September 2016 Update Pack

Dear Colleague,

This is the first of the fully electronic updates to the Part E Robust Details Handbook.

As you may have seen on the recent email from us, the online Handbook has been amended to include the updates in this pack, but if you still have a hardcopy Handbook, please feel free to print off this pack (double-sided if you can), and insert the pages in your Handbook as described below.

In this update pack, we are pleased to include a further new wall type, **E-WM-30**. This is an aircrete block wall with a minimum 100mm cavity fully-filled with Knauf Party Wall Wool blown insulation, and has a gypsum board finish. This wall has demonstrated consistent performance at 5 dB improvement on Building Regulations. Please see the ratings tables on our website.

Additionally, Cellecta's E-FT-5 and E-FT-6 floors are now approved for use without the secondary ceiling. However, to use this new ceiling option, you must use the Cellecta HP30 resilient bars. Following this amendment, E-FT-5 will retain the 1 Code for Sustainable Homes credit, but E-FT-6 will no longer be eligible for Code credits. (E-FT-6 previously achieved 1 credit, but on top-floor flats only).

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

- 1. Remove and replace all pages of the Introduction.
- 2. Insert the new Robust Detail E-WM-30 to the end of the Separating Walls, Masonry section.
- 3. Remove and replace all pages of E-FT-5.
- 4. Remove and replace all pages of E-FT-6.

Yours sincerely

John Tebbit

Chief Executive.

Robust Details Limited

Changes to the fourth edition following September 2016 update

Section Page Amendment

Introduction

Table 1 3 New Robust Detail separating wall

E-WM-30 added.

Table 3a 6 New Robust Detail separating wall

E-WM-30 added with valid

combinations.

Table 4 8 New Robust Detail separating wall

E-WM-30 added with relevant

notes.

Table 6a 9 New Robust Detail separating wall

E-WM-30 added with valid

combinations.

Separating Wall - Masonry

E-WM-30

All 1-6

1-6 New Robust Detail separating wall added – Aircrete blockwork Knauf Party Wall Wool (gypsum-based board) with 100mm minimum cavity.

Separating Floor – Timber

E-FT-5

Isometric 1 Second ceiling removed from

illustration.

Sections 1-4 2-3 Second ceiling removed from

illustrations; resilient bars replaced

with HP30 bars.

Section 5 4 Page reformatted to include new

ceiling option CT3.

Sections 6-7 5 Second ceiling removed from

illustrations; resilient bars replaced

with HP30 bars.

Checklist 6 Notes added relating to new ceiling

option CT3.

E-FT-6

Isometric 1 Second ceiling removed from

illustration.

Sections 1-8 2-5 Second ceiling removed from

illustrations; resilient bars replaced

with HP30 bars.

Section 9 6 Page reformatted to include new

ceiling option CT3.

Sections 10-11 7 Second ceiling removed from

illustrations; resilient bars replaced

with HP30 bars.

Checklist 8 Notes added relating to new ceiling

option CT3.

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

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

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

The tables on pages 5, 6 and 7 show which 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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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
imber walls	E-WT-1	_	
	E-WT-2	_	
	E-WT-4	_	
imber floors	E-FT-1	_	
	E-FT-2	_	
	E-FT-3	_	
		_	
	E-FT-5		
	E-FT-5 E-FT-6	_	
		- -	
		_ _	

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) 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
E-WM-30	masonry - aircrete blockwork Knauf Party Wall Wool (gypsum-based board) with 100mm minimum cavity

See over for timber and steel frame walls

List of Robust Details

Table 1 (continued) - Separating walls

E-WT-1	timber frame - without sheathing board
E-WT-2	timber frame - with sheathing board
E-WT-3	timber frame - Elecoframe prefabricated panels
E-WT-4	timber frame - Excel Industries Warmcell 500 insulation - with sheathing board
E-WS-1	steel frame – twin metal frame
E-WS-2	steel frame – British Gypsum Gypwall QUIET IWL
E-WS-3	steel frame – modular steel frame housing
E-WS-4	steel frame – twin metal frame - 250mm between linings

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

Table 3a - Combinations of Robust Details separating walls and floors for flats/apartments in loadbearing masonry constructions

		Separating floors					
		E-FC-1	E-FC-14	l	1		
		E-FC-11	E-FC-15				E-FC-8
Separa	ting walls	E-FC-12	E-FC-16			E-FC-6	E-FC-9
		E-FC-13	E-FC-17	E-FC-4	E-FC-5	E-FC-7	E-FC-10
E-WM-1	E-WM-16		,	V	V	V	V
E-WM-3	E-WM-18	V	•	•	•	V	•
E-WM-2	E-WM-20						
E-WM-4	E-WM-21	~					
E-WM-5	E-WM-26			/	~	F	V
E-WM-8	E-WM-27	ľ		•	•	•	•
E-WM-11	E-WM-28						
E-WM-14							
E-WM-6	E-WM-23						
E-WM-10	E-WM-24	F	:	/	✓ see note 1	F	V
E-WM-13	E-WM-30	·		•	→ Sections I	•	•
E-WM-15							
E-WM-12		F		V	F	F	F
E-WM-17	E-WM-22	✓ see	note 2	V	✓ see note 2	F	✓ see note 2
E-WM-25	E-WM-29	F		F	F	F	F

- **F** Only the separating floor requires pre-completion sound testing.
- Where this combination is selected, 200mm (min) thick precast concrete planks and ceiling treatment CT5 must be used.
- 2 This combination can only be selected where the construction does not include Plasmor Aglite Ultima blocks (1050 kg/m³).

