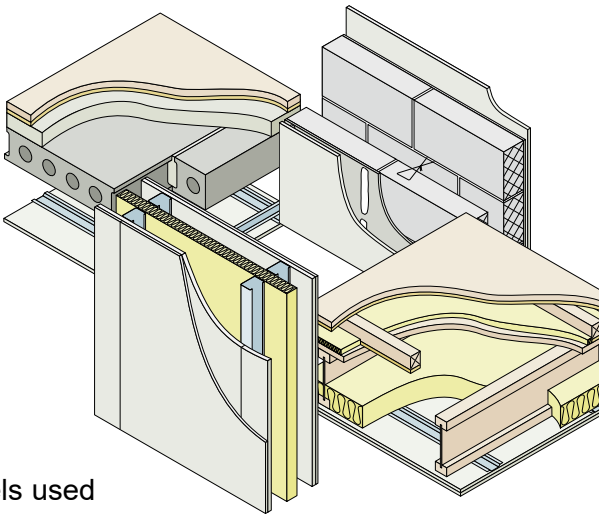
April 2022 Update Pack



Dear Colleague,

Thank you for downloading this April update, the first of 2022.

This update brings one specification change, in that the spandrels used in conjunction with E-WM-31 can now be lined with a single layer of Fermacell as an alternative to the 2 layers of gypsum board.

There are also a number of product name changes also made: Elecoframe's E-WT-3 is now manufactured under the Openwall name, and two flanking conditions in Appendix A2 are also being produced under different names: Stewart Milne Timber Systems Sigma® Roof Spandrel Panel System now comes from Donaldson Timber Systems; and **NYT**ROOF *RAPID FIT SYSTEM* has been rebranded and is provided by **NTS**ROOF.

And additionally, we have restructured the text relating to putty pads in the light-frame walls to give added clarity on their purpose.

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

1. Remove and replace **pages 3/4** and **9/10** of the Introduction.
2. Remove and replace **page 5/6** of E-WM-31.
3. Remove and replace **page 7/8** of E-WT-1.
4. Remove and replace **page 7/8** of E-WT-2.
5. Remove and replace **all pages** of E-WT-3.
6. Remove and replace **page 5/6** of E-WT-4.
7. Remove and replace **page 5/6** of E-WS-1.
8. Remove and replace **page 7/8** of E-WS-2.
9. Remove and replace **page 9/10** of E-WS-5.
10. Remove and replace **pages 1/2 and 9/10** of Appendix A2.

Yours sincerely

John Thompson

Chief Executive,
Robust Details Limited

Changes to the fourth edition following April 2022 update

Section	Page	Amendment
Introduction		
Table 1	4	E-WT-3 renamed as Openwall prefabricated panels.
Table 6a	9	**NYT**ROOF *RAPID FIT SYSTEM* renamed **NTS**ROOF *RAPID FIT SYSTEM*.
		Stewart Milne Sigma® Panel renamed Donaldson Timber Systems Single Leaf Spandrel.
	10	**NTS**ROOF *RAPID FIT SYSTEM* added with applicable combinations.
		Stewart Milne Sigma® Panel renamed Donaldson Timber Systems Single Leaf Spandrel.
Separating Wall – Masonry		
E-WM-31		
Spandrels	5-6	Note added regarding the linings for the spandrels panels
Separating Wall – Timber		
E-WT-1		
Services	10	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.
E-WT-2		
Services	7	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.
E-WT-3		
Bullet points	1	1st point amended to new company name of Openwall.
Isometric	1	Timber battens introduced to break continuity of rigid insulation.
Frame construction	1	Identification label amended to new company name of Openwall.
Flanking wall junctions	2	Timber battens introduced to break continuity of rigid insulation.
Services	6	Note added referencing putty pads and other proprietary liners.
Checklist	8	Name changed to Openwall on first check item.
		Contact details amended.
E-WT-4		
Services	6	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.

Section	Page	Amendment
Separating Wall – Steel		
E-WS-1		
Services	6	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.
E-WS-2		
Services	6	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.
E-WS-5		
Services	10	Text reordered to clarify putty pads are an alternative to just the 2 layers of gypsum board.
Appendix A2		
Contents	1	Stewart Milne Timber Systems Sigma® Roof renamed Donaldson Timber Systems Single Leaf.
		NYTROOF *RAPID FIT SYSTEM* renamed **NTS**ROOF *RAPID FIT SYSTEM*.
Donaldson timber spandrel	9	Stewart Milne Timber Systems Sigma® Roof renamed Donaldson Timber Systems Single Leaf.
		Contact details amended.
RAPID FIT SYSTEM	10	Heading amended to include name changed to **NTS**ROOF; and reference to timber walls.
		Diagram 1 amended to show guidance for use on timber frame walls.
		Diagram 2 amended to show joist positions.
		Contact details amended.

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) 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

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 – Openwall 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

