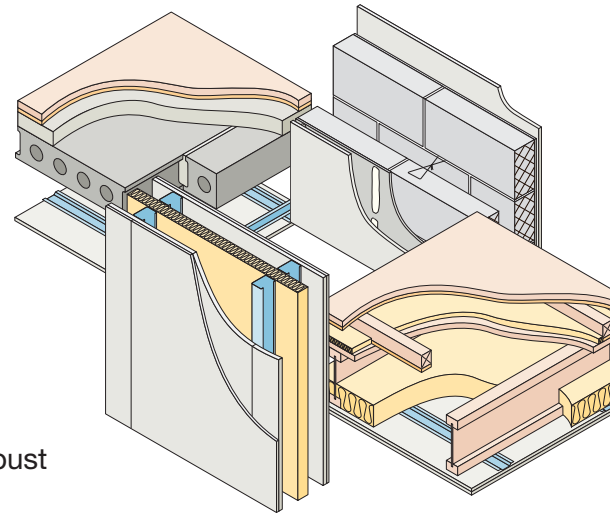


April 2016 Update Pack



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 option for insulating the flanking constructions of E-WT-2 and E-FT-1. This now allows rigid PIR insulation, meeting the published description, to be fitted to the inner leaf in place of the mineral wool. While this does not affect the acoustic performance, it can have a significant improvement on thermal performance.

For customers of Space4, a new room-in-roof spandrel and roof cassette system has been added to Appendix A2. This is for use on the timber frame separating wall E-WT-2; and the masonry separating wall E-WM-26.

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

1. Remove and replace all pages of the Introduction.
2. Remove and replace just the first leaf (pages 1 & 2) of E-WT-2.
3. Remove and replace just the first leaf (pages 1 & 2) of E-FT-1.
4. Remove and replace just the first and last leaves (pages 1 & 2, and 7 & 8) of Appendix A2.

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Tebbit'.

John Tebbit

Managing Director,
Robust Details Limited



Changes to the fourth edition following April 2016 update

Section Page Amendment

Introduction

Table 6a	9	New Space4 flanking construction added to the table.
Table 6a	10	New Space4 flanking construction added to the table.
Table 6b	11	New Space4 flanking construction added to the table.

Separating Wall – Timber

E-WT-2

Diagram 1	2	PIR insulation added as an option.
Diagram 2	2	PIR insulation added as an option.

Separating Floor – Timber

E-FT-1

Diagram 1	2	PIR insulation added as an option.
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Appendix A2

Contents	1	New flanking construction, Space4 “room-in-roof” system added.
Space4	8	New flanking construction, Space4 “room-in-roof” system added.

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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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:

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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	Concrete floors	E-FC-1	
	E-WM-2		E-FC-2	
	E-WM-3		E-FC-4	
	E-WM-4		E-FC-5	
	E-WM-11		E-FC-6	
	E-WM-16		E-FC-8	
	E-WM-18		E-FC-9	
	E-WM-19		E-FC-10	
	E-WM-21		E-FC-11	
	E-FC-12			
	E-FC-13			
	E-FC-14			
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			

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

See over for timber and steel frame walls

Introduction

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 Yelofon 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 YELOfon® 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

Introduction

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-16	✓		✓	✓	✓	✓
E-WM-3	E-WM-18						
E-WM-2	E-WM-20						
E-WM-4	E-WM-21						
E-WM-5	E-WM-26	✓		✓	✓	F	✓
E-WM-8	E-WM-27						
E-WM-11	E-WM-28						
E-WM-14							
E-WM-6	E-WM-15						
E-WM-10	E-WM-23	F		✓	✓ see note 1	F	✓
E-WM-13	E-WM-24						
	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	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.

Introduction

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/m² (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.

Introduction

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

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		RC frame	
E-FT-1	W3	E-FC-2	W4
E-FT-2	W3	E-FC-10	W4
E-FT-3	W3		
E-FT-4	W3		
E-FT-5	W3		
E-FT-6	W3		
E-FT-7	W3		
E-FT-8	W3		

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.

Introduction

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	✓	✓			✓	✓	

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

Introduction

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					✓		

Introduction

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

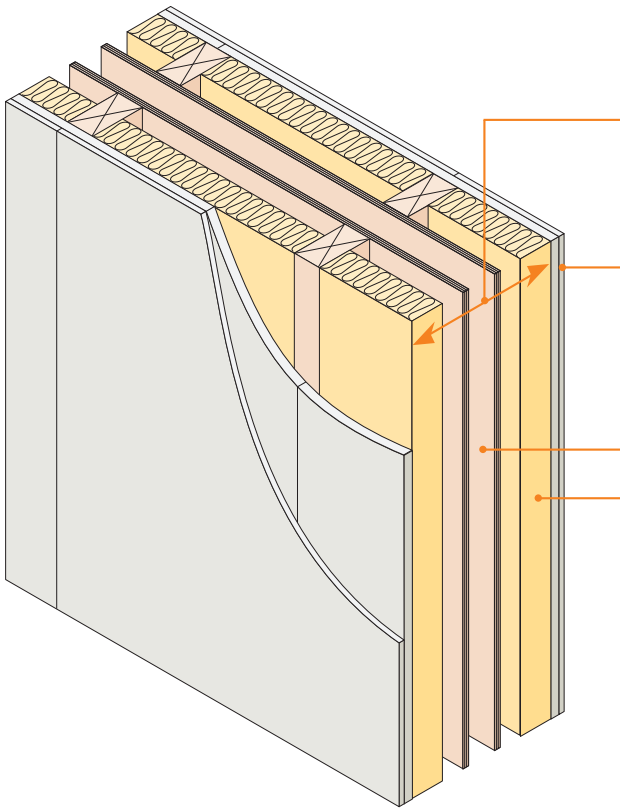
1 Applies only to loadbearing masonry constructions.

Introduction

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		

- With sheathing board ■
- Twin timber frames ■



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

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

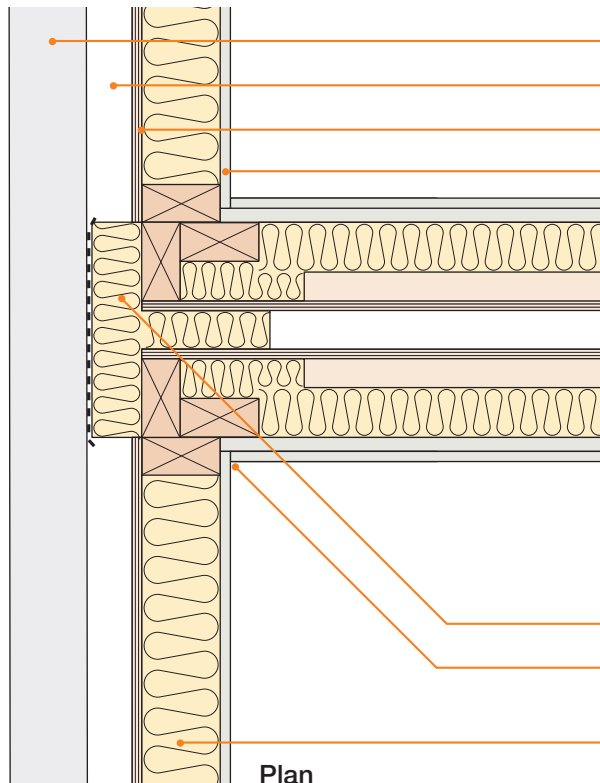
Structural framing details may vary slightly between different manufacturers and this is permitted, however, all dimension specifications within this Robust Detail must be adhered to.