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

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

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

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

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

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

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

	Separating floors		
	E-FT-1		
	E-FT-2		
	E-FT-3		
	E-FT-4		
Separating walls	E-FT-5		
	E-FT-6		
	E-FT-7	E-FC-2	
	E-FT-8	E-FS-1	
E-WT-1	V	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-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.

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

Loadbearing masonry

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

Timber frame

E-WM-20

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

9	•		
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-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

Light steel fra	ıme
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	V				~		
	E-WM-2	✓				/		
	E-WM-3	~	✓			~	/	
	E-WM-4	V	/			~	✓	
	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	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	✓			✓	✓	
	E-WM-25					/		
	E-WM-26	V	/			✓	/	✓
	E-WM-27	✓	✓			✓	✓	
	E-WM-28	~	✓			/	✓	
	E-WM-29					/		
	E-WM-30	see note 1	/			/	/	

Key

See over for timber and steel frame walls

When constructing these walls off raft foundations, the raft must have insitu concrete with 150mm minimum thickness.

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	E-WT-1		✓	✓	~	~	✓	
walls	E-WT-2		/	~	V	~	✓	~
	E-WT-3		/			~	✓	
	E-WT-4		/			~	✓	
Steel	E-WS-1					/		
walls	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	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					/		

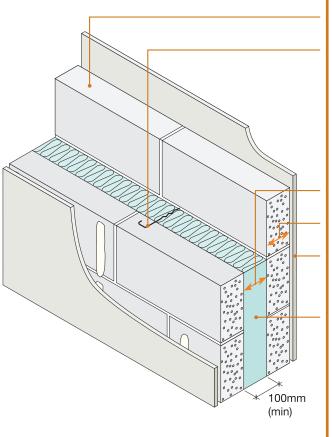
Key

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	Insumate insulation
		GypFloor	tray
Concrete	E-FC-1	V	
floors	E-FC-2	V	
	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	E-FT-1		✓
floors	E-FT-2		~
	E-FT-3		V
	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		

- Aircrete blocks standard and thin joint ■
- Knauf Insulation Supafil® Party Wall blown glass mineral wool insulation
 - Gypsum-based board (nominal 8 kg/m²) on dabs ■



Block density 600 to 800 kg/m³

Wall ties Approved Document E 'Tie

type A' (see Appendix A)
For thin joint, wall ties must
be Ancon Building Products
Staifix HRT4 or Clan PWT4
installed at no more than
2.5 ties per square metre

Cavity width 100mm (min)

Block thickness 100mm (min), each leaf

Wall finish Gypsum-based board

(nominal 8 kg/m²) mounted

on dabs

Insulation Knauf Supafil® Party Wall

blown glass mineral wool

insulation

External Masonry (both leaves) with (flanking) wall 50mm (min) cavity – clear,

50mm (min) cavity – clear, fully filled or partially filled

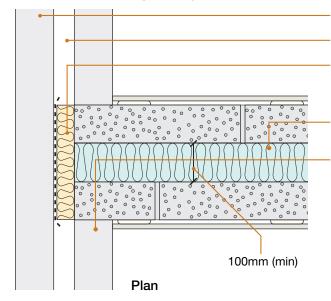
with insulation

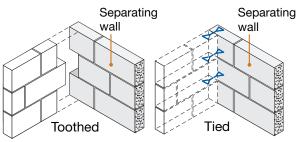
DO

- Keep cavity 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
- Supafil® Party Wall is only to be installed by contractors approved by Knauf Insulation; and must not exceed 25 kg/m³ density once installed

- Ensure all injection holes are drilled through mortar joints, and made good by fully filling with mortar
- Keep any chases for services to a minimum and fill well with mortar.
 Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A

1. External (flanking) wall junction





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)

Supafil® Party Wall

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

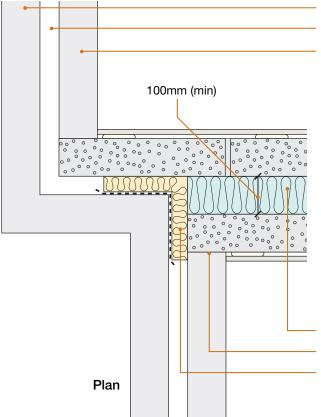
- 100mm (min) aircrete block (450 kg/m³ to 800 kg/m³)
- internal finish 13mm plaster or nominal 8 kg/m² gypsum-based board

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

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

Tooth or tie walls together

2. Staggered external (flanking) wall junction



Masonry outer leaf

External wall cavity (min 50mm)

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

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

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

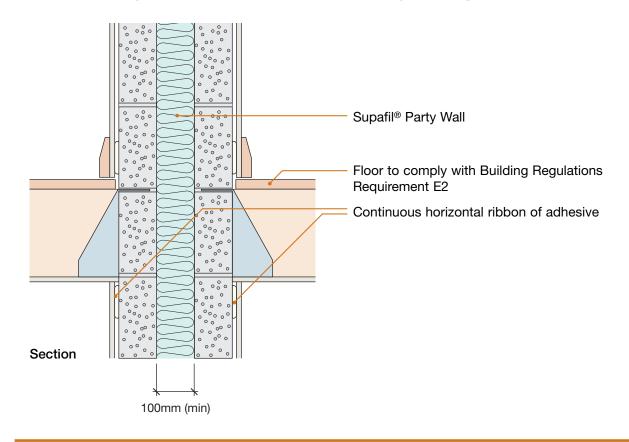
- if using robustdetails® for floor, refer to Table 3a in introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- if using floor requiring pre-completion testing, seek specialist advice