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

		BRIDGESTOP® system	Smartroof system	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Donaldson Timber Single Leaf Spandrel	**NTS**ROOF *RAPID FIT SYSTEM*	Nu-Span Spantherm
Masonry walls	E-WM-1	✔		✔		✔		✔	✔
	E-WM-2	✔		✔		✔		✔	✔
	E-WM-3	✔	✔	✔	✔	✔		✔	✔
	E-WM-4	✔	✔	✔	✔	✔		✔	✔
	E-WM-5	✔	✔	✔	✔	✔		✔	✔
	E-WM-6		✔	✔	✔				✔
	E-WM-8	✔	✔	✔	✔	✔		✔	✔
	E-WM-9								
	E-WM-10		✔	✔	✔				✔
	E-WM-11	✔	✔	✔	✔	✔		✔	✔
	E-WM-12	✔	✔	✔	✔	✔		✔	✔
	E-WM-13		✔	✔	✔				✔
	E-WM-14	✔	✔	✔	✔	✔		✔	✔
	E-WM-15		✔	✔	✔				✔
	E-WM-16	✔	✔	✔	✔	✔		✔	✔
	E-WM-17	✔	✔	✔	✔	✔		✔	✔
	E-WM-18	✔		✔		✔		✔	✔
	E-WM-19	✔ see note 1				✔		✔	
	E-WM-20	✔	✔	✔	✔	✔		✔	✔
	E-WM-21	✔		✔		✔		✔	✔
	E-WM-22	✔	✔	✔	✔	✔		✔	✔
	E-WM-23	✔ see note 1	✔	✔	✔				✔
	E-WM-24	✔ see note 1	✔	✔	✔				✔
	E-WM-25			✔					✔
	E-WM-26	✔	✔	✔	✔	✔		✔	✔
	E-WM-27	✔	✔	✔	✔	✔		✔	✔
	E-WM-28	✔	✔	✔	✔	✔		✔	✔
	E-WM-29			✔					✔
	E-WM-30	✔ see note 1	✔	✔	✔				✔
	E-WM-31		✔	✔	✔				✔
	E-WM-32	✔	✔	✔	✔	✔		✔	✔
	E-WM-33	✔	✔	✔	✔	✔		✔	✔
	E-WM-34	✔	✔	✔	✔	✔		✔	✔

Key

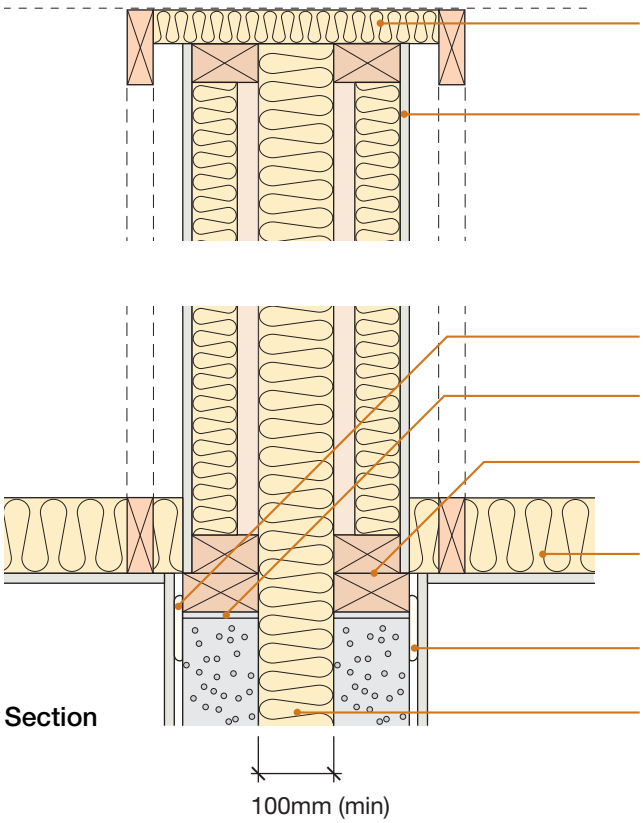
1 When constructing these walls off raft foundations, the raft must have insitu concrete with 150mm minimum thickness.

See over for timber and steel frame walls

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

		Smartroof system	Kingspan TEK	Prestoplan PresPeak 60	Wall Cap RDA2	RoofSpace I-Roof	Space4 system	Donaldson Timber Single Leaf Spandrel	**NTS**ROOF *RAPID FIT SYSTEM*	Lightweight external cladding systems	Nu-Span Spantherm
Timber walls	E-WT-1	✔	✔	✔	✔	✔		✔	✔	✔	✔
	E-WT-2	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
	E-WT-3	✔			✔	✔					✔
	E-WT-4	✔			✔	✔					✔
Steel walls	E-WS-1					✔					✔
	E-WS-2										
	E-WS-3										
	E-WS-4				✔						✔
	E-WS-5										

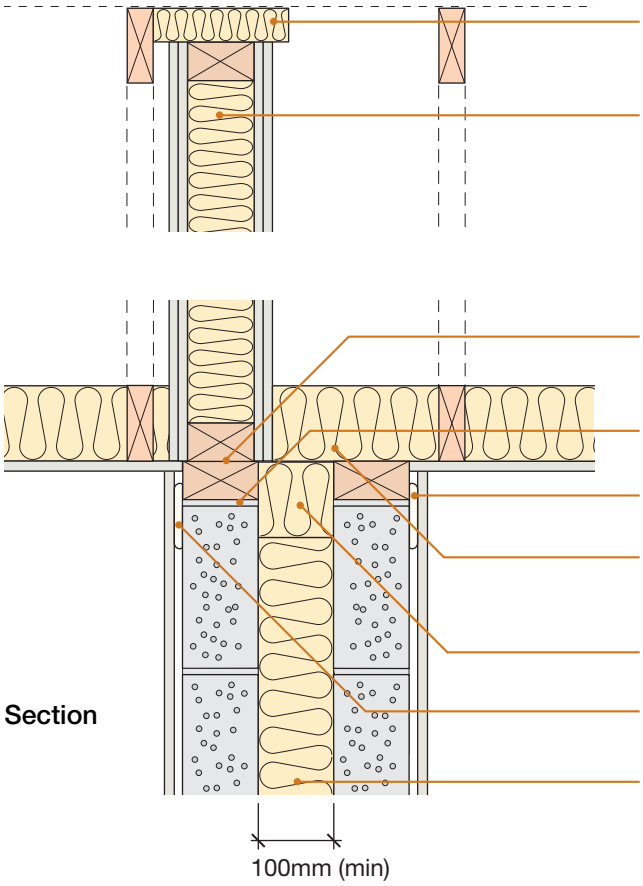
7. Roof junction – pitched roof without room-in-roof