Separating wall cavity insulation (optional)

The cavity may be insulated with mineral wool rolls or batts with a density of 18 – 40 kg/m³. Ensure insulation thickness is no greater than 10mm wider than cavity width to avoid excessive compression of the insulation.

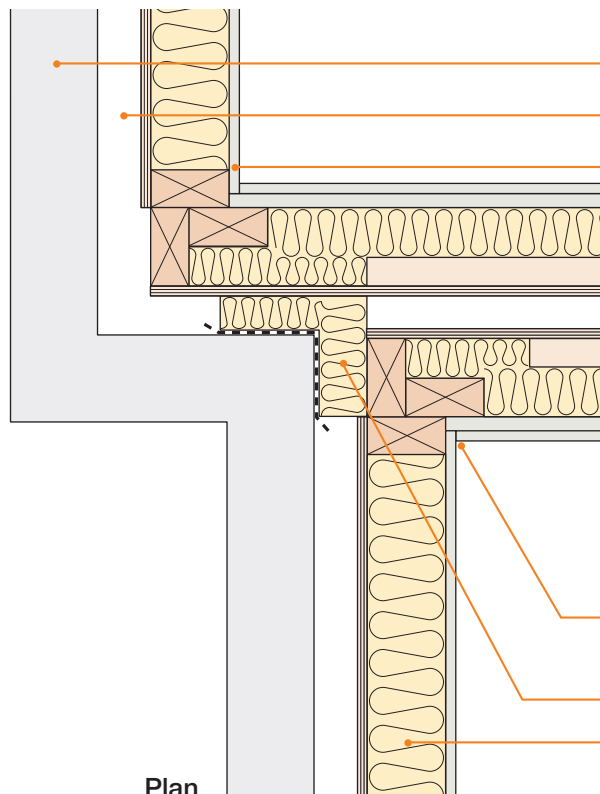
- DO**
- Keep wall linings at least 240mm apart
 - Ensure that the 50mm (min) gap between the wall panels is maintained
 - Ensure quilt or batts cover whole lining area, fitting tight between studs without sagging
 - Ensure that all cavity stops/closers are flexible or are fixed to one frame only
 - Make sure there is no connection between the two leaves except where ties are necessary for structural reasons (see above)
 - Stagger joints in wall linings to avoid air paths
 - Seal all joints in outer layer with tape or caulk with sealant
 - Refer to Appendix A

1. External (flanking) wall junction



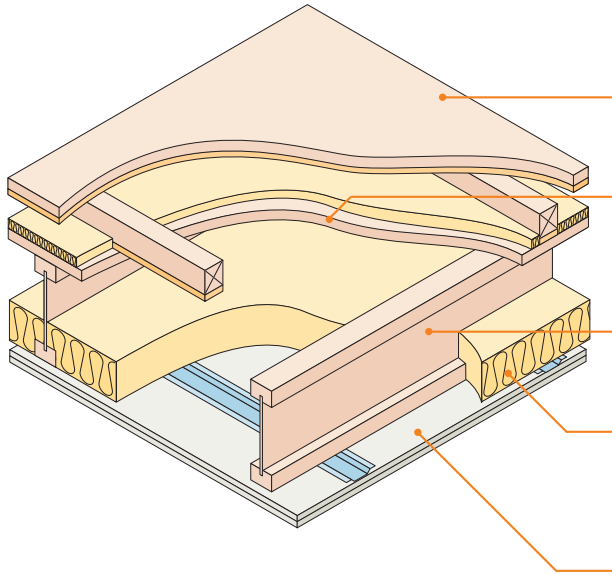
- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Sheathing board
- Inner leaf where there is no separating floor e.g. for houses
 - one layer of gypsum-based board nominal 8 kg/m²
- Inner leaf where there is a separating floor, e.g. for flats/apartments
 - if using **robustdetails**[®] for floor, refer to Table 3b in introduction to select an acceptable **robustdetails**[®] separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
 - if using floor requiring pre-completion testing, seek specialist advice
- Close cavity with a cavity stop (see Appendix A)
- Seal all perimeter joints with tape or caulk with sealant
- Mineral wool insulation 10 kg/m³ (min) or 70mm (min) foil faced PIR with no gaps

2. Staggered external (flanking) wall junction



- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Inner leaf where there is no separating floor e.g. for houses
 - one layer of gypsum-based board nominal 8 kg/m²
- Inner leaf where there is a separating floor, e.g. for flats/apartments
 - if using **robustdetails**[®] for floor, refer to Table 3b in introduction to select an acceptable **robustdetails**[®] separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
 - if using floor requiring pre-completion testing, seek specialist advice
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a cavity stop (see Appendix A)
- Mineral wool insulation 10 kg/m³ (min) or 70mm (min) foil faced PIR with no gaps

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



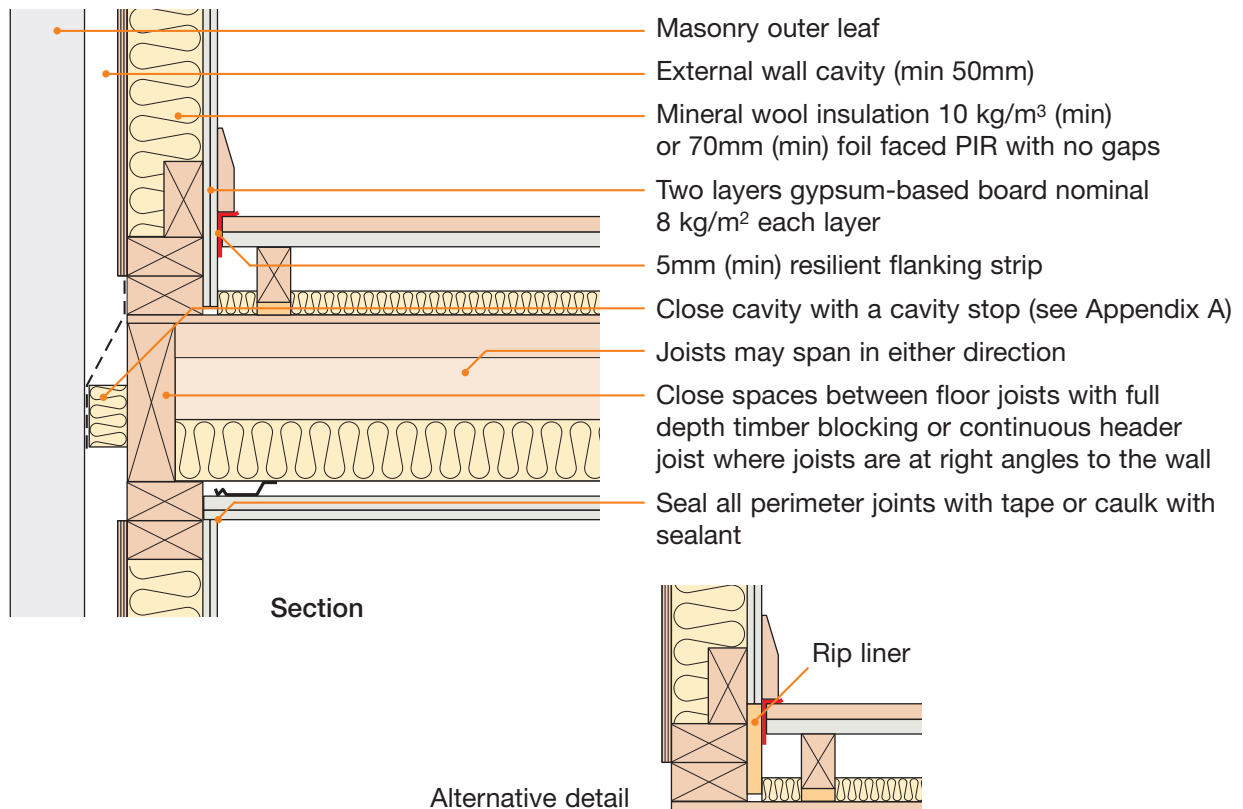
Floating floor	See section 6 for suitable floating floor treatment
Floor decking	15mm thick (min) wood based board, density 600 kg/m ³ (min)
Joists	235mm (min) timber I-Joists
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m ³) between joists
Ceiling	See section 5 for suitable ceiling treatment