Supafil® Party Wall

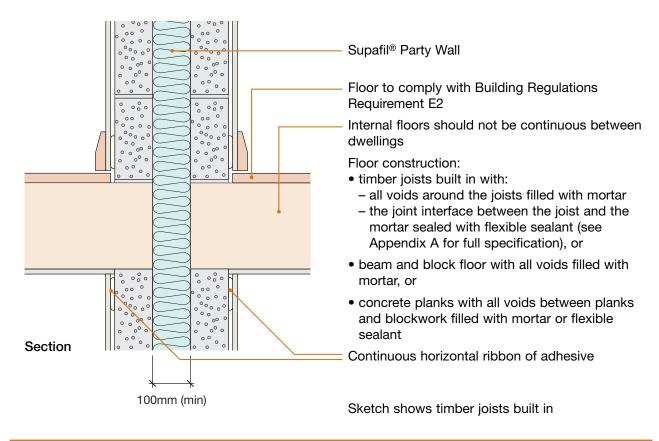
Tooth or tie walls together

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

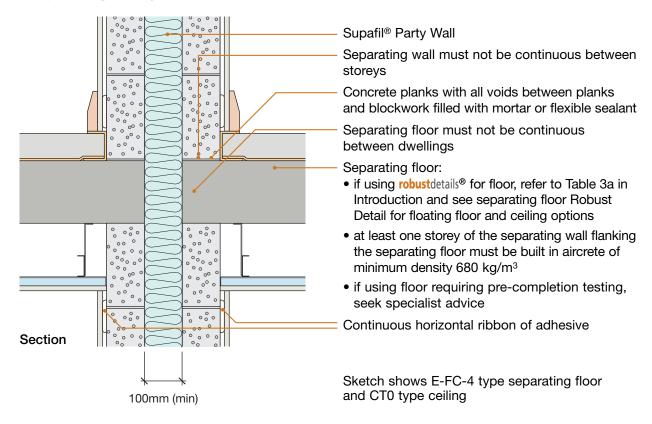
3. Internal floor junction: timber floor supported on joist hangers



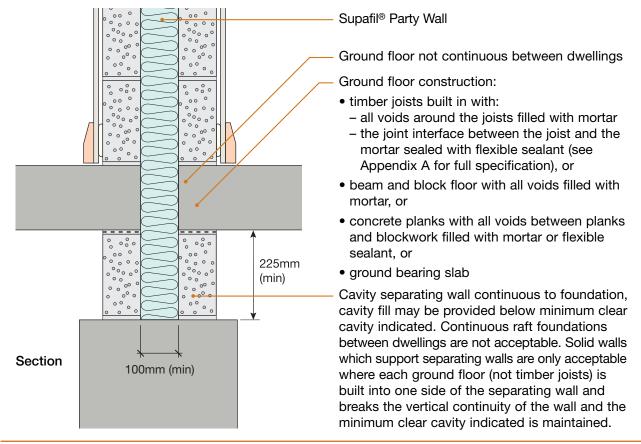
4. Internal floor junction: timber floor joists built in, beam and block or precast concrete



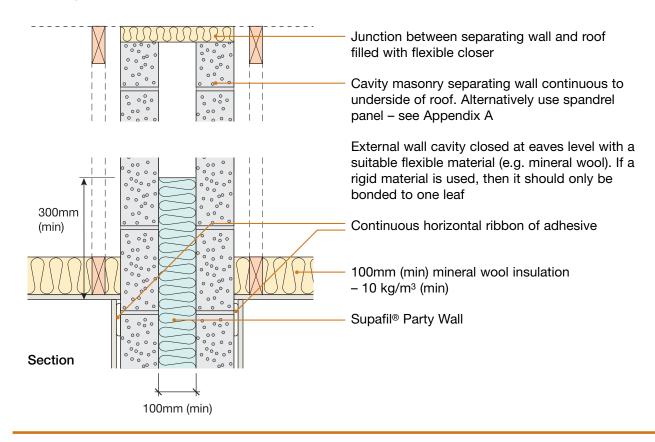
5. Separating floor junction



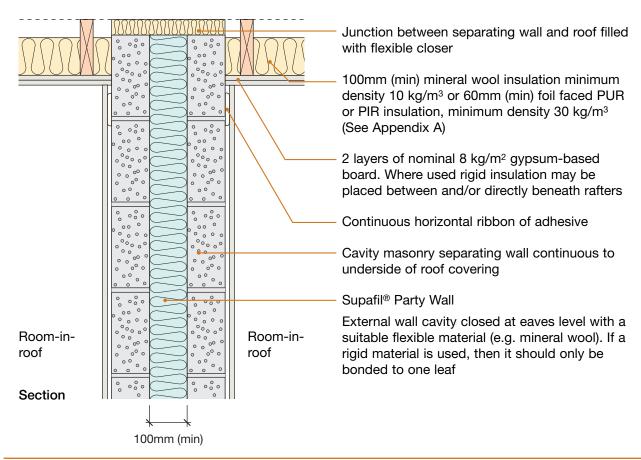
6. Ground floor junction: timber floor, beam and block, precast concrete plank, cast in-situ suspended concrete slab or ground bearing concrete slab



