June 2021 Update Pack

Dear Colleague,

Thank you for downloading this June update containing two significant amendments – one of which brings with it a new Robust Detail.

The new wall, E-WM-34, is a cavity masonry wall using Plasmor Aglite Ultima (1050 kg/m³) blocks with gypsum board on dabs. Blown mineral wool can be used as a full-fill option provided the cavity is min.125mm – otherwise, built-in mineral insulation is used where there is a min.100mm cavity. As this second option is identical to when Aglite Ultima is used in E-WM-22, the Plasmor blocks will be withdrawn from E-WM-22 after a 12-month transition period. Therefore, if you register E-WM-22 using the Aglite Ultima option, registrations should be amended to E-WM-34; and please ensure your standard design details reference E-WM-34 for registrations from June 2022.

Following extensive and focussed research testing, the private stairs section in Appendix A2 now includes an additional simplified flanking option that utilises a single timber leaf above the separating floor in conjunction with a cavity masonry wall below. This new option also obviates the need for an independent wall lining at ground floor level.

Please update your April 2021, 4th Edition Handbook as follows:

- 1. Remove and replace **all pages** of the Introduction.
- 2. Insert the new E-WM-34 to the end of the Separating Walls, Masonry section.
- 3. Remove and replace page 1/2 and pages 11 onwards of Appendix A2.

Yours sincerely

the for

John Thompson Chief Executive, Robust Details Limited



Changes to the fourth edition following June 2021 update

Section

Page Amendment

Introduction

Table 1	3	New wall type E-WM-34 added.
Table 3a	6	New wall type E-WM-34 added.
Table 4	8	New wall type E-WM-34 added with relevant note.
Table 6a	9	New wall type E-WM-34 added with allowable combinations.

Separating Wall – Masonry

E-WM-34

All	1-6	Plasmor "Aglite Ultima" lightweight
		aggregate blockwork (render and
		gypsum-based board) with full-fill
		cavity insulation.

Appendix A2

- Private stairs 13 New diagram added specifying option of single-leaf timber frame above floor.
 - Original diagram moved to bottom of page and renamed as "Alternative construction".
 - 14 Solid wall diagram moved from previous page.

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

www.robustdetails.com

or from:

Robust Details Limited Unit 14, Shenley Pavilions Chalkdell Drive Shenley Wood Milton Keynes MK5 6LB Telephone: 03300 882140 - Technical

03300 882141 - General

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

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

The tables on pages 5, 6 and 7 show which **robust**details[®] 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.

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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-1
			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.