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

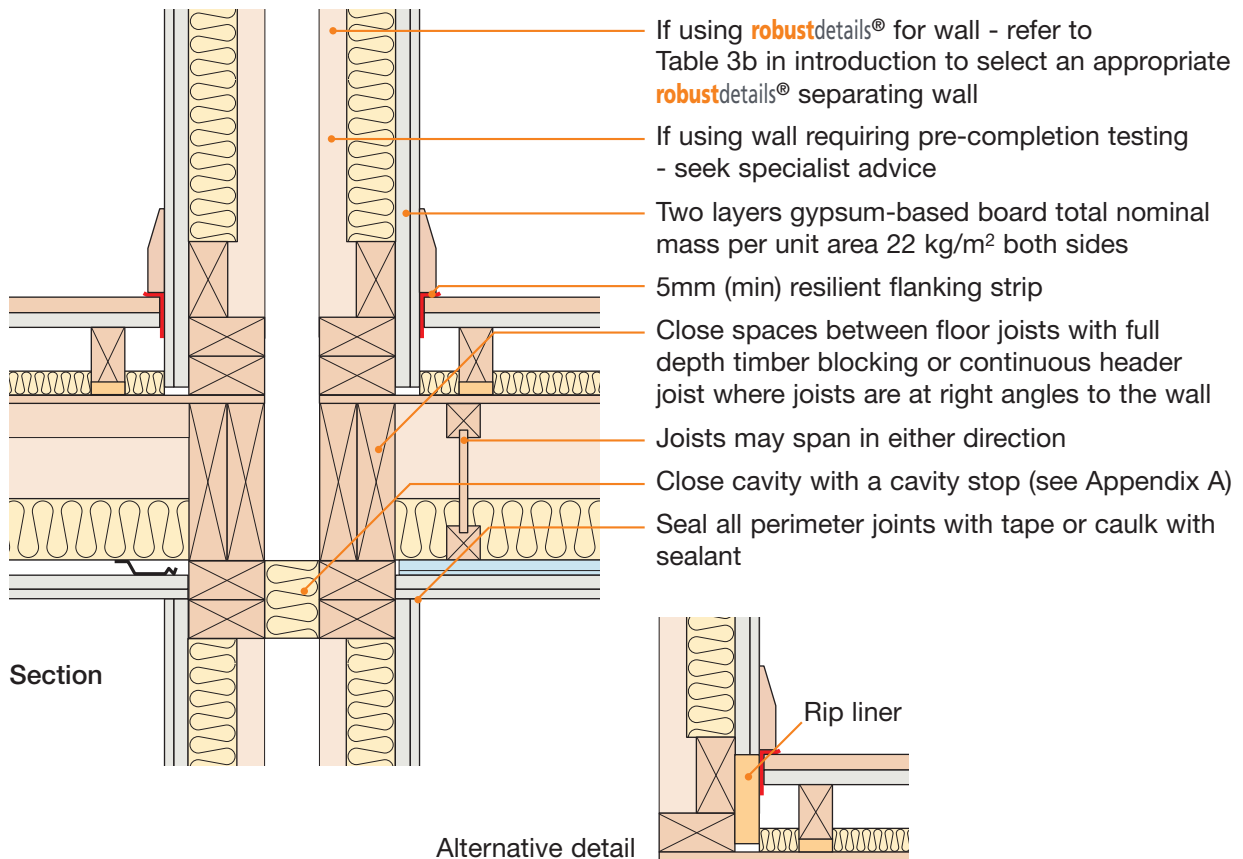
DO

- Lay quilt (min 100mm thick) between all joists, including doubled up I-joists, ensuring no gaps remain
- Ensure floating floor treatment is suitable and is installed in accordance with the manufacturer's instructions
- Ensure quilt is laid between and not under flooring battens
- Install flanking strips around the perimeter of the flooring board to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure timber floor ceiling treatment is either CT1, CT2 or CT3 and is fixed correctly (see page 4)
- Stagger joints in ceiling layers
- Refer to Appendix A

1. External (flanking) wall junction



2. Separating wall junction



Appendix A2 – Proprietary Flanking Conditions

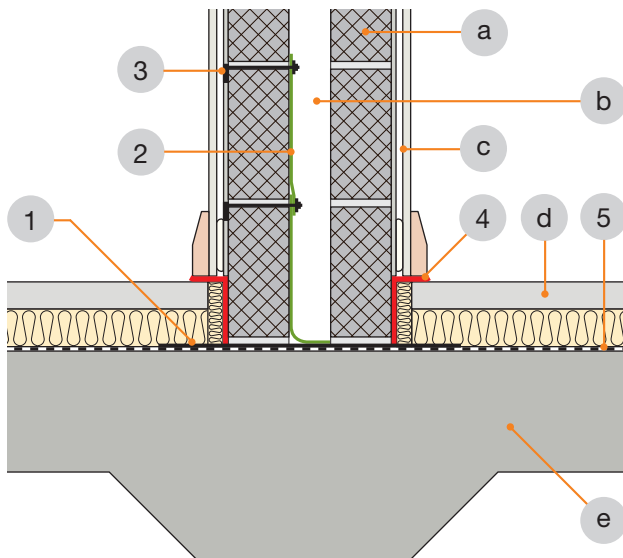
Contents

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Prestoplan PresPeak 60 interlocking single spandrel panel system for robustdetails ® timber separating walls	5
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RoofSpace I-Roof™ “room-in-roof” panel system using robustdetails ® timber or masonry cavity walls	7
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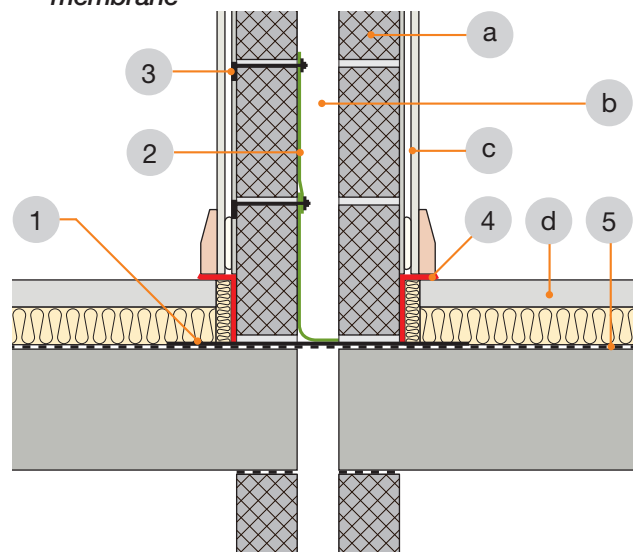
Appendix A2 – Proprietary Flanking Conditions

Icopal-MONARFLOOR® BRIDGESTOP® System for robustdetails® cavity masonry walls.
Refer to Table 6 in Introduction.