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



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



CHECKLIST (to be completed by site manager/supervisor)

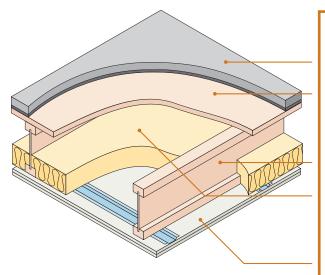
Com	pany:			
Site:				
Plot	Site manager/supervisor:			
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Is separating wall cavity at least 100mm?	()	()	(initials & date)
2.	Is external (flanking) wall cavity at least 50mm?			
3.	Are separating wall blocks aircrete (600 to 800 kg/m³)?			
4.	Is cavity free from droppings and debris?			
5.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)? For thin joint, are wall ties Ancon Staifix HRT4 or Clan PWT4 installed at no more than 2.5 ties per square metre?			
6.	Are cavity stops installed where specified in the Robust Detail?			
7.	Are joints fully filled?			
8.	Is blue Supafil [®] Party Wall installed to a maximum density of 25 kg/m³, and was it by an approved installer?			
9.	Are all injection holes drilled through the mortar joints, and made good by fully filling with mortar?			
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 Knauf Insulation Ltd, manufacturer cephone: 01744 766 666 E-mail: technical.uk@knaufinsulation	-	il® Party	Wall:
	tes (include details of any corrective action) manager/supervisor signature			
Site	managor/saporvisor signature	• •		

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



Floating floor Cellecta® ScreedBoard® 28

Floor decking 18mm thick (min) wood

based board, density

600 kg/m³ (min)

Joists 240mm (min) timber I-joist

Absorbent 100mm (min) mineral wool material quilt insulation (10-36 kg/m³)

between joists

Ceiling See section 5 for ceiling

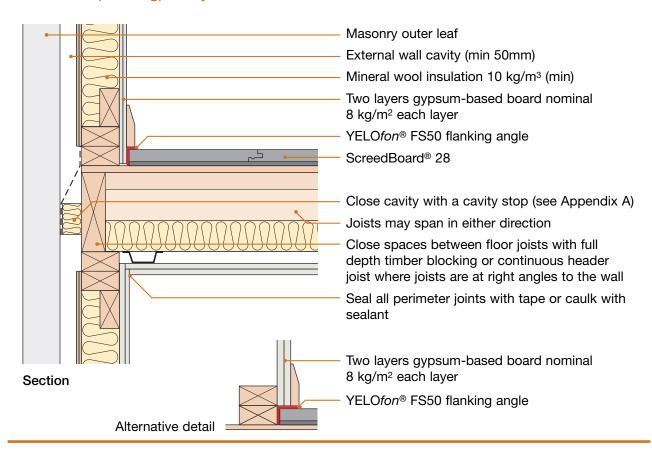
treatment

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

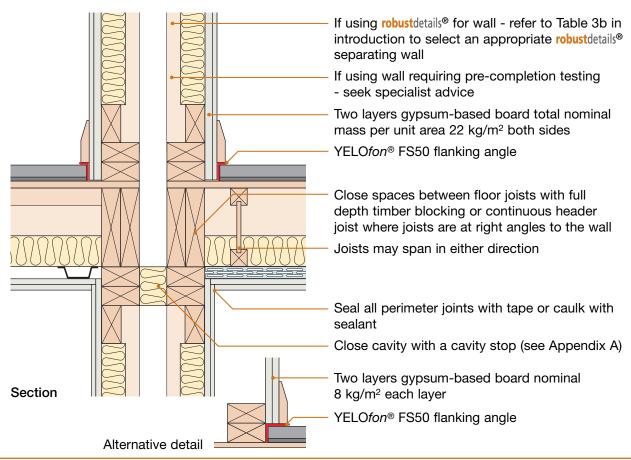
DO

- Lay quilt (min 100mm thick) between all joists, including doubled up timber I-joists, ensuring no gaps remain
- Apply Cellecta® SB adhesive to all ScreedBoard® 28 decking joints
- Install Cellecta® YELOfon® FS50 flanking angle around the perimeter of the ScreedBoard® 28 to isolate floor from walls and skirtings
- Ensure resilient ceiling bars are fixed at right angles to the joists
- Ensure ceiling treatment is fixed correctly (see section 5)
- Stagger joints in ceiling layers
- Refer to Appendix A