List of Robust Details

Table 1 – Separating walls

E-WM-1	masonry – dense aggregate blockwork (wet plaster)
E-WM-2	masonry – lightweight aggregate blockwork (wet plaster)
E-WM-3	masonry – dense aggregate blockwork (render and gypsum-based board)
E-WM-4	masonry – lightweight aggregate blockwork (render and gypsum-based board)
E-WM-5	masonry – Besblock "Star Performer" cellular blockwork (render and gypsum-based board)
E-WM-6	masonry – aircrete blockwork (render and gypsum-based board)
E-WM-7	Suspended from further registrations
E-WM-8	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD35 (gypsum-based board)
E-WM-9	masonry – solid dense aggregate blockwork (render and gypsum-based board)
E-WM-10	masonry - aircrete thin joint blockwork with specified wall ties (render and gypsum-based board finish)
E-WM-11	masonry - lightweight aggregate blockwork (render and gypsum-based board) 100mm minimum cavity
E-WM-12	masonry – Plasmor "Aglite Ultima" lightweight aggregate blockwork (render and gypsum-based board)
E-WM-13	masonry - aircrete thin joint - untied blockwork (render and gypsum-based board)
E-WM-14	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD35 (gypsum-based board) with 100mm minimum cavity
E-WM-15	masonry – aircrete blockwork Saint Gobain - Isover RD35 (gypsum-based board)
E-WM-16	masonry - dense aggregate blockwork (render and gypsum-based board) with 100mm minimum cavity
E-WM-17	masonry – lightweight aggregate blockwork Saint Gobain-Isover RD Party Wall Roll (gypsum-based board)
E-WM-18	masonry – dense aggregate blockwork (wet plaster) with 100mm minimum cavity
E-WM-19	masonry – dense or lightweight aggregate blockwork (render and gypsum-based board) with 100mm minimum cavity and MONARFLOOR® BRIDGESTOP® system
E-WM-20	masonry – lightweight aggregate blockwork Saint Gobain – Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity
E-WM-21	masonry - lightweight aggregate blockwork (wet plaster) with 100mm minimum cavity
E-WM-22	masonry – lightweight aggregate blockwork – Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (gypsum-based board) with 100mm minimum cavity
E-WM-23	masonry – aircrete blockwork Superglass Party Wall Roll (gypsum-based board) 100mm min cavity
E-WM-24	masonry – aircrete blockwork Saint Gobain – Isover RD Party Wall Roll (gypsum-based board) with 100mm minimum cavity
E-WM-25	masonry – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 100mm minimum insulated cavity
E-WM-26	masonry – Besblock "Star Performer" cellular blockwork (gypsum-based board) with 100mm minimum insulated cavity
E-WM-27	masonry – lightweight aggregate blockwork Superglass Party Wall Roll (gypsum-based board) with minimum 75mm cavity
E-WM-28	masonry – lightweight aggregate blockwork Knauf Supafil [®] Party Wall (gypsum-based board) with minimum 100mm cavity
E-WM-29	masonry – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 75mm minimum insulated cavity
E-WM-30	masonry – aircrete blockwork Knauf Supafil® Party Wall (gypsum-based board) with 100mm min cavity
E-WM-31	masonry – H+H – Celcon Elements (gypsum-based board) with 100mm minimum insulated cavity
E-WM-32	masonry – lightweight aggregate blockwork Knauf Earthwool Masonry Party Wall Slab (gypsum-based board) with minimum 75mm cavity
E-WM-33	masonry – lightweight aggregate blockwork Superglass Superwhite 34 (gypsum-based board) with 100mm minimum cavity
E-WM-34	masonry – Plasmor "Aglite Ultima' lightweight aggregate blockwork (render and gypsum-based board) with full-fill cavity insulation

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
E-WS-5	steel frame – twin metal frame

List of Robust Details

Table 2 – Separating floors

E-FC-1	precast concrete plank with directly applied screed and floating floor treatment
E-FC-2	in-situ concrete slab and floating floor treatment
E-FC-3	Suspended from further registrations
E-FC-4	precast concrete plank and Thermal Economics IsoRubber Base system and floating screed
E-FC-5	precast concrete plank and Cellecta 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 Base system and floating screed
E-FC-15	precast concrete plank and Regupol Quietlay layer and floating screed
E-FC-16	precast concrete plank with directly applied screed and Thermal Economics IsoRubber CC3 bonded resilient floor covering
E-FC-17	precast concrete plank and Cellecta YELOfon [®] HD10+ system and floating screed and Cellecta ULTRA ceiling treatment
E-FC-18	in-situ concrete slab with floating screed or bonded resilient floor covering
E-FC-19	precast concrete plank and Cellecta RUBBERfon Impact 6 system and floating screed
E-FT-1	timber I-joists and floating floor treatment
E-FT-2	timber solid joists and floating floor treatment
E-FT-3	MiTek Posi-Joist, Prestoplan PresWeb, WOLF easi-joist, ITW Gang-Nail Ecojoist or ITW Alpine SpaceJois 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 floors					
		E-FC-1	E-FC-15	1			1
		E-FC-11	E-FC-16				
Separa	ting walls	E-FC-12	E-FC-17				E-FC-8
		E-FC-13	E-FC-19			E-FC-6	E-FC-9
		E-FC-14		E-FC-4	E-FC-5	E-FC-7	E-FC-10
E-WM-1	E-WM-16	V	/	~	~	V	~
E-WM-3	E-WM-18	•		•		•	•
E-WM-2	E-WM-21						
E-WM-4	E-WM-26						
E-WM-5	E-WM-27	~	/	~	~	F	~
E-WM-8	E-WM-28				· ·	-	
E-WM-11	E-WM-32						
E-WM-14	E-WM-33						
E-WM-20							
E-WM-6	E-WM-23						
E-WM-10	E-WM-24	F		~	✓see note 1	F	~
E-WM-13	E-WM-30			· ·			•
E-WM-15							
E-WM-12	E-WM-34	F	:	~	F	F	F
E-WM-17	E-WM-22	✔ see	note 2	~	✓ see note 2	F	✓ see note 2
E-WM-25	E-WM-29	F	:	F	F	F	F