Section

- Junction between separating wall and roof filled with flexible closer
- RoofSpace I-Roof™ spandrel panel lined with 2 layers of 8 kg/m² gypsum board, or 1 layer 15mm Fermacell
- 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
- Wall plate bedded on min. 2mm thin-joint mortar
- Spandrel panels to be bedded on flexible sealant or mineral wool strips
- 100mm (min) mineral wool insulation – 10 kg/m³ (min)
- Continuous horizontal ribbon of adhesive
- 100mm mineral wool max. 40 kg/m³ (no gaps to remain)

Alternative detail with single spandrel panel



Section

- Junction between separating wall and roof filled with flexible closer
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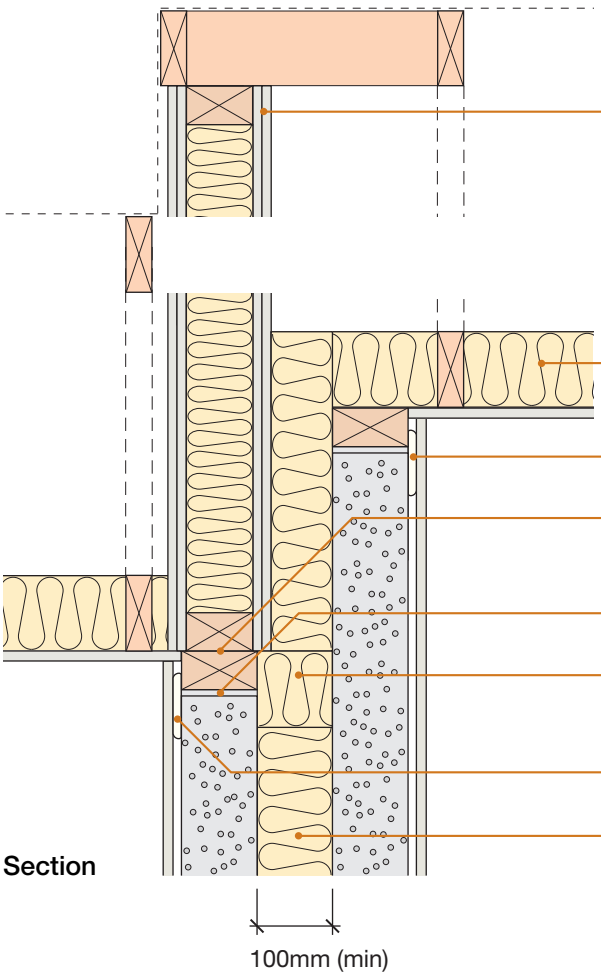
- External wall cavity closed at eaves level with a suitable flexible material (e.g. mineral wool). If a rigid material is used, then it should only be bonded to one leaf
- Spandrel panels to be bedded on flexible sealant or mineral wool strips
- Wall plate bedded on min. 2mm thin-joint mortar
- Continuous horizontal ribbon of adhesive
- 100mm (min) mineral wool insulation – 10 kg/m³ (min)
- Cavity closer
- Continuous horizontal ribbon of adhesive
- 100mm mineral wool max. 40 kg/m³ (no gaps to remain)

8. Stepped roof junction – pitched roof without room-in-roof



RoofSpace I-Roof™ spandrel panel lined with 2 layers of 8 kg/m^2 gypsum board, or 1 layer 15mm Fermacell

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

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

Continuous horizontal ribbon of adhesive

Spandrel panels to be bedded on flexible sealant or mineral wool strips

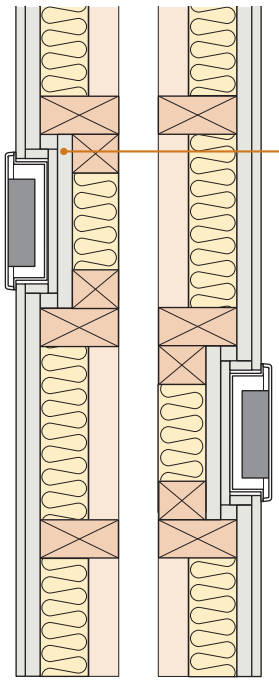
Wall plate bedded on min. 2mm thin-joint mortar

Cavity closer

Continuous horizontal ribbon of adhesive

100mm mineral wool max. 40 kg/m^3 (no gaps to remain)

10. Services and sockets in the separating wall



Plan

10.1 – electrical sockets, switches, etc.

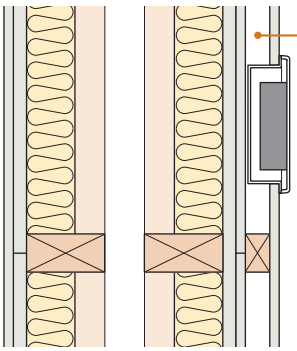
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

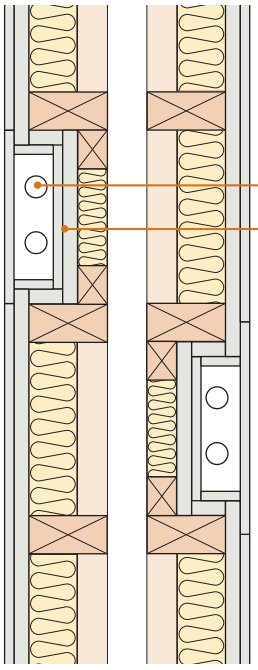
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