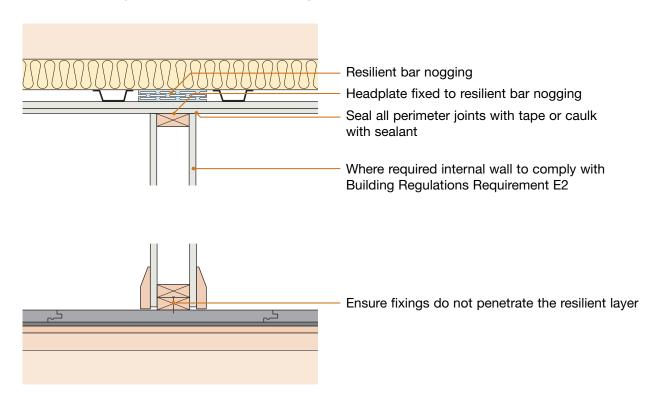
1. External (flanking) wall junction



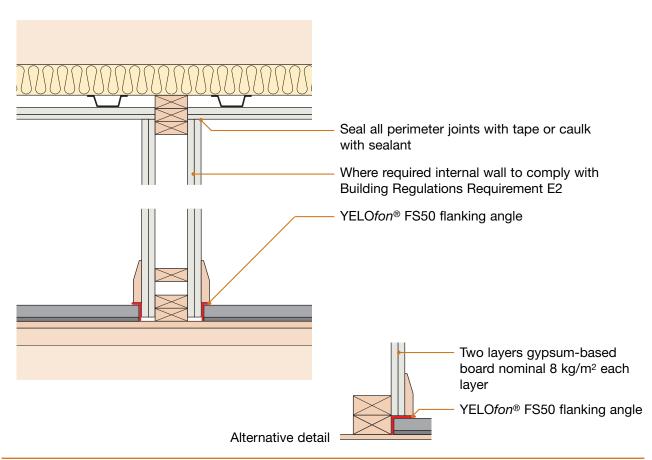
2. Separating wall junction



3. Internal wall junction (non loadbearing)



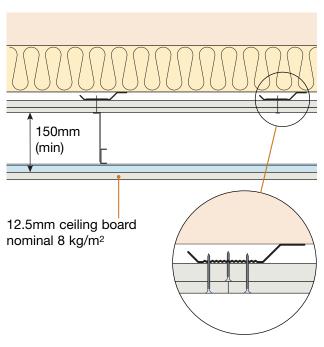
4. Internal wall junction (loadbearing)



5. Ceiling treatment for E-FT-5

- The maximum load on resilient bars should not exceed that specified in the manufacturer's instructions
- Ensure ceiling layers have staggered joints.
- Services must not puncture ceiling linings (except cables, which should be sealed around with flexible sealant)

CT1 and CT2 - Must include second ceiling



CEILING BOARD FIXINGS MUST NOT PENETRATE OR TOUCH JOISTS

16mm (min) resilient bars with CT1 and CT2

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of $rd\Delta Rw+Ctr=17dB$ and $rd\Delta Lw=16dB$) – see Appendix E

Ceiling treatment CT1

Two layers of gypsum-based board, composed of 19mm (nominal 13.5 kg/m²) fixed with 32mm screws, and 12.5mm (nominal 10 kg/m²) fixed with 42 mm screws

Ceiling treatment CT2

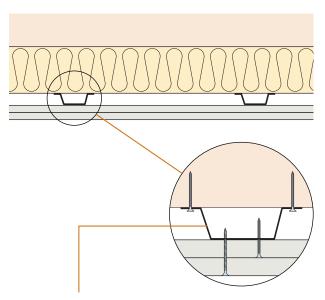
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the second ceiling in accordance with the manufacturer's instructions

Particular attention should also be paid to Building Regulations Part B - Fire Safety

CT3 - Optional second ceiling



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

Ceiling treatment CT3

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

Downlighters and recessed lighting

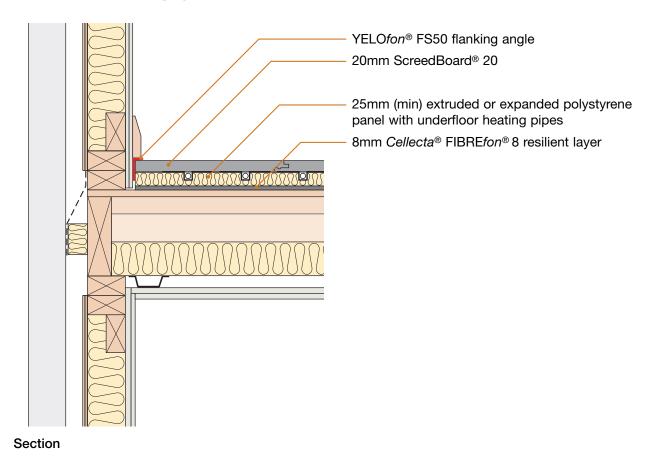
Downlighters or recessed lighting may be installed in the primary ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room unless the use of a greater density of light fittings is supported by testing undertaken in accordance with Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

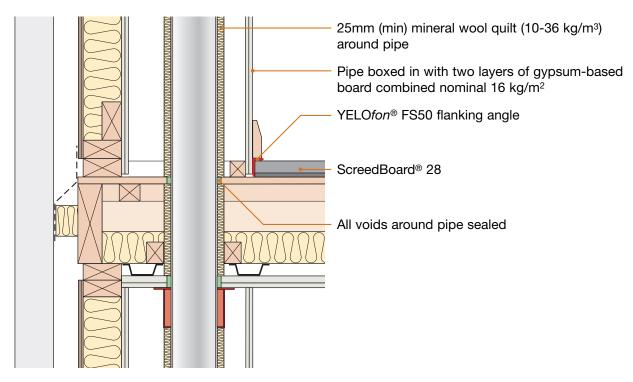
Particular attention should also be paid to Building Regulations Part B - Fire Safety

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

6. Undefloor heating systems below ScreedBoard®



7. Services - pipes through separating floor



Section

CHECKLIST (to be completed by site manager/supervisor)