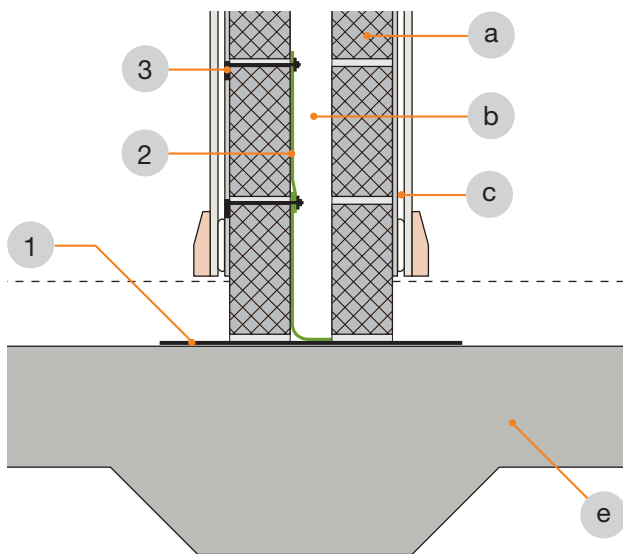
1. Separating wall – direct support on raft



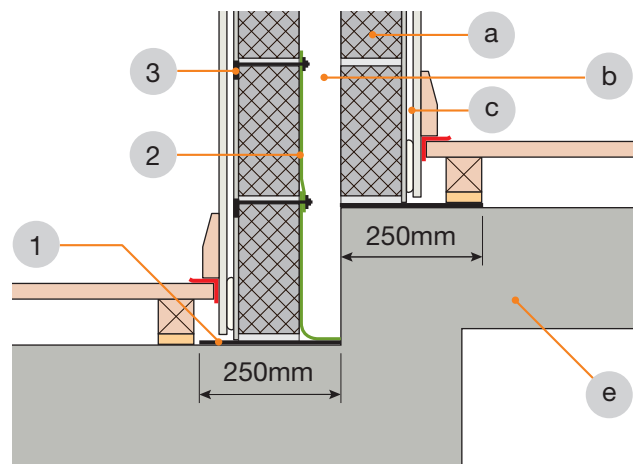
2. Separating wall – suspended floor with gas membrane



3. Insulated raft foundation



4. Stepped foundation



Key

- 1 500mm wide (or 250mm where shown) MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane laid under the party wall over the dpm. This is an integral part of the system.
- 2 MONARFLOOR® BRIDGESTOP® Quilt in two lifts to prevent mortar droppings touching both masonry leaves.
- 3 MONARFLOOR® BRIDGESTOP® Tie to penetrate at max 450mm centres. Ties are reversible. May also be used as render depth marker.
- 4 MONARFLOOR® 6mm Acoustic Angled Flanking Strip to isolate screed/insulation from party wall and to isolate skirting board from screed.
- 5 Continuous dpm over the raft where ground gasses are an issue. Contact Icopal for specification.

- a Min 100mm block (with appropriate Type A wall ties) dependent on Robust Detail being used. Refer to Table 6a in the Introduction.
- b Min 75mm or 100mm cavity width dependent on Robust Detail being used.
- c Wall finish dependent on Robust Detail used.
- d Floating screed on insulation; or timber floating floor types FFT2 resilient cradle and batten, FFT3 resilient batten, or FFT4 deep platform system.
- e 150mm (min) thick insitu concrete 365kg/m² (min) mass per unit area or Insulslab SFRC.

Contact details for Icopal-MONARFLOOR®:

Telephone: 0161 866 6540

Fax: 0161 865 8433

E-mail: acoustics.uk@icopal.com

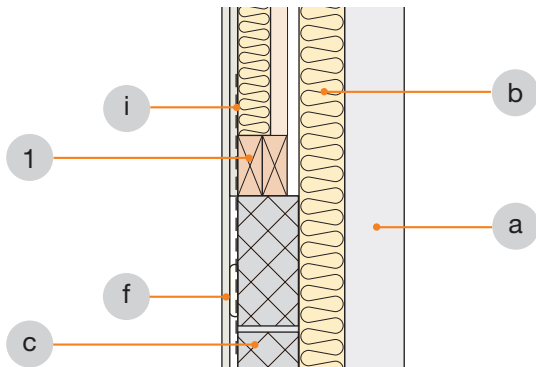
BRIDGESTOP® is the subject of Patent Application ref GB2429719

The trade marks MONARFLOOR and BRIDGESTOP are the subject of UK trade mark registrations owned by Icopal Limited

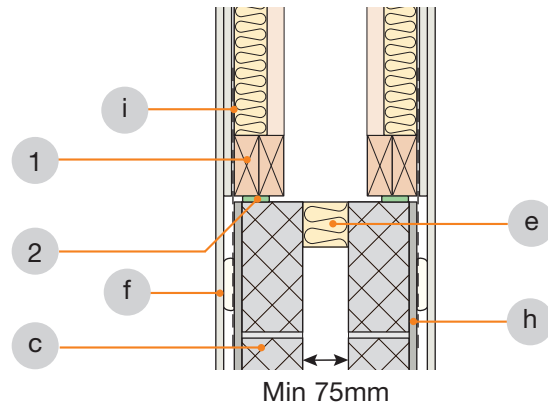
Appendix A2 – Proprietary Flanking Conditions

Smartroof complete interlocking “room-in-roof” panel system using **robustdetails®** timber or masonry cavity walls. Refer to Table 6 in Introduction.