10.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

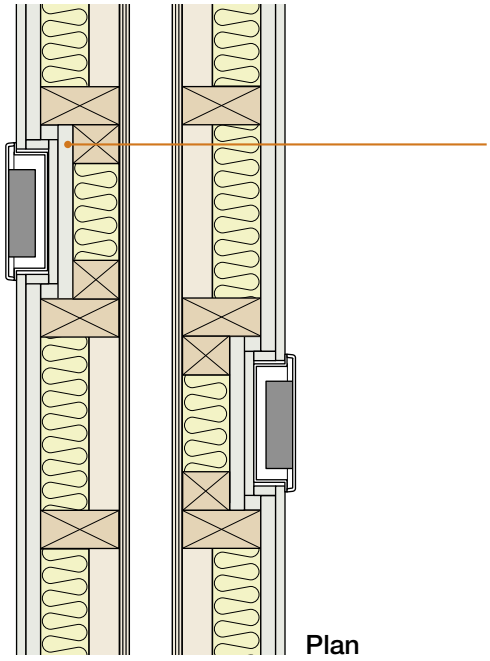
Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 240mm apart?			
2.	Is absorbent material at least 60mm thick?			
3.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
4.	Are all joints in wall lining staggered?			
5.	Is separating wall lining correct mass per unit area on both sides?			
6.	Are all joints sealed with tape or caulked with sealant?			
7.	Are services installed in accordance with sketches 10.1 and 10.2?			
8.	If there is a separating floor (e.g. in flats/apartments) has the resilient flanking strip been provided?			
9.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

10. Services and sockets in the separating wall



Plan

9.1 – electrical sockets, switches, etc.

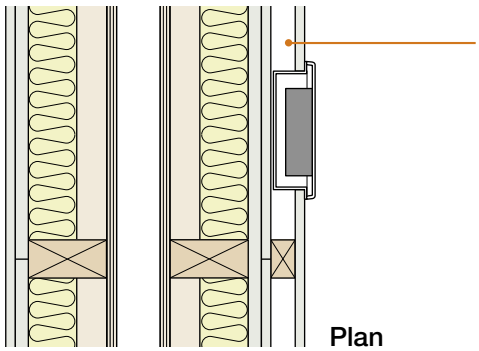
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

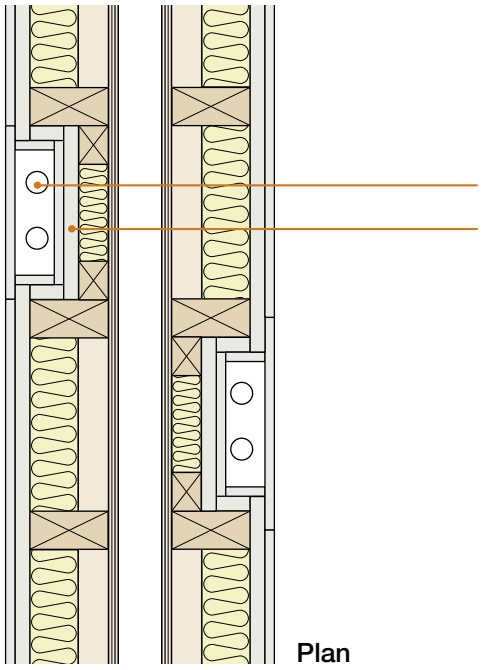
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

9.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

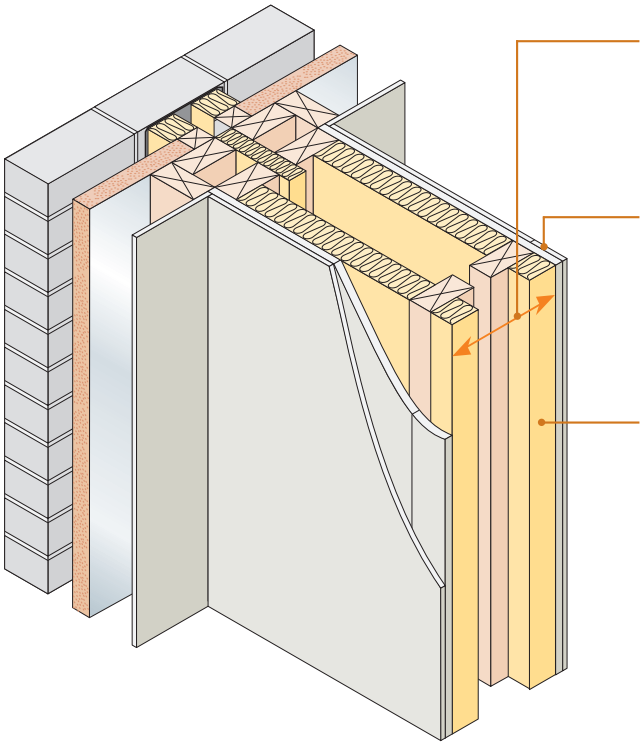
Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 240mm apart?			
2.	Are sheathing boards at least 50mm apart?			
3.	Are stud frames at least 68mm apart?			
4.	Is absorbent material at least 60mm thick?			
5.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
6.	Are all joints in wall lining staggered?			
7.	Is separating wall lining correct mass per unit area on both sides?			
8.	Are all joints sealed with tape or caulked with sealant?			
9.	Are services installed in accordance with sketches 9.1 and 9.2?			
10.	If there is a separating floor (e.g. in flats/apartments) has the resilient flanking strip been provided?			
11.	Is separating wall satisfactorily complete?			