Com	npany:					
Site:						
Plot	<u>:</u>	Site manager/supervisor:				
Ref.	Item			Yes (✔)	_	Inspected (initials & date)
1.	Are timber I-joists m	inimum 240mm deep?				(iiiiiaio a dato)
2.	Is sub-deck minimur	m 18mm, 600 kg/m³?				
3.	Are YELOfon® FS50	flanking angles installed correctly?				
4.		d [®] 28 floating floor treatment been he manufacturer's instructions?	fitted			
5.	Where underfloor he addition to the Screen	ating is used, is FIBRE <i>fon</i> ® 8 instaledBoard® 20?	led in			
6.	accordance with the	of resilient ceiling bars used and fit manufacturer's instructions, at right Cellecta® HP30 bars must be used tincluded)?	nt			
7.	Has quilt (min 100m	m thick) been fitted between the join	ists?			
8.	_	nents fixed to the resilient bars with a that the screws do not touch or	ו			
9.	For CT1 or CT2 is se	econdary ceiling void minimum 150	mm?			
10.	Are all joints sealed	with tape or caulked with sealant?				
11.	-	pipes wrapped in quilt and boxed in m-based board combined nominal of g/m ² ?				
12.	Is separating floor sa	atisfactorily complete?				
Cor	ntact details for technical	assistance from <i>Cellecta®</i> , manufacturer c	of ScreedBo	ard® 28	3 systen	า:
Tel	ephone: 01634 29667	7 Fax: 01634 226630 E-n	nail: techr	nical@	cellect	a.co.uk
	·	any corrective action)				

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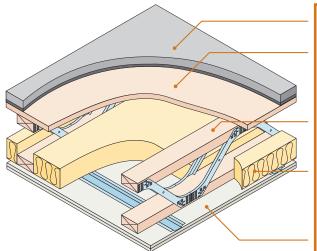
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- Timber flange and metal web joists
 - Use with timber frame walls only ■

See section 9 for suitable

ceiling treatment



Floating floor	Cellecta® ScreedBoard® 28
Floor decking	18mm thick (min) wood based board, density min 600 kg/m ³
Joists	253mm (min) metal web joists (see joist type below)
Absorbent material	100mm (min) mineral wool quilt insulation (10–36 kg/m³) between joists

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.

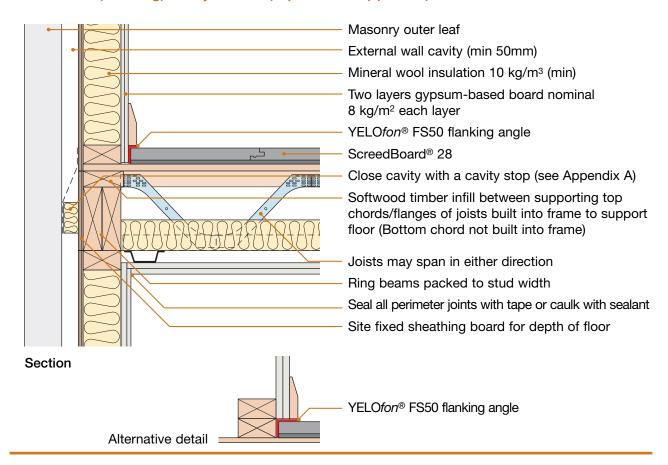
Metal web joists can be **top chord/flange** supported or **fully built-in** and supported on the panel and this is permitted, however, all dimension specifications within this Robust Detail must be adhered to.

DO

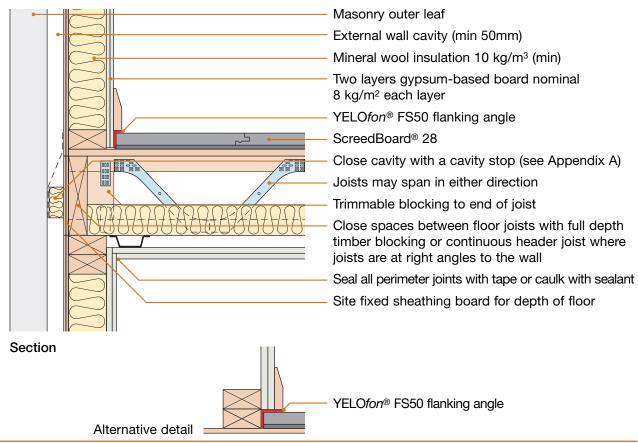
Ceiling

- 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 Cellecta® YELOfon® 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

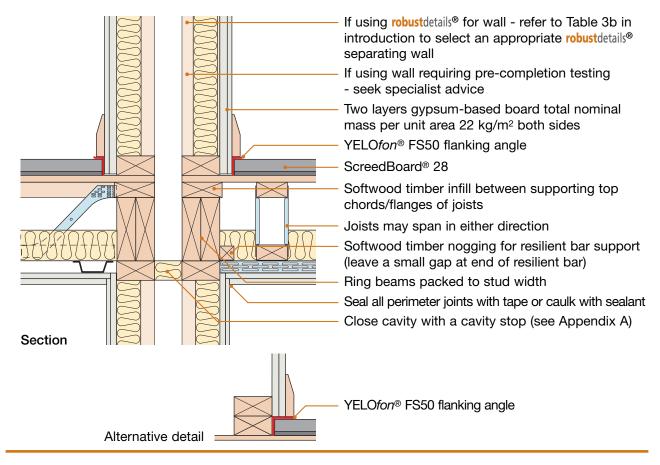
1. External (flanking) wall junction (top chord supported)