Key

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

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

2 This combination can only be selected where the separating wall construction does not include Plasmor Aglite Ultima blocks (1050 kg/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 robust details® separating wall;

- the external (flanking) wall construction above the separating floor meets the requirements on page 2 of the relevant robust details® 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 robust details® 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 floors		
	E-FT-1		
	E-FT-2		
	E-FT-3		
	E-FT-4		
Separating walls	E-FT-5		
	E-FT-6	E-FC-2	
	E-FT-7	E-FC-18	
	E-FT-8	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 floors					
Separating walls	E-FC-2	E-FC-10	E-FC-18	E-FS-1	E-FS-2	E-FS-3
E-WS-1	W see note 1	w	W see note 1	W see note 1	~	~
E-WS-2	~	w	✓ see note 2	W	W	w
E-WS-3	w	w	w	W	W	w
E-WS-4	W see note 1	w	W see note 1	W see note 1	~	~
E-WS-5	~	~	~	W	W	w

Key for Table 3b and Table 3c

- F Only the separating floor requires pre-completion sound testing.
- W Only the separating wall requires pre-completion sound testing.
- 1 Lightweight steel and timber frame walls may be constructed above in-situ poured concrete floors. The lightweight walls built directly off the concrete floors may be registered as Robust Details provided:
- they meet all other requirements of the Robust Detail, including flanking constructions;
- the principles of the raft foundation junction are followed. As such, the concrete of the floor must have a mass of 365 kg/m² (min), and a floating floor treatment must be provided to shield the base of the wall, as shown in the Separating Wall junction in the floor Robust Detail;
- Walls constructed to the soffit of in-situ poured concrete floors cannot be registered as Robust Details and may be subject to pre-completion sound testing.
- 2 A floating screed must be installed up to the separating wall as shown in the separating floor detail.

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

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

Loadbearing masonry

E-WM-1	F1	E-WM-21	F1
E-WM-2	F1	E-WM-22	F1
E-WM-3	F1	E-WM-23	F1
E-WM-4	F1	E-WM-24	F1
E-WM-5	F1	E-WM-25	F1
E-WM-6	F1	E-WM-26	F1
E-WM-8	F1	E-WM-27	F1
E-WM-10	F1	E-WM-28	F1
E-WM-11	F1	E-WM-29	F1
E-WM-12	F1	E-WM-30	F1
E-WM-13	F1	E-WM-31	F1
E-WM-14	F1	E-WM-32	F1
E-WM-15	F1	E-WM-33	F1
E-WM-16	F1	E-WM-34	F1
E-WM-17	F1		
E-WM-18	F1		
E-WM-20	F1		

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

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

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

Timber frame

		5	
E-WT-1	F2	E-WS-1	F3
E-WT-2	F2	E-WS-2	F4
E-WT-3	F2	E-WS-3	F3
E-WT-4	F2	E-WS-4	F3
		E-WS-5	F4

Light steel frame

Key

- F1 Only the separating floor requires pre-completion testing provided the floor does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.
- F2 Only the separating floor requires pre-completion testing provided the floor is timber-based and does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.
- **F3** Only the separating floor requires pre-completion testing provided the wall is being used in a lightweight steel frame flat/apartment and the floor does not bridge the separating wall cavity. Otherwise both the wall and floor need testing.
- F4 Only the separating floor requires pre-completion testing provided the wall is being used in a concrete frame building and the floor has the required floor treatment (see notes under Table 3c). Otherwise both the wall and floor need testing.

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.

		BRIDGESTOP [®] system	Smartroof system	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Stewart Milne Sigma® Panel	NYTROOF RAPID FIT SYSTEM	Nu-Span Spantherm
Masonry	E-WM-1	~		~		✓		~	~
walls	E-WM-2	~		~		~		~	~
	E-WM-3	~	~	~	✓	✓		✓	~
	E-WM-4	~	~	~	~	✓		~	~
	E-WM-5	~	~	~	~	✓		~	~
	E-WM-6		~	~	v				~
	E-WM-8	~	~	~	~	✓		~	~
	E-WM-9								
	E-WM-10		~	~	✓				~
	E-WM-11	~	✓	~	✓	✓		~	~
	E-WM-12	~	~	~	✓	✓		~	~
	E-WM-13		~	~	✓				~
	E-WM-14	~	~	~	✓	✓		~	~
	E-WM-15		~	~	v				~
	E-WM-16	~	~	~	v	✓		~	~
	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	~	~	v				~
	E-WM-25			~					~
	E-WM-26	~	~	~	~	~		~	~
	E-WM-27	~	~	~	~	✓		~	~
	E-WM-28	~	~	~	~	✓		~	~
	E-WM-29			~					~
	E-WM-30	✓ see note 1	✓	~	~				~
	E-WM-31		✓	✓	~				~
	E-WM-32	~	~	~	~	✓		~	~
	E-WM-33	~	✓	~	~	✓		~	~
	E-WM-34	v	v	~	v	~		v	~