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

Separating Wall – Timber Frame

Openwall prefabricated panels ■
Twin timber frames ■
For use in timber frame houses and flats/apartments ■

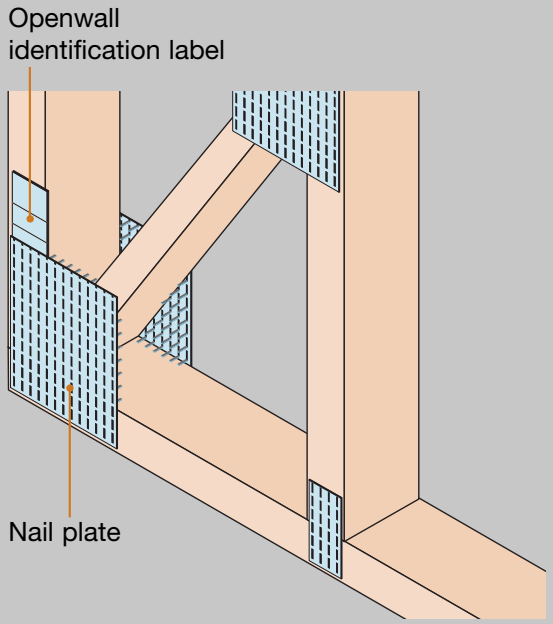


Wall width	240mm (min) between inner faces of wall linings. 50mm (min) gap between studs (must not be bridged by any diagonal bracing)
Wall lining	- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2), both sides - all joints staggered
Absorbent material	60mm (min) mineral wool batts or quilt (density 10 – 60 kg/m^3) both sides. Material may be unfaced, paper faced or wire-reinforced
Ties	Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically
External (flanking) wall	Outer leaf masonry with minimum 50mm cavity. Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

Note: When using this robustdetails® in flats/apartments, please refer to Tables 3b and 4 of the Introduction

Note: Partial sheathing of the cavity faces of the separating wall is permitted for structural reasons. This may be for a length of 1800mm (max) to each end of both leaves or to the entire face of one leaf.

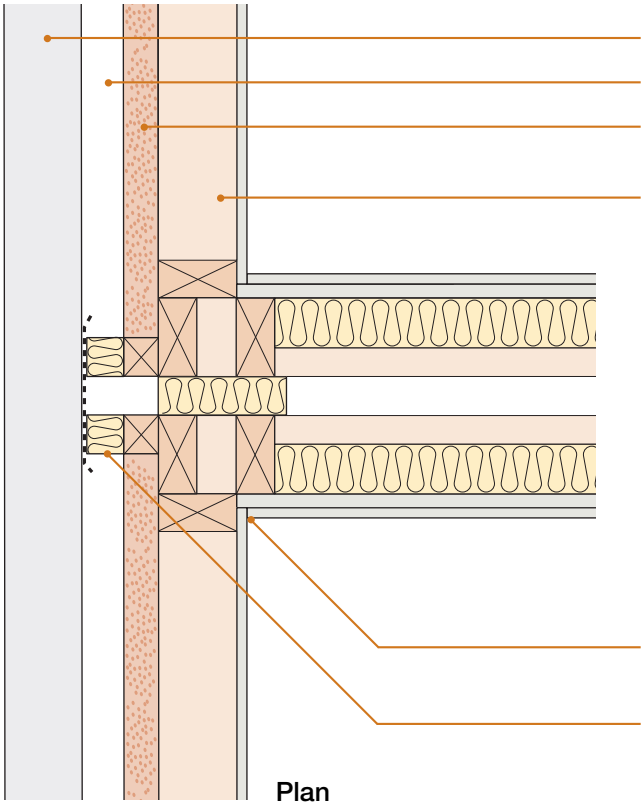
FRAME CONSTRUCTION



DO

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

1. External (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

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

- one layer of gypsum-based board nominal 8 kg/m^2

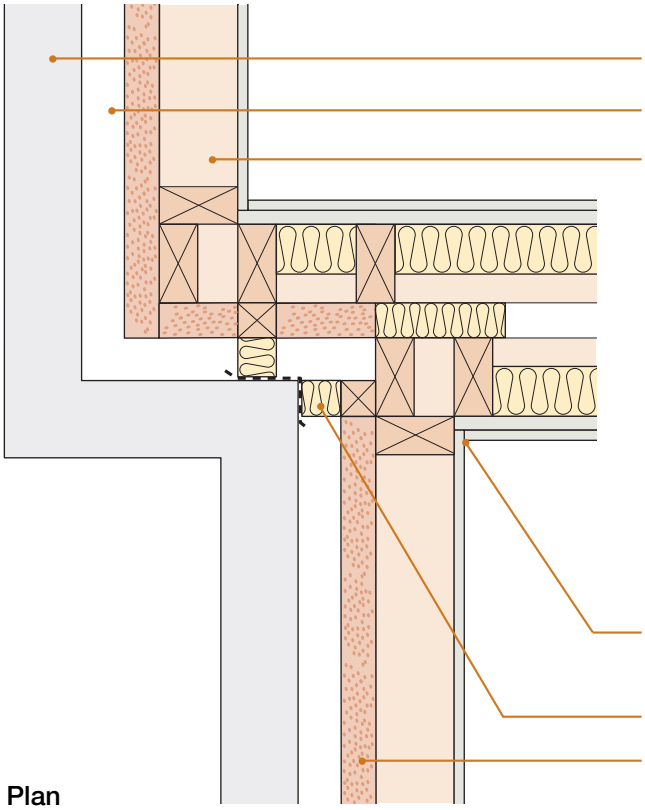
Inner leaf where there is a separating floor, e.g. for flats/apartments

- use two layers of gypsum-based board nominal 8kg/m^2 each layer, and refer to Tables 3b and 4 in Introduction
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with cavity stops (see Appendix A)

2. Staggered external (flanking) wall junction



Plan

Masonry outer leaf (min 100mm thick)

External wall cavity (min 50mm)