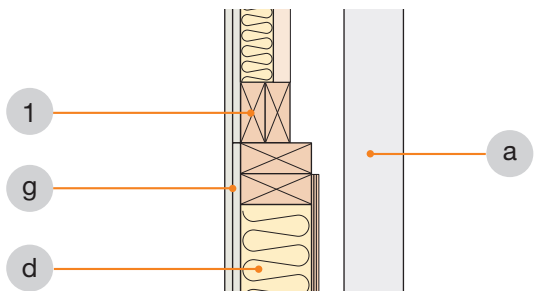
1. Gable flanking junction – masonry



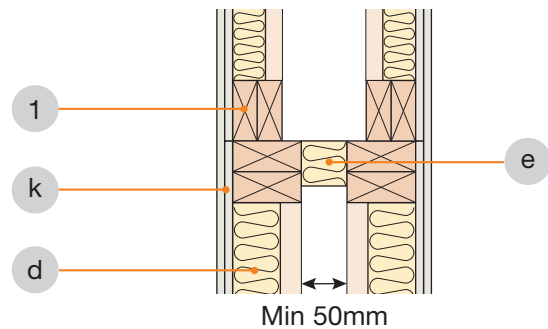
2. Room-in-roof junction with masonry cavity walls



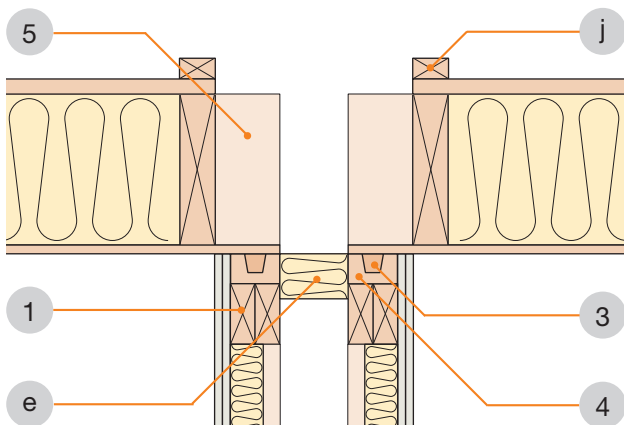
3. Gable flanking junction – timber frame



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



5. Separating wall – roof junction



Key

- 1 Smartroof panel.
- 2 Smartroof thin-joint compressed foam to take up unevenness in blockwork.
- 3 Smarttongue 35 x 72mm.
- 4 Smartchannel.
- 5 Smartroof roof panel.

- a Outer leaf of external wall.
- b Continue cavity batts up to gable end if required.
- c Minimum 100mm blockwork.
- d Timber frame inner leaf.
- e Cavity closer.
- f Gypsum-based board dependent on Robust Detail being used.
- g Gypsum-based board nominal 8 kg/m². 2 layers required where separating floors are used (refer to **robustdetails®** separating floor).
- h Nominal 8mm render coat (refer to relevant **robustdetails®** separating wall).
- i Vertical metal straps at 1200mm centres if required.
- j 35 x 50mm counterbatten.
- k 2 layers gypsum-based board total nominal 22 kg/m².

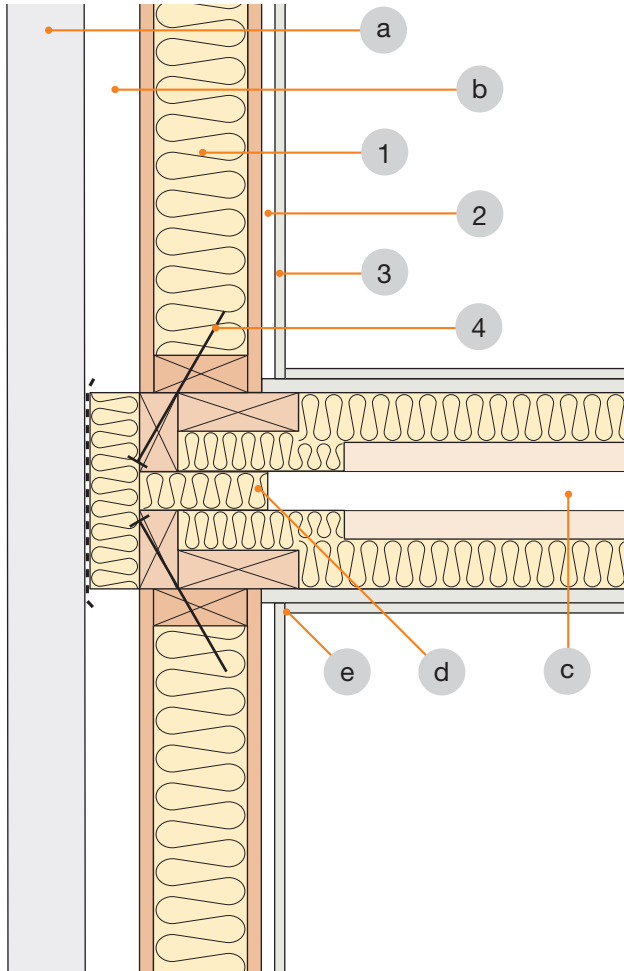
Contact details for smartroof Limited:

Telephone: 01675 44 23 45
Fax: 01675 44 30 95
E-mail: info@smartroof.co.uk
Web: www.smartroof.co.uk

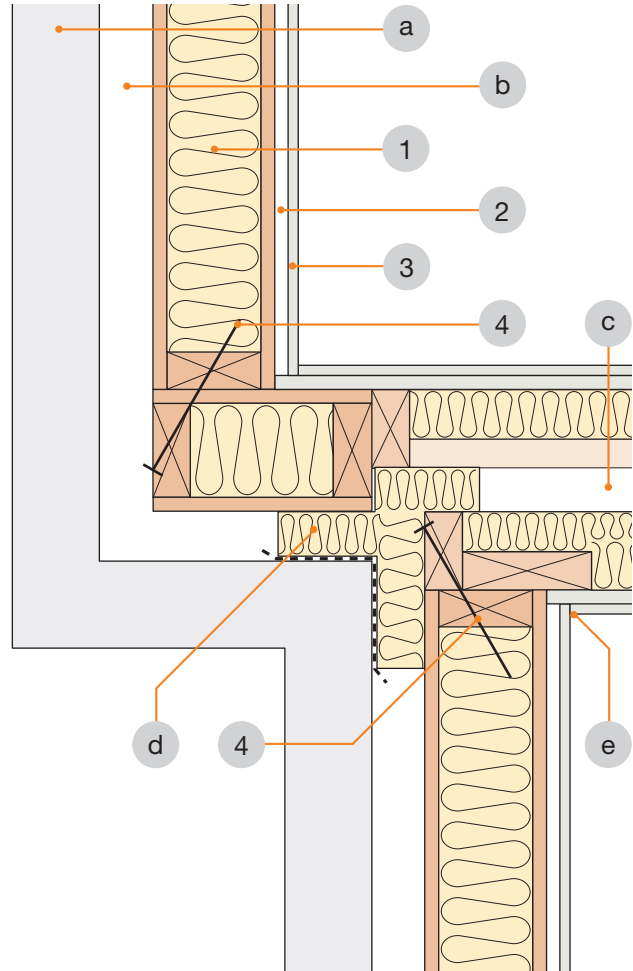
Appendix A2 – Proprietary Flanking Conditions

Kingspan TEK inner leaf flanking condition for **robustdetails**[®] timber separating walls. Refer to Table 6 in Introduction. *Currently when used with separating floors in apartments, separating floors will require pre-completion testing.*

1. External (flanking) wall junction



2. Staggered external (flanking) wall junction



Key

- 1 Kingspan TEK – 142 Panel.
- 2 Service void (if required).
- 3 One layer of gypsum-based board nominal 8 kg/m² on inner leaf where there is no separating floor, e.g. for houses.
Two layers of gypsum-based board nominal 8 kg/m² each on inner leaf where there is a separating floor (non-**robustdetails**[®] floor), e.g. for flats and apartments.
- 4 Approved fixings to TEK BBA Cert No. 02/S029.