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

Key

 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 specific flanking constructions contained in Appendix A2

			nartroof ystem	Kingspan TEK	Prestoplan PresPeak 60	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Stewart Milne Sigma® Panel	Lightweight external cladding systems	Nu-Span Spantherm
Timber	E-WT-	1	~	~	✓	~	~		~	~	~
walls	E-WT-	2	~	~	✓	~	~	✓	v	~	v
	E-WT-	3	~			~	~				~
	E-WT-	4	~			~	~				~
Steel	E-WS-	1					~				v
walls	E-WS-	2									
	E-WS-	3									
	E-WS-	4				~					v
	E-WS-	5									

Introduction

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

	BRIDGESTOP [®] system	Kingspan TEK	Wall Cap RDA2	Private stairs
Concrete	E-FC-1	IER		Stans
floors	E-FC-1 E-FC-2		V	
	E-FC-2 E-FC-4		v	~
	E-FC-4		 	
	E-FC-6		 	v
	E-FC-7		 	
	E-FC-8		 	v
	E-FC-9		 	V
	E-FC-10		✓ see note 1	
	E-FC-11			v
	E-FC-12		 	
	E-FC-12 E-FC-13		 	
	E-FC-14		 	
	E-FC-14 E-FC-15		 	
	E-FC-15 E-FC-16		-	~
			V	
	E-FC-17		v	v
	E-FC-18			
 : 1	E-FC-19		V	v
Timber floors	E-FT-1		<u> </u>	
	E-FT-2			
	E-FT-3			
	E-FT-4			
	E-FT-5		<u> </u>	
	E-FT-6		<u> </u>	
	E-FT-7			
A	E-FT-8		v	
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 whichcan be used together with alternative productscontained in Appendix A3

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

Separating Wall – Cavity Masonry

E-WM-34

Plasmor "Aglite Ultima' lightweight aggregate blocks

Built-in or blown mineral wool insulation

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



DO

- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- If using blown fibres, ensure all injection holes are drilled through mortar joints, and made good by fully filling with mortar
- If using built-in insulation, ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions
- Keep any chases for services to a minimum and fill well with mortar.
 Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A

robustdetails®

E-WM-34

1. External (flanking) wall junction



2. Staggered external (flanking) wall junction



robust details[®] This guidance relates only to specific aspects of Part E (England & Wales) & Part G (Northern Ireland) 2 of 6

100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³ or blown mineral fibres with an installed density of max 25 kg/m³ Floor to comply with Building Regulations Requirement E2 Continuous horizontal ribbon of adhesive

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

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



Sketch shows timber joists built in

This guidance relates only to specific aspects of Part E (England & Wales) & Part G (Northern Ireland)

5. Separating floor junction



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



100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³ or blown mineral fibres with an installed density of max 25 kg/m³

Ground floor not continuous between dwellings

Ground floor construction:

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

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

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



Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

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

100mm mineral wool roll, quilt or batt with a density of 12-25 kg/m³ or blown mineral fibres with an installed density of max 25 kg/m³

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



CHECKLIST (to be completed by site manager/supervisor)

Corr	ipany:				
Site:					
Plot:	Site manager/supervisor:				
Ref. 1.	Item Is separating wall cavity min 100mm (built-in insulation)	Yes No (✔) (✔)	Inspected (initials & date)		
	or min 125mm (blown insulation)?				
2.	Is external (flanking) wall cavity at least 50mm?				
3.	Are separating wall blocks and external (flanking) wall blocks Plasmor "Aglite Ultima" 1050 kg/m ³ blocks?				
4.	Is cavity free from droppings and debris?				
5.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)?				
6.	Are cavity stops installed where specified in the Robust Detail?				
7.	Are joints fully filled?				
8.	For blown insulation, are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?				
9.	For built-in insulation, are insulation rolls tightly butted together?				
10.	Are voids around floor joists, chases, etc. fully filled/sealed?				
11.	Where there is a separating floor (e.g. flats/apartments) has the resilient flanking strip been installed?				
12.	Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?				
13.	Is separating wall satisfactorily complete?				
	ntact details for technical assistance from Plasmor, manufacturer of "Aglite Ult ephone: 01977 673221 Fax: 01977 607071 E-mail: knot	ima" lightweight t@plasmor.co			
Not	t es (include details of any corrective action)				
Site	manager/supervisor signature				

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С

е

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

1. Separating wall - direct support on raft а 3 b С 2 1 4 5 е

3. Insulated raft foundation

3

2

2. Separating wall - suspended floor with gas membrane а 3 b С 2 1 5



- Key
- 1 500mm wide (or 250mm where shown) MONARFLOOR® BRIDGESTOP® 3mm HP Acoustic Membrane laid under the party wall over the dpm. This is an integral part of the system.
- 2 MONARFLOOR® BRIDGESTOP® Quilt in two lifts to prevent mortar droppings touching both masonry leaves.
- 3 MONARFLOOR® BRIDGESTOP® Tie to penetrate at max 450mm centres. Ties are reversible. May also be used as render depth marker.
- 4 MONARFLOOR® 6mm Flanking Band forming a 90° angle to isolate floating floor treatment from separating wall blocks, lining and skirting board.
- 5 Continuous dpm over the raft where ground gasses are an issue. Contact Icopal for specification.

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

Contact details for Icopal-MONARFLOOR®: Telephone: 0161 866 6540 Fax: 0161 865 8433 E-mail: acoustics.uk@icopal.com

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

BRIDGESTOP® is the subject of Patent Application ref GB2429719

robustdetails[®]



Lightweight external cladding treatments for **robust**details[®] timber separating walls. Refer to Table 6 in Introduction. *Currently when used with separating floors in apartments, separating floors will require pre-completion testing.*

External (flanking) wall junction



Key

- 1 Cladding system (see Table below).
- Cladding support rails (timber or metal).
 Horizontal rails fixed directly to the wall structure must not be continuous across the separating wall.
- **3** Flexible cavity closer to fully close the cavity behind the cladding.
- a Separating wall. See chosen Robust Detail for specification.
- b Inner leaf of external wall. See chosen Robust Detail for specification.

Acceptable cladding types				
Render board	Systems having minimum 9mm rigid render board with minimum mass per unit area of 12.4 kg/m ² . It is acceptable to have multiple board layers.			

Flanking construction guidance for **robust**details[®] precast concrete separating floors around private stairs, where there are two flats (one above the other) and where stairs being open to the upper flat prevents the flanking condition published in the floor Robust Detail from being fully constructed. See Table 6b in the Introduction.

Typical stair arrangement



The area under the stairs must either form a cupboard or be fully enclosed. It is not acceptable to have the stairs soffit within a habitable room.

Stair soffit treatment - applies to both timber and





Section A - cavity walls



Alternative construction



This guidance relates only to specific aspects of Part E (England & Wales) & Part G (Northern Ireland)

robust details®





Section B - common junctions at stair landing

Edition 4 June 2021 Update This guidance relates only to specific aspects of Part E (England & Wales) & Part G (Northern Ireland)

Nu-Span and Spantherm pre-insulated ground floor concrete slabs for **robust**details[®] cavity separating walls. Refer to Table 6 in Introduction.

1. Slab installation - ground floor only





Timber and light steel frame walls

2. Slab components



Key

- Nu-Span or Spantherm pre-insulated slab, 300mm or 375mm deep.
 Slabs can be end-bearing or side-bearing.
- 2 Nominal 10mm self-levelling compound. Thicker screed layers are also acceptable.
- a robustdetails® separating wall. Refer to Table 6a in the Introduction and relevant Robust Detail in the Handbook
- b Maintain minimum cavity width specified for chosen robustdetails[®] separating wall. This can be insulated in accordance with the specification for the chosen wall type.

Contact details for Nu-Span:

Telephone: 01842 810445 E-mail: info@nu-span.com Web: www.nu-span.com

Contact details for Spantherm:

Telephone: 01636 831043 E-mail: spantherm@creaghconcrete.com Web: www.creaghconcrete.com