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

- one layer of gypsum-based board nominal 8 kg/m^2

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

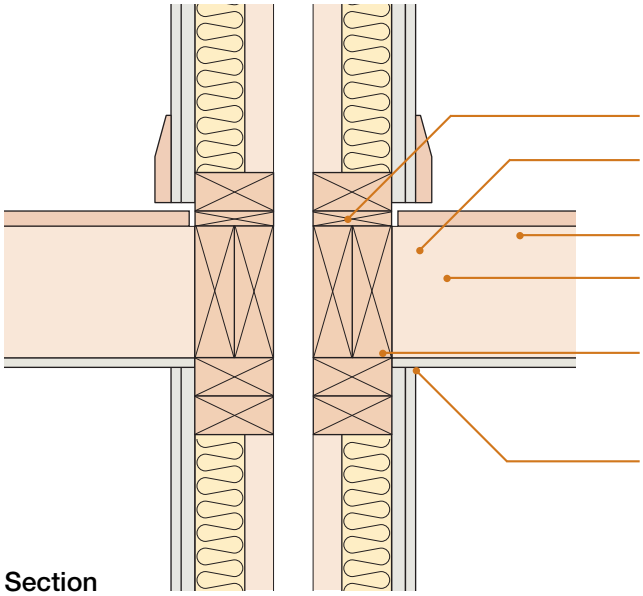
- use two layers of gypsum-based board nominal 8kg/m^2 each layer, and refer to Tables 3b and 4 in Introduction
- if using floor requiring pre-completion testing, seek specialist advice

Seal all perimeter joints with tape or caulk with sealant

Close cavity with a cavity stop (see Appendix A)

Inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3

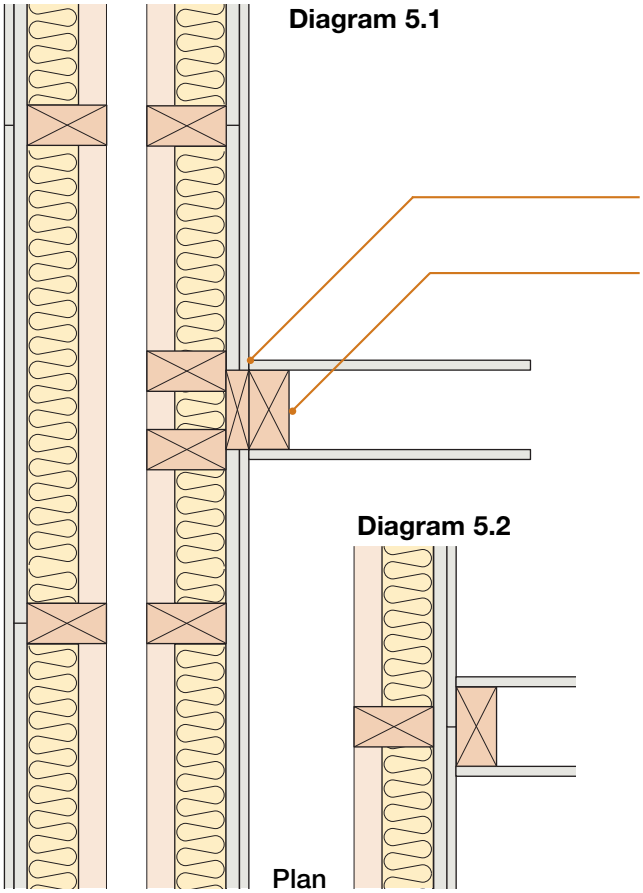
3. Internal floor junction



Section

- Floor decking may run under sole plates
- Internal floor to comply with Building Regulations Requirement E2
- Floor joists may span in either direction
- Internal floors should not be continuous between dwellings
- Close spaces between floor joists with full depth timber blocking where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant

4. Internal wall junction



Plan

Diagram 5.1

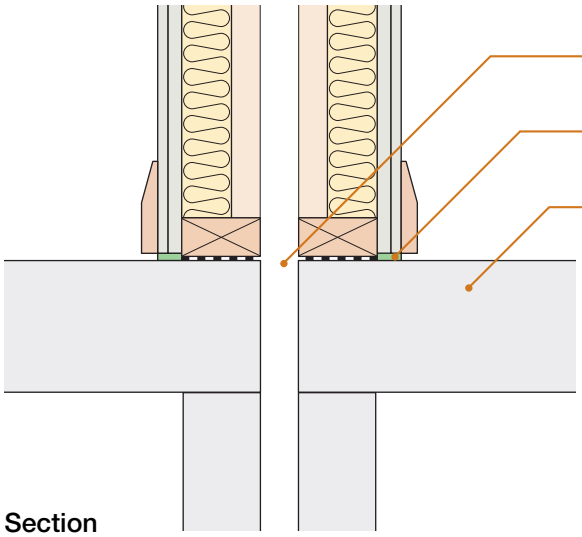
Diagram 5.2

- Seal all perimeter joints with tape or caulk with sealant
- Where required internal wall to comply with Building Regulations Requirement E2

Diagram 5.1 shows junction detail where the internal wall is fixed through the separating wall lining; other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

Diagram 5.2 shows junction where the separating wall lining is continuous

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



Section

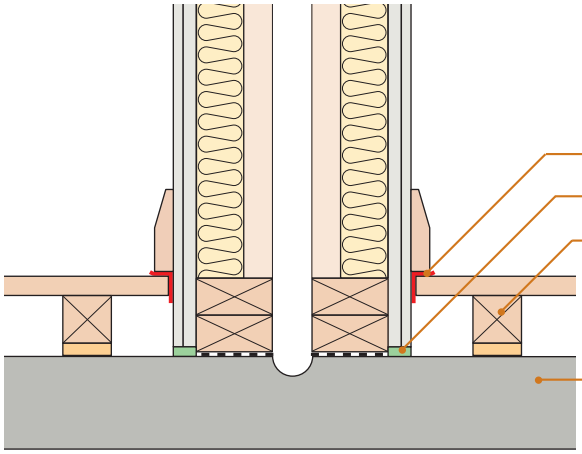
Ground floors not continuous between dwellings