- a Masonry outer leaf (min 100mm thick).
- b External wall cavity (min 50mm).
- c **robustdetails**[®] timber frame separating wall. (Refer to Table 6 in Introduction and relevant timber frame Robust Details in Handbook).
- d Close cavity with flexible cavity stop (see Appendix A).
- e Seal all joints with tape or caulk with sealant.

Contact details for Kingspan TEK,
Kingspan Insulation Limited:

Telephone: 01544 387382

Fax: 01544 387482

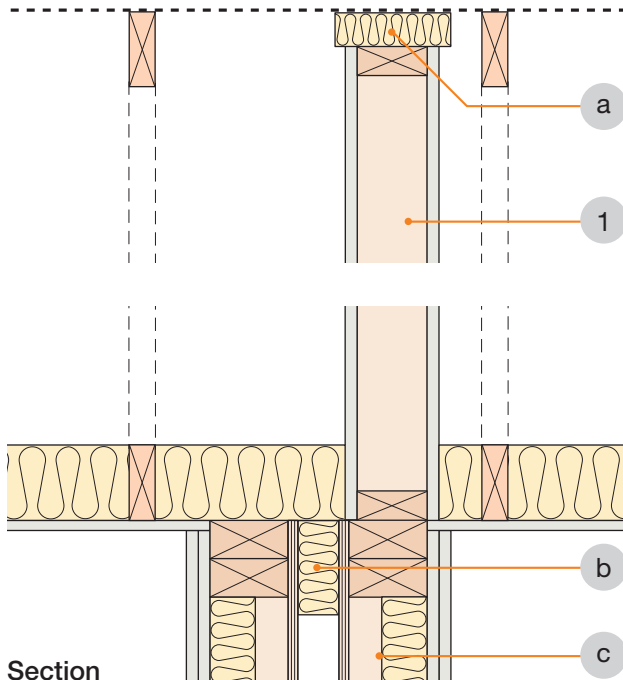
E-mail: technical.uk@tek.kingspan.com

Web: www.tek.kingspan.com

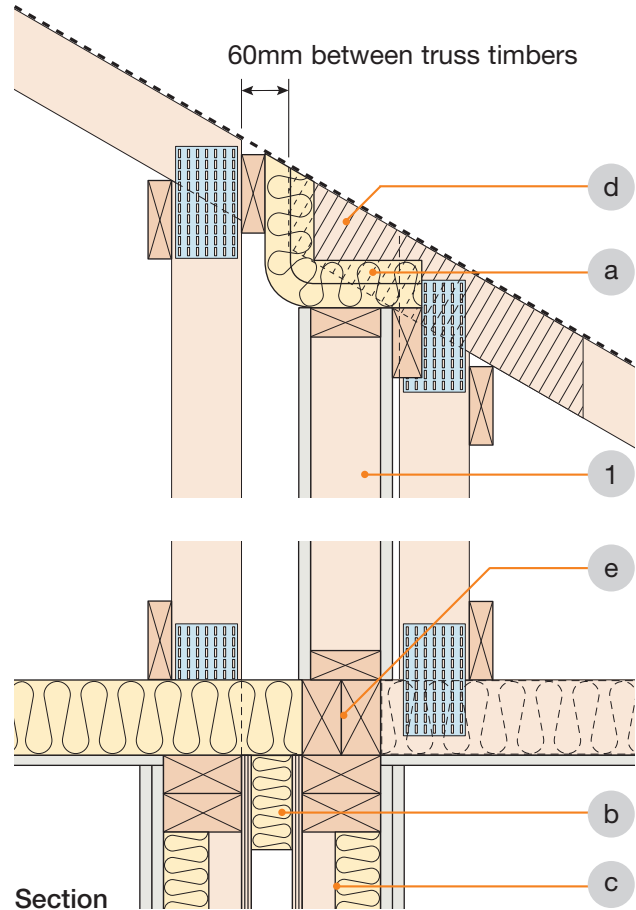
Appendix A2 – Proprietary Flanking Conditions

Prestoplan PresPeak 60 interlocking single spandrel panel system for use on **robustdetails®** timber separating walls in non room-in-roof situations. Refer to Table 6 in Introduction.

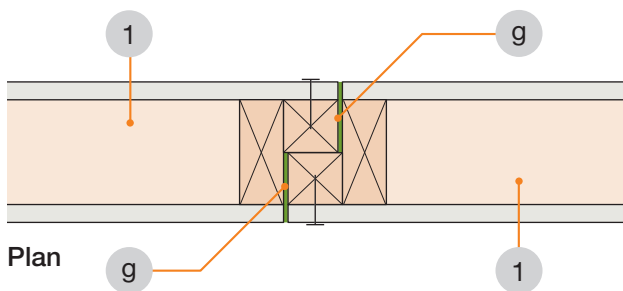
1. Spandrel panel located parallel to trussed rafters



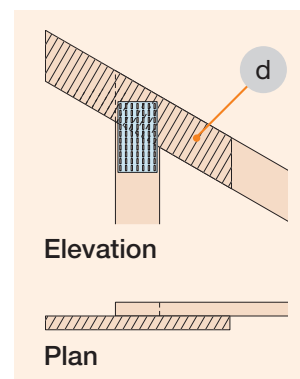
2. Spandrel panel located across trussed rafters



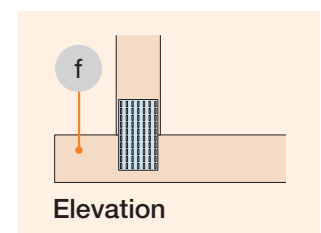
3. Spandrel panel joint detail



Top chord detail



Bottom chord detail



Key

- 1 PresPeak 60 spandrel panels.
- a Firestop wired mineral wool closer.
- b Flexible cavity stop.
- c Timber frame separating wall.
- d Site-fixed rafter extension.
- e Continuous blocking between bottom chords of trusses.
- f Bottom chord extended for support.
- g Intumescent tape.

Refer also to manufacturer's guidance

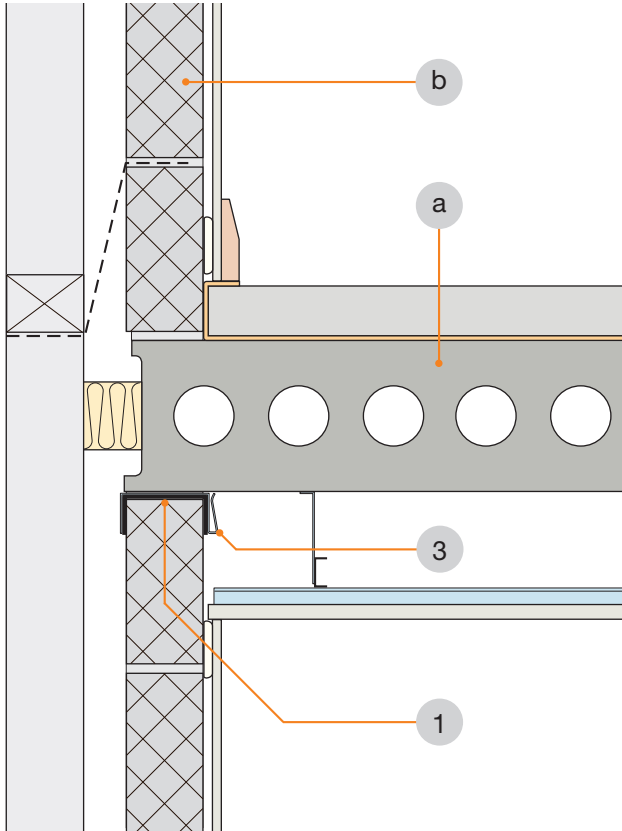
Contact details for Prestoplan Limited:

Telephone: 01772 627373
Fax: 01772 627575
Web: www.prestoplan.co.uk

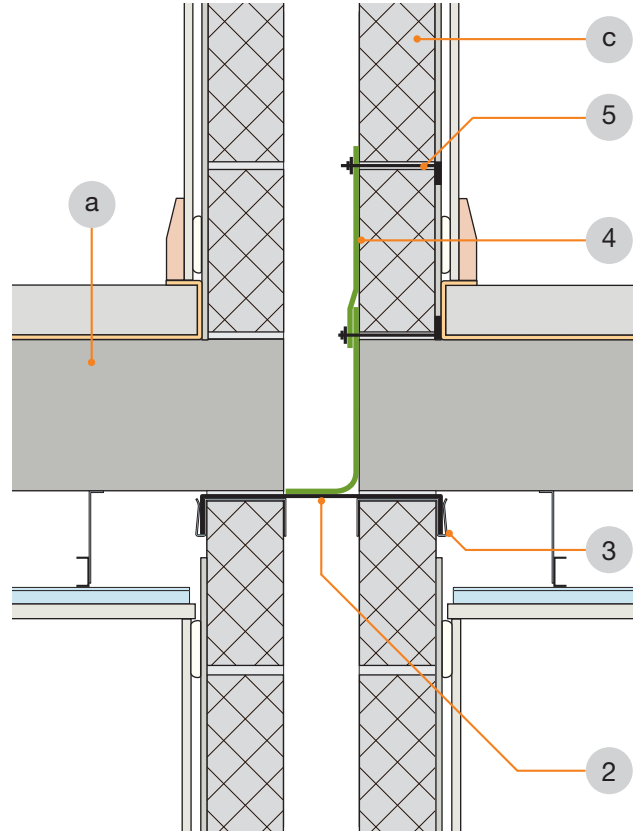
Appendix A2 – Proprietary Flanking Conditions

Icopal-MONARFLOOR® Wall Cap RDA2 System for **robustdetails®** separating floors in conjunction with cavity walls. Refer to Table 6 in Introduction.

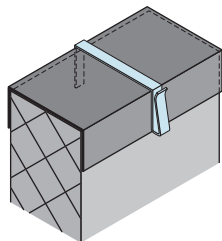
1. External (flanking) wall junction



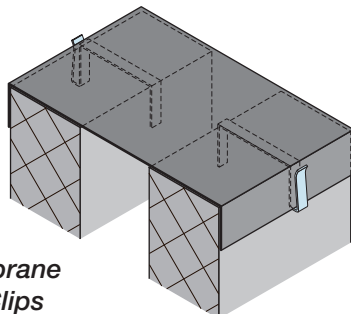
2. Separating wall junction



Wall Cap 200
and Wall Cap Clip



Wall Cap RDA2 Membrane
and Wall Cap RDA2 Clips



Key

- 1 3.5mm MONARFLOOR® Wall Cap 200 laid as continuous layer on external (flanking) wall.
 - 2 3.5mm MONARFLOOR® Wall Cap RDA2 Membrane laid as continuous layer on separating wall.
 - 3 Wall Cap RDA2 Clips.
 - 4 MONARFLOOR® RDA2 Quilt in two lifts to prevent mortar droppings touching both masonry leaves.
 - 5 MONARFLOOR® RDA2 Tie to penetrate at max 450mm centres. Ties are reversible and may also be used as render depth gauges.
- a **robustdetails®** separating floor. Refer to Table 6 in Introduction.
- b External (flanking) wall. Refer to floor Robust Detail for specification.
- c Separating wall. If using **robustdetails®** separating wall refer to Table 3a in Introduction.

When applying this system to forms of construction other than masonry, please refer to manufacturer's installation guides. Note: In these cases, not all components shown above may be required.

Contact details for Icopal-MONARFLOOR®:

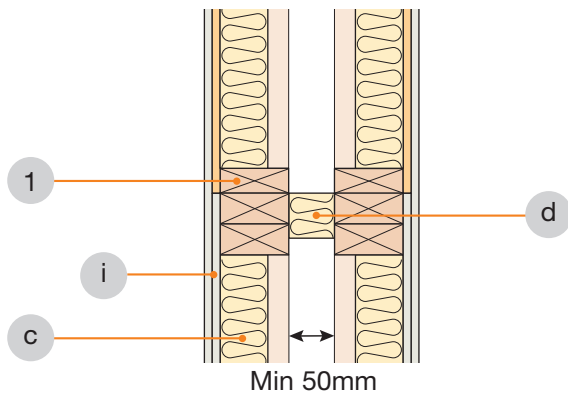
Telephone: 0161 866 6540
Fax: 0161 865 8433
E-mail: acoustics.uk@icopal.com

The trade marks MONARFLOOR and Wall Cap are the subject of UK trade mark registrations owned by Icopal Limited

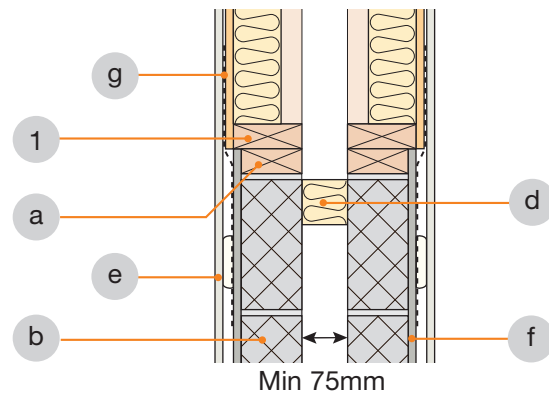
Appendix A2 – Proprietary Flanking Conditions

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

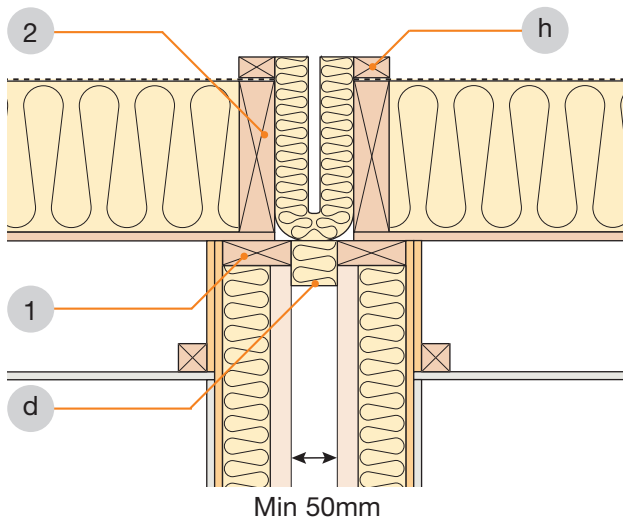
1. Room-in-roof junction with timber frame cavity walls