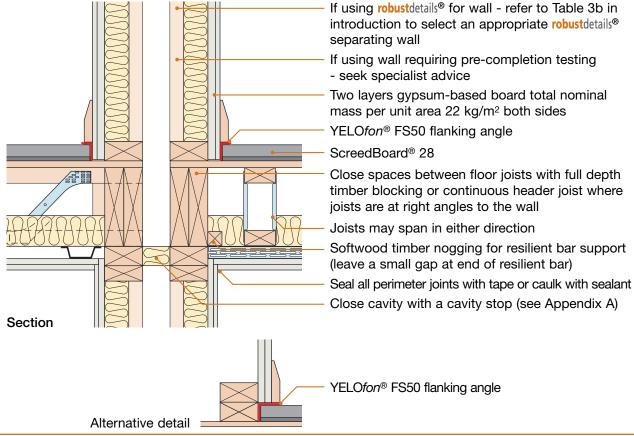
2. External (flanking) wall junction (fully built-in)



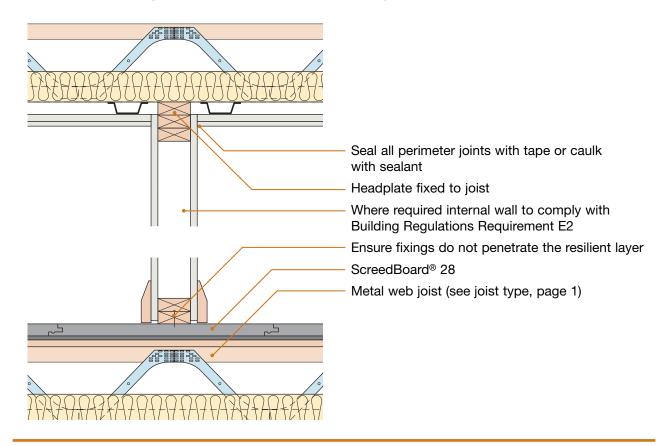
3. Separating wall junction (top chord supported)



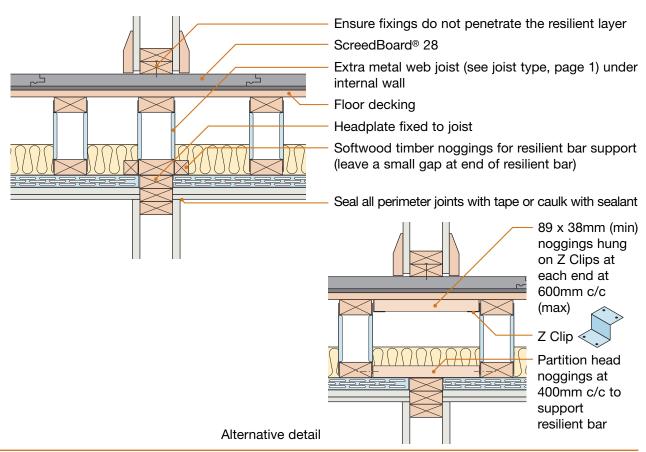
4. Separating wall junction (fully built-in)



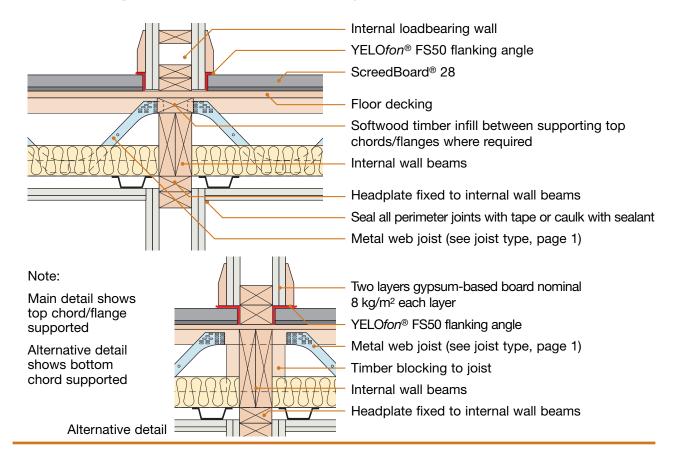
5. Non loadbearing internal wall perpendicular to joists



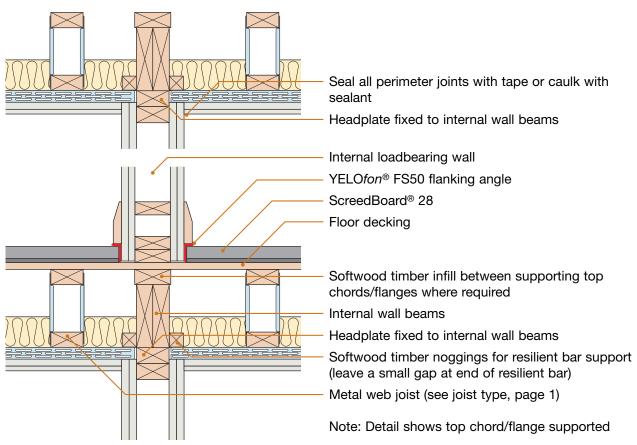
6. Non loadbearing internal wall parallel to joists



7. Loadbearing internal wall perpendicular to joists



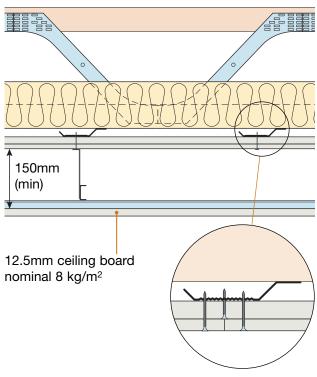
8. Loadbearing internal wall parallel to joists



9. Ceiling treatment for E-FT-6

- The maximum load on resilient bars should not exceed that specified in the manufacturer's instructions
- Ensure ceiling layers have staggered joints.
- Services must not puncture ceiling linings (except cables, which should be sealed around with flexible sealant)