Flexible or acoustic sealant (may be omitted when timber ground floor is used)

Ground floor construction:

- timber floor joists:
  - may span in either direction
  - floor decking may run under sole plates
  - close spaces between floor joists with full depth timber blocking where joists are at right angles to wall, or
- beam and block floor with all voids filled with mortar, or
- precast concrete planks with all voids between planks and blockwork filled with mortar or flexible sealant, or
- cast in-situ concrete suspended slab, or
- ground bearing slab

6. Raft foundation



Section

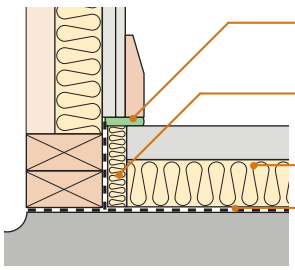
5mm (min) resilient flanking strip

Flexible or acoustic sealant

A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)

Concrete raft - mass per unit area of 365 kg/m^2 (min)

Alternative detail with screed finish



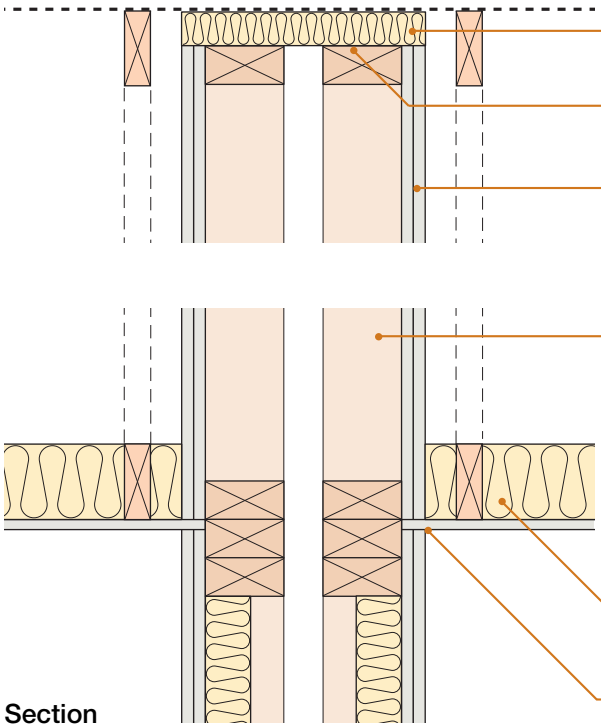
Mastic sealant, ensure skirting and wall lining are isolated from screed

Perimeter insulation, isolating screed from timber frame

Below screed insulation, isolating screed from raft

Polyethylene

7. Roof junction - pitched roof with no room-in-roof



Section

Junction between separating wall and roof filled with flexible closer

Cavity separating wall continuous to underside of roof

Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m^2), both sides, all joints staggered

Absorbent material not required in separating wall above ceiling

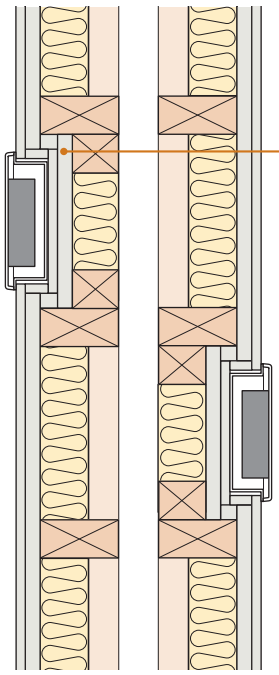
Alternatively use spandrel panel - see Appendix A

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

100mm (min) mineral wool insulation, 10 kg/m^3 (min), between ceiling joists

Seal all perimeter joints with tape or caulk with sealant

8. Services and sockets in the separating wall



Plan

8.1 – electrical sockets, switches, etc.

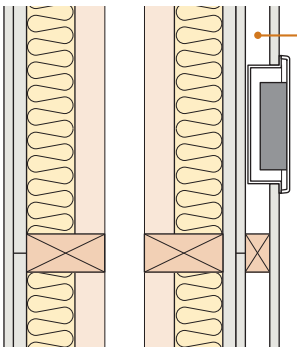
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

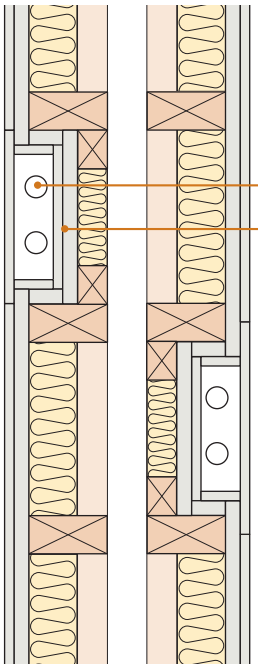
Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Plan

Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

8.2 – piped services

Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

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See overleaf for checklist

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are Openwall panels being used?			
2.	Are wall linings at least 240mm apart?			
3.	Is absorbent material at least 60mm thick in both leaves of the separating wall?			
4.	Does absorbent material cover whole lining area except above ceiling line in roof void zone?			
5.	Are all joints in wall lining staggered?			
6.	Is separating wall lining correct mass per unit area on both sides?			
7.	Are all joints sealed with tape or caulked with sealant?			
8.	Are services installed in accordance with sketches 8.1 and 8.2?			
9.	Is inner leaf lined with 45mm (min) foil faced PIR insulation, minimum density 32 kg/m^3?			
10.	Is separating wall satisfactorily complete?			

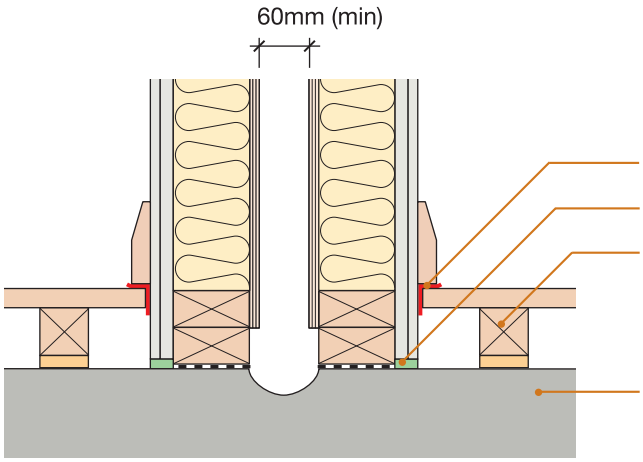
Contact details for technical assistance from Openwall Limited, manufacturer of Openwall prefabricated panels:

Telephone: 0151 832 4272 **E-mail:** technical@openwalloffsite.com

Notes (include details of any corrective action)

Site manager/supervisor signature . . . . . .

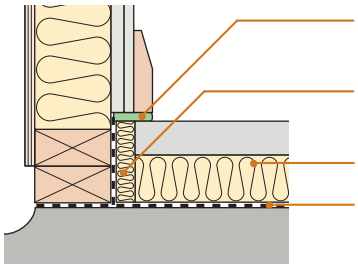
7. Raft foundation



- 5mm (min) resilient flanking strip
- Flexible or acoustic sealant
- A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)
- Concrete raft - mass per unit area of 365 kg/m² (min)

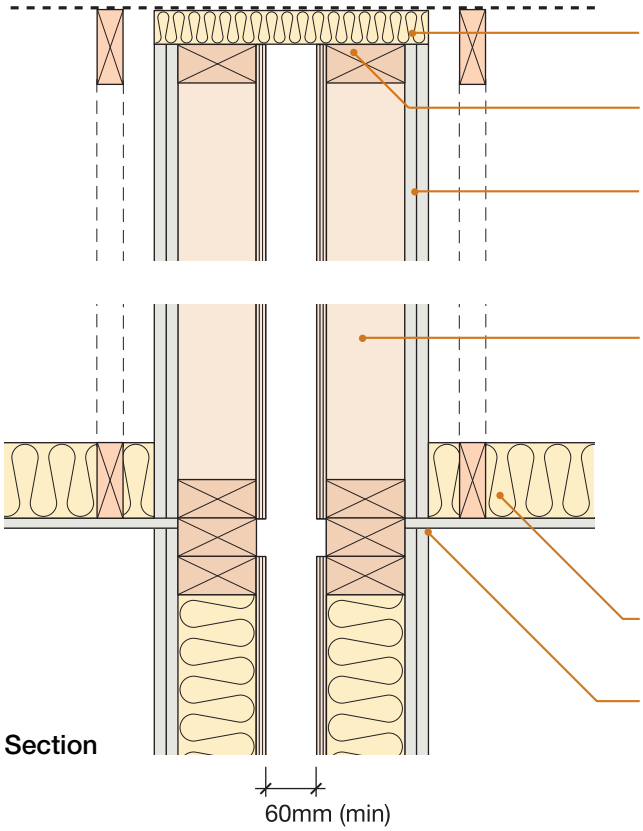
Section

Alternative detail with screed finish



- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from timber frame
- Below screed insulation, isolating screed from raft
- Polyethylene

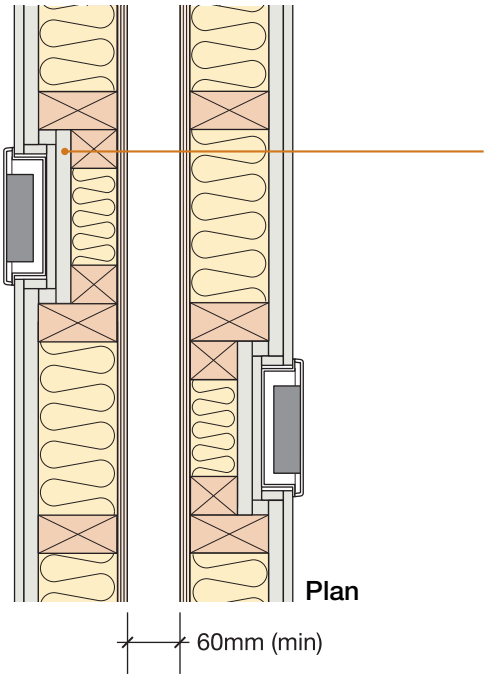
8. Roof junction - pitched roof with no room-in-roof



- Junction between separating wall and roof filled with flexible closer
- Cavity separating wall continuous to underside of roof
- Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered
- Absorbent material not required in separating wall above ceiling
- 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
- 100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists
- Seal all perimeter joints with tape or caulk with sealant

Section

9. Services and sockets in the separating wall



9.1 – electrical sockets, switches, etc.

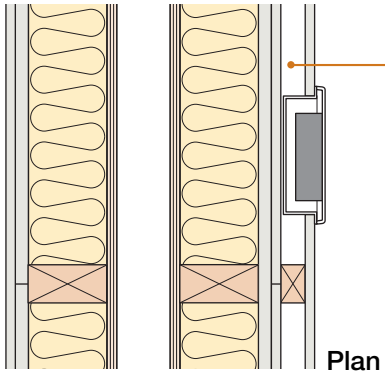
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