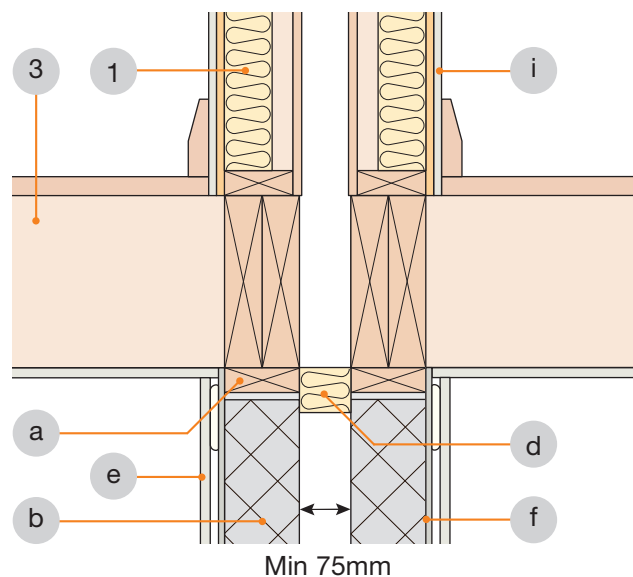
2. Room-in-roof junction with masonry cavity walls



3. Separating wall – roof junction



4. Internal floor cassette junction option



Key

- 1 RoofSpace I-Roof™ spandrel panel.
- 2 RoofSpace I-Roof™ roof panel.
- 3 RoofSpace internal floor cassette.
- a Timber wall plate bedded on 10mm mortar bed to take out unevenness in blockwork.
- b Minimum 100mm blockwork.
- c Timber frame separating wall leaf.
- d Cavity closer.
- e Gypsum-based board dependent on Robust Detail being used.
- f Nominal 8mm render coat (refer to relevant robustdetails® separating wall).
- g Vertical metal straps at 1200mm centres if required.
- h 25 x 38mm counterbatten.
- i 2 layers gypsum-based board total nominal 22 kg/m².

Contact details for SIG RoofSpace:

Telephone: 01789 209 006

Fax: 01789 292 858

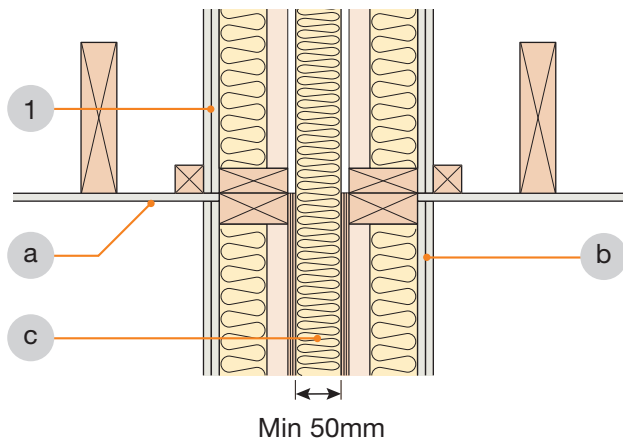
E-mail: technical@sigroofspace.co.uk

Web: www.sigroofspace.co.uk

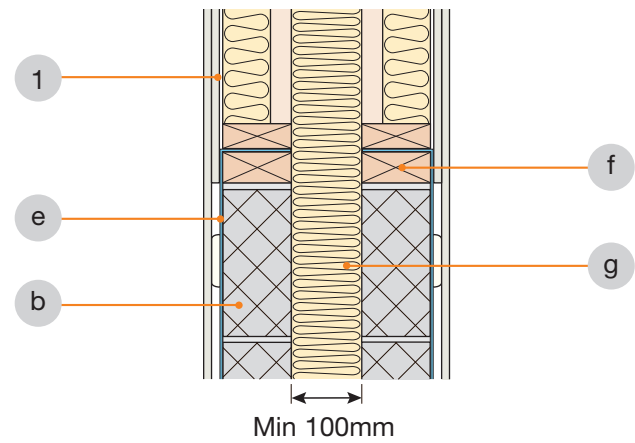
Appendix A2 – Proprietary Flanking Conditions

Space4 “room-in-roof” panel system using **robustdetails**[®] timber or masonry cavity walls. Refer to Table 6 in Introduction.

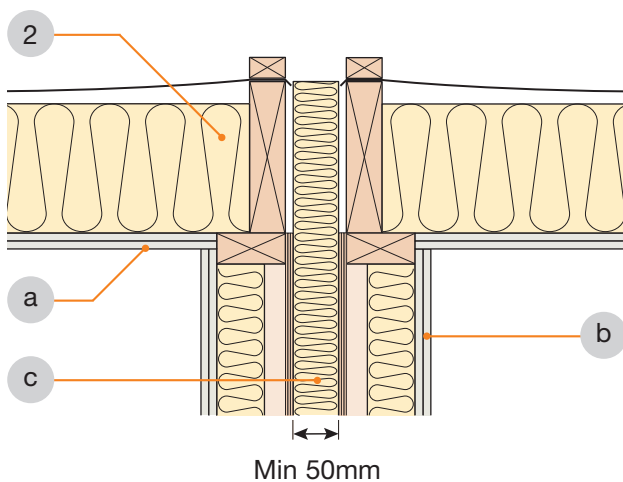
1. Non room-in-roof spandrel panel to timber separating wall junction



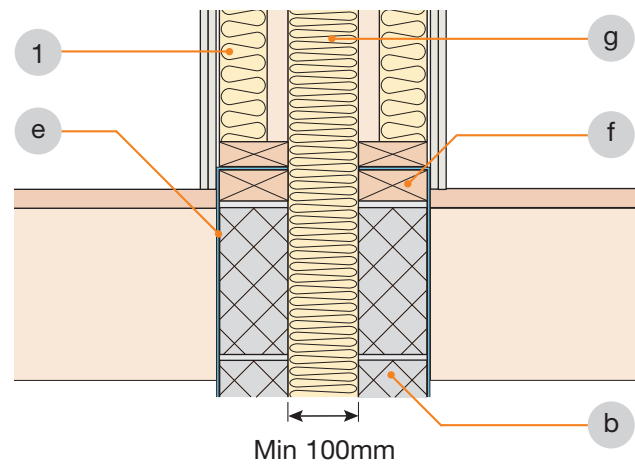
2. Spandrel panel to masonry separating wall junction



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



4. Internal floor junction for room-in-roof



Key

- 1 Space4 spandrel panel.
- 2 Space4 roof cassette.
- a Minimum 1 layer nominal 8 kg/m² gypsum-based board to ceiling.
- b **robustdetails**[®] separating wall.
- c Mineral wool 18-40 kg/m³.
- d Minimum 2 layers nominal 8 kg/m² gypsum-based board to ceiling.
- e Vertical metal straps at 1200mm centres if required.
- f Wall plate fully bedded on mortar with no gaps.
- g Mineral wool 12-25 kg/m³.

Contact details for Space4:

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