CT1 and CT2 - Must include second ceiling



CEILING BOARD FIXINGS MUST NOT PENETRATE OR TOUCH JOISTS

16mm (min) resilient bars with CT1 and CT2

16mm (min) metal resilient ceiling bars mounted at right angles to the joists at 400mm centres (bars must achieve a minimum laboratory performance of $rd\Delta Rw+Ctr=17dB$ and $rd\Delta Lw=16dB$) – see Appendix E

Ceiling treatment CT1

Two layers of gypsum-based board, composed of 19mm (nominal 13.5 kg/m²) fixed with 32mm screws, and 12.5mm (nominal 10 kg/m²) fixed with 42 mm screws

Ceiling treatment CT2

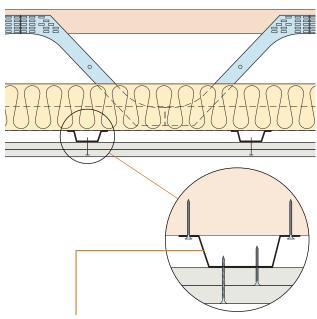
Two layers of gypsum-based boards composed of 15mm (nominal 12.5 kg/m²) fixed with 25mm screws and second layer of 15mm gypsum-based board (nominal 12.5 kg/m²) fixed with 42mm screws

Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the second ceiling in accordance with the manufacturer's instructions

Particular attention should also be paid to Building Regulations Part B - Fire Safety

CT3 - Optional second ceiling



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

Ceiling treatment CT3

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

Downlighters and recessed lighting

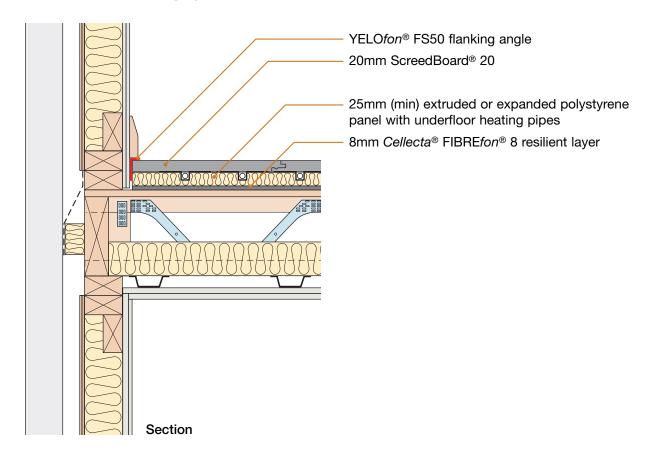
Downlighters or recessed lighting may be installed in the primary ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m² of ceiling area in each room unless the use of a greater density of light fittings is supported by testing undertaken in accordance with Appendix F
- at centres not less than 0.75m
- into openings not exceeding 100mm diameter or 100x100mm

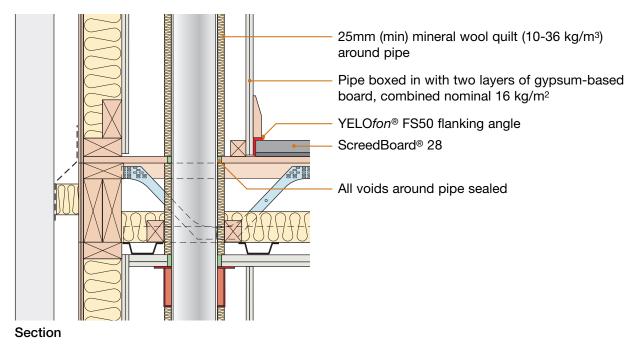
Particular attention should also be paid to Building Regulations Part B - Fire Safety

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

10. Underfloor heating systems below ScreedBoard®



11. Services - pipes through separating floor



Sketch shows top chord supported external (flanking) wall junction detail, for fully built-in arrangement see section 2

CHECKLIST (to be completed by site manager/supervisor)

Con	npany:				
Site					
Plot	:	Site manager/supervisor	:		
Ref.	Item			Yes No	Inspected (initials & date)
1.	Are correct metal we Robust Detail)?	b joists being used (see page 1 o	of		(illinate of date)
2.	Which of the permitte	ed metal web joist types are beir	ng used?		
3.	Are joists at least 25	53mm deep?			
4.	Are YELOfon® FS50				
5.		rd® 28 floating floor treatment be the manufacturer's instructions			
6.	Where underfloor he addition to the Scre	eating is used, is FIBRE <i>fon</i> ® 8 in edBoard® 20?	nstalled in		
7.	accordance with the	of resilient ceiling bars used a e manufacturer's instructions, a (Cellecta® HP30 bars must be u t included)?	t right		
8.	Has quilt (min 100m	m thick) been fitted between th	ne joists		
9.	_	ments fixed to the resilient bars h that the screws do not touch ?			
10.	For CT1 or CT2 is s	econdary ceiling void minimum	150mm?		
11.	Are all joints sealed	with tape or caulked with seals	ant?		
12.		pipes wrapped in quilt and box m-based board combined nom kg/m²?			
13.	Is separating floor s	atisfactorily complete?			
Coi	ntact details for technical	assistance from Cellecta®, manufact	urer of ScreedBo	oard® 28 systen	n:
	ephone: 01634 29667	77 Fax: 01634 226630	E-mail: techi	nical@cellect	a.co.uk

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