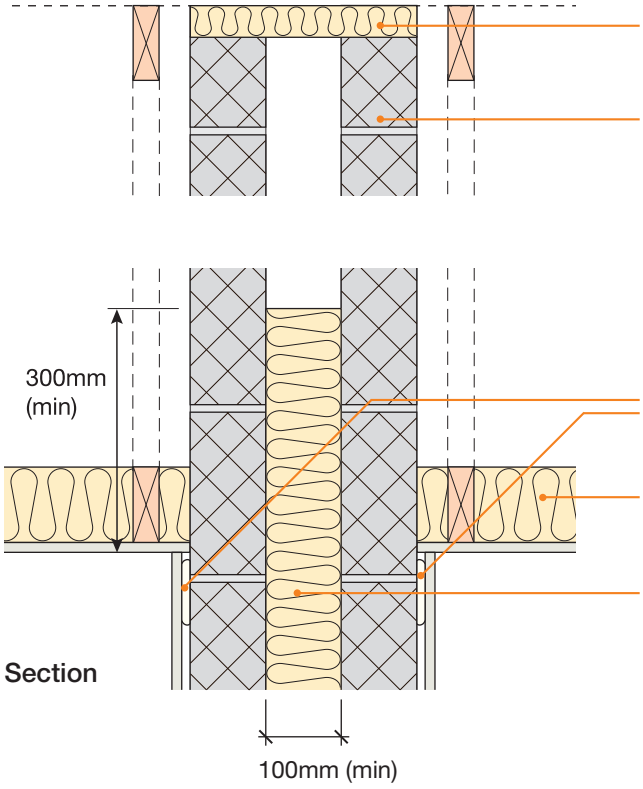
100mm Knauf Earthwool Masonry Party Wall Slab or 100mm Superglass Party Wall Roll or URSA Cavity Batt 35 (no gaps to remain)

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

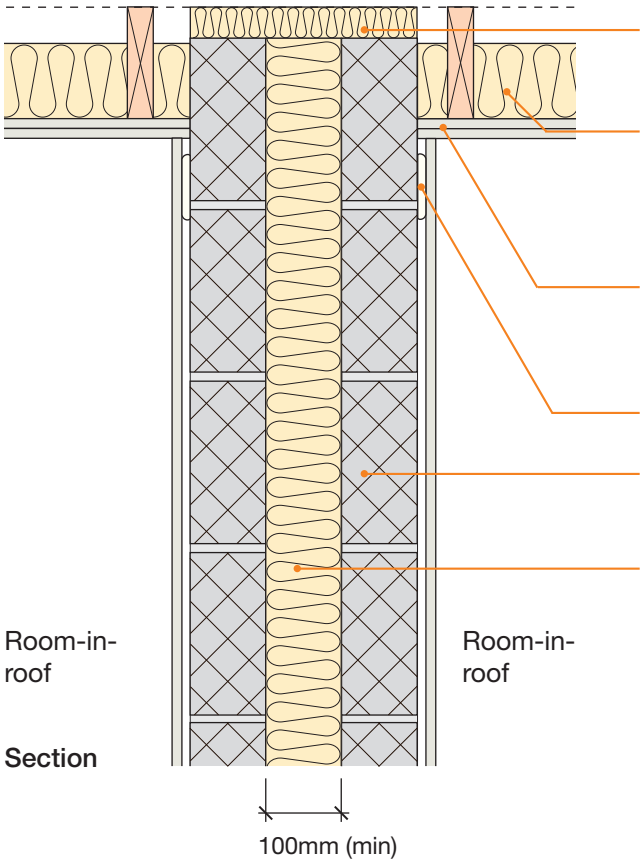
External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf

Continuous horizontal ribbon of adhesive

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

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

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



Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

Cavity masonry separating wall continuous to underside of roof covering

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

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

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?			
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m^3) or Plasmor Aglite Ultima (1050 kg/m^3)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)?			
6.	Are cavity stops installed where specified in the Robust Detail?			
7.	Are joints fully filled?			
8.	Is 100mm Knauf Earthwool Masonry Party Wall Slab or 100mm Superglass Party Wall Roll or URSA Cavity Batt 35 used?			
9.	Are insulation sections tightly butted together?			
10.	Are voids around floor joists, chases, etc. fully filled/sealed?			
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?			
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?			
13.	Is separating wall satisfactorily complete?			

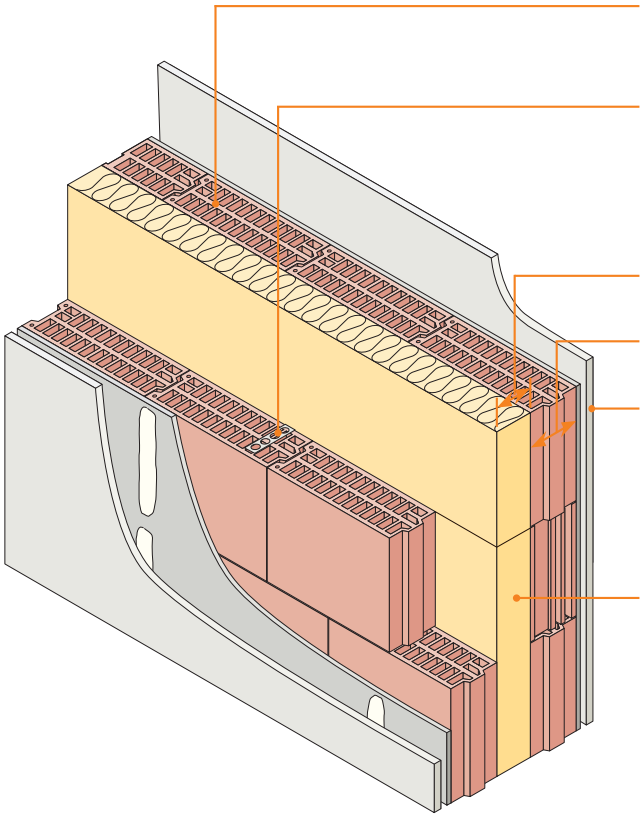
Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Cavity Masonry

E-WM-29

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



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

IMPORTANT

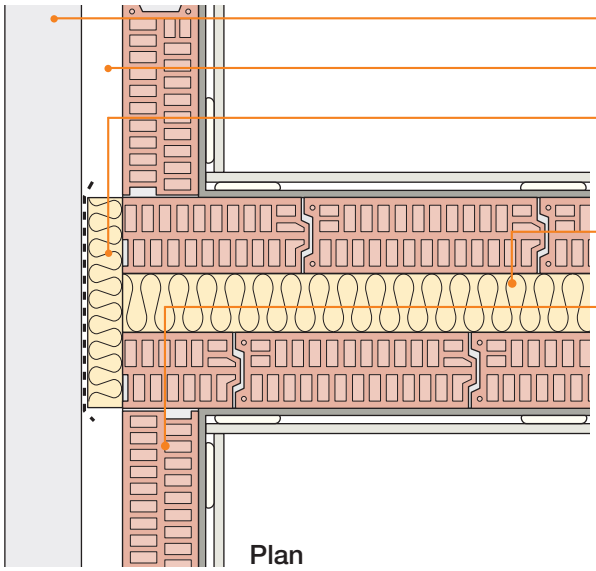
Only the following wall ties may be used in this separating wall:

- Ancon Building Products CCBA 'Type A'

DO

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

1. External (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

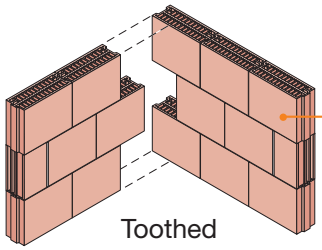
Close external wall cavity with a flexible cavity stop. (Optional if external wall cavity is fully filled with built in mineral wool insulation)

Mineral wool insulation (no gaps to remain)

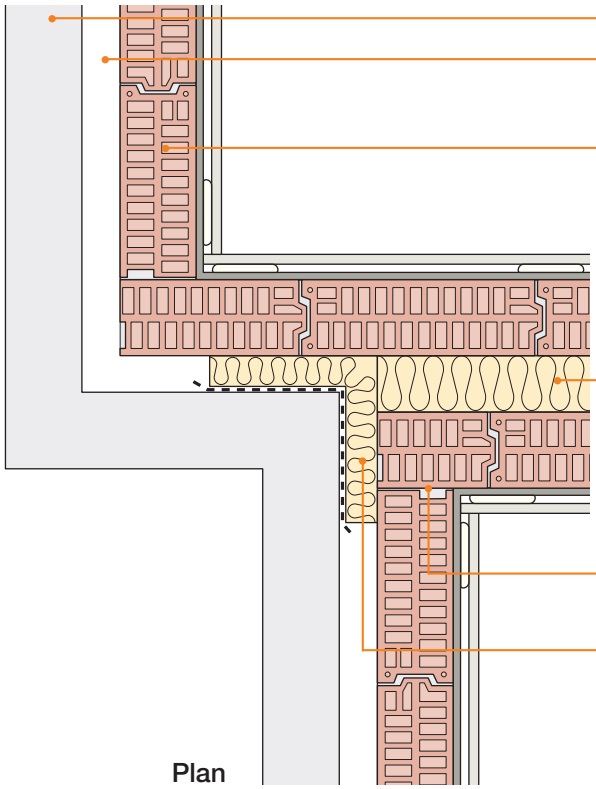
Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m^2 gypsum board on dabs

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

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



2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

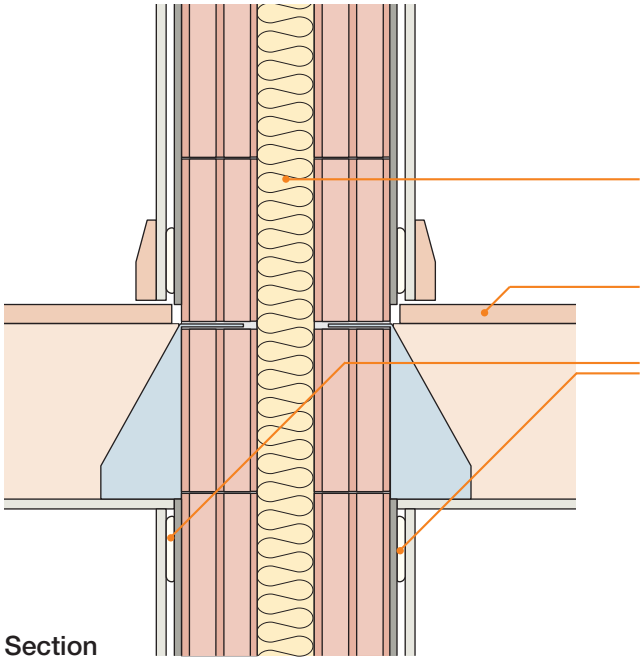
Inner leaf: minimum 100mm Porotherm perforated clay blocks with Ecoparge (nominal 4mm, minimum 3mm) and nominal 8 kg/m^2 gypsum board on dabs

Mineral wool insulation (no gaps to remain)

Tooth walls together

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

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



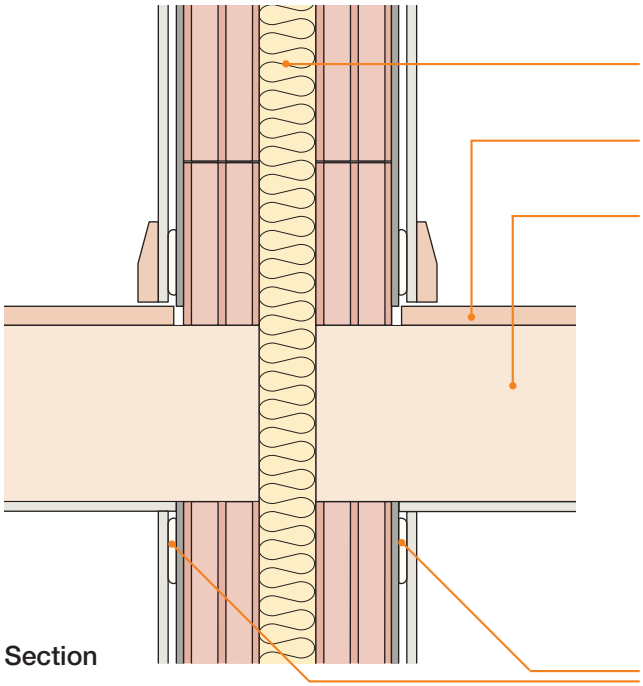
Section

Mineral wool insulation (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Continuous horizontal ribbon of adhesive

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



Section

Mineral wool insulation (no gaps to remain)

Floor to comply with Building Regulations Requirement E2

Internal floors should not be continuous between dwellings

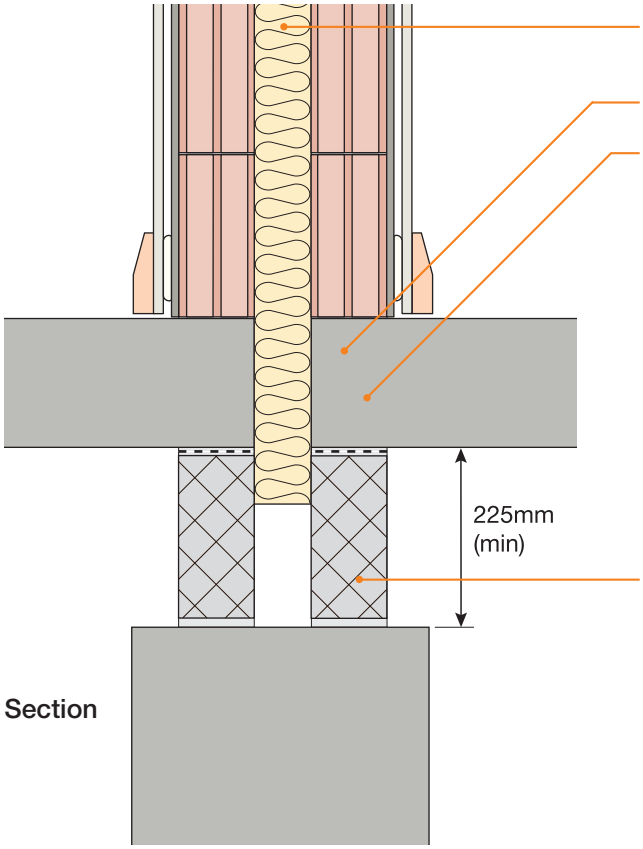
Floor construction:

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

Continuous horizontal ribbon of adhesive

Sketch shows timber joists built in

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



Mineral wool insulation (no gaps to remain)

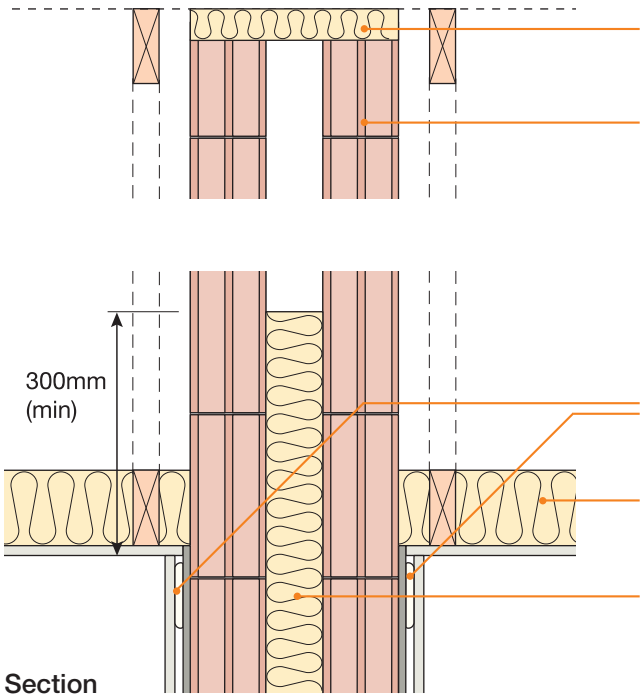
Ground floor not continuous between dwellings

Ground floor construction:

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

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

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



Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

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

Mineral wool insulation (no gaps to remain)

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

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

Contact details for technical assistance from Wienerberger, supplier of Porotherm products:

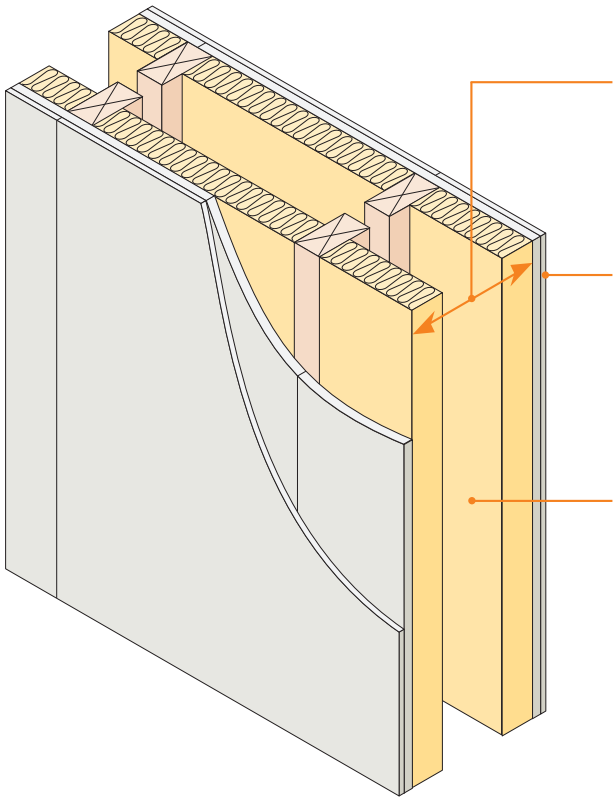
Telephone: 0161 491 8200 **Fax:** 0161 491 6529 **E-mail:** Regional Tech Manager - see www.wienerberger.co.uk/blocks for contact information

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Timber Frame

Partial or no sheathing board ■
Twin timber frames ■



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

Separating wall cavity insulation (optional)

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

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

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

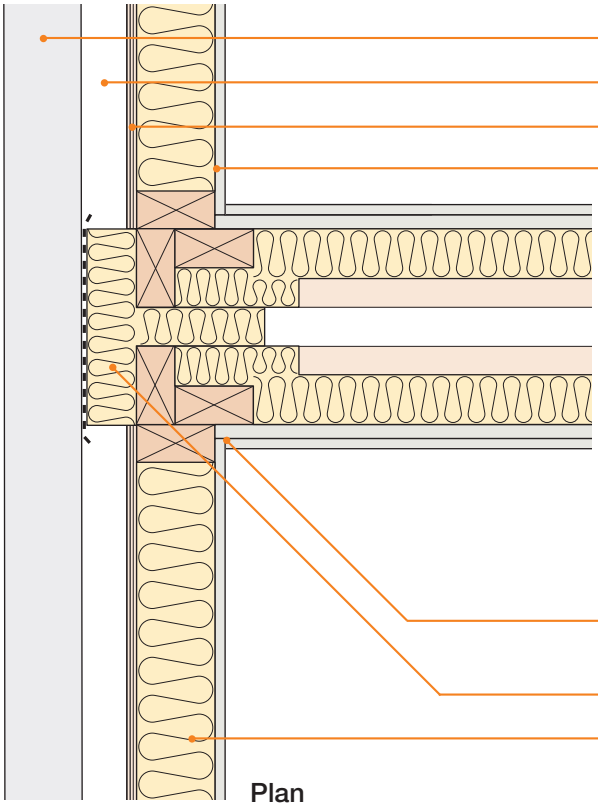
If a greater extent of sheathing is required to the cavity face, Robust Detail E-WT-2 must be used.

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

DO

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

1. External (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Sheathing board

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

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

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

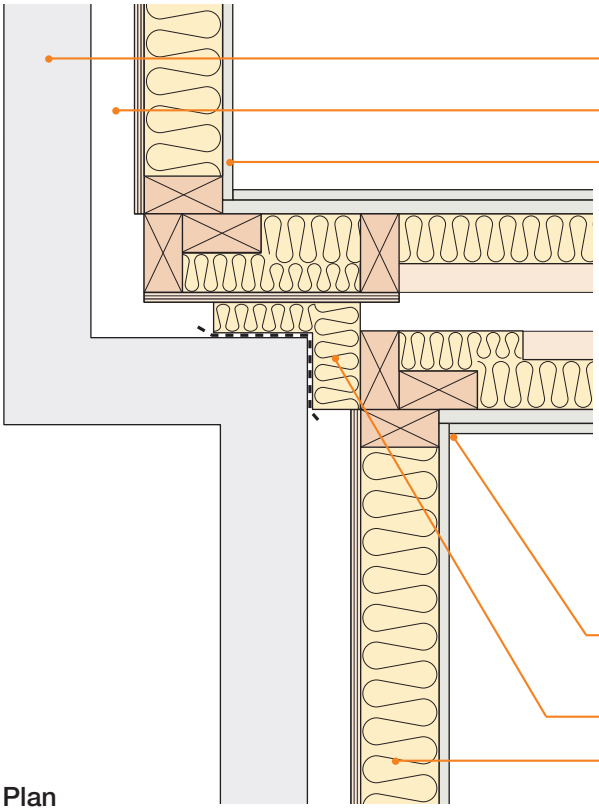
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Mineral wool insulation 10 kg/m³ (min)

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

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

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

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

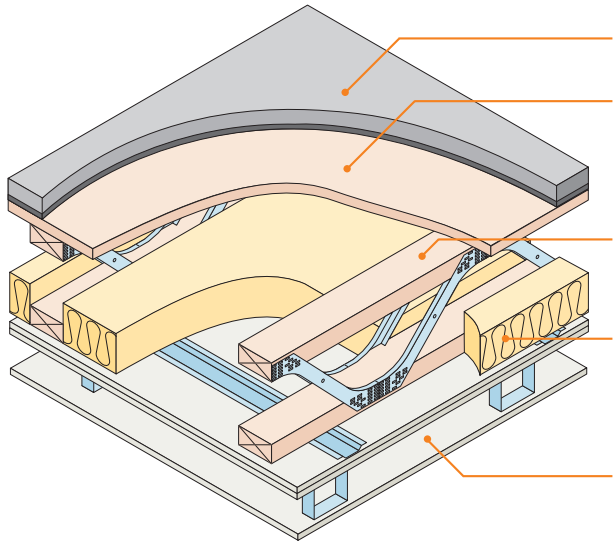
Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Mineral wool insulation 10 kg/m³ (min)

Separating Floor – Metal Web Joists E-FT-6

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



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

Joist type

IMPORTANT

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

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

Notes:

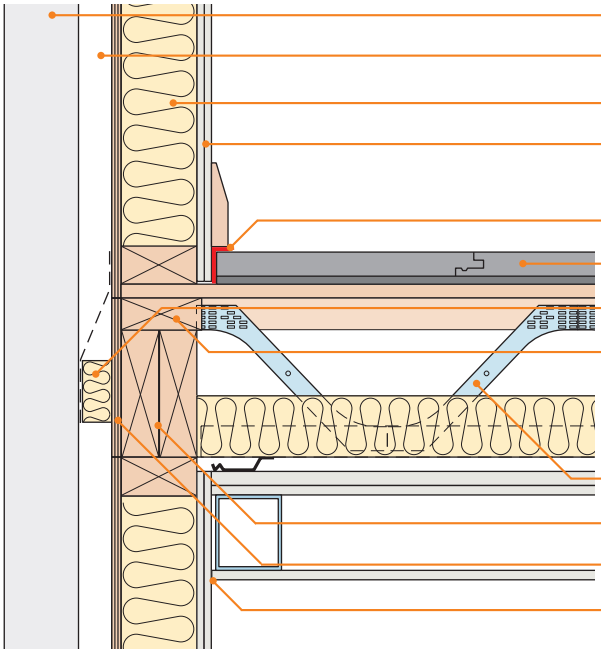
Although single header and sole plates are indicated, increasing the number of header and sole plates would be acceptable, however, all dimension specifications within this Robust Detail must be adhered to.

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

DO

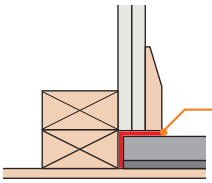
- Ensure correct metal web joists are being used (see joist type)
- Lay quilt (min 100mm thick) between joists ensuring no gaps remain
- Apply *Cellecta*® SB adhesive to all ScreedBoard® 28 decking joints
- Install YELO*fon*® FS50 flanking angle around the perimeter of the ScreedBoard® 28 to isolate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

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



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

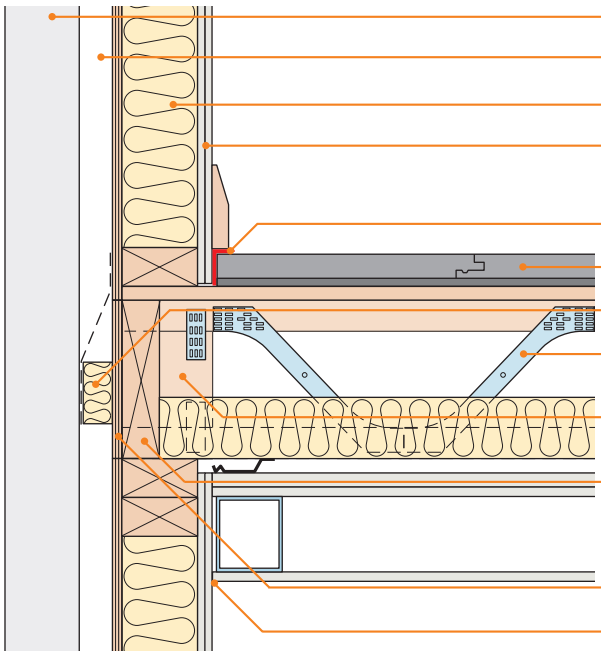
Section



- YELO*fon*® FS50 flanking angle

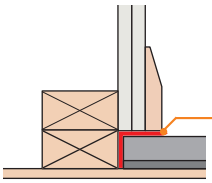
Alternative detail

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



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

Section



- YELO*fon*® FS50 flanking angle

Alternative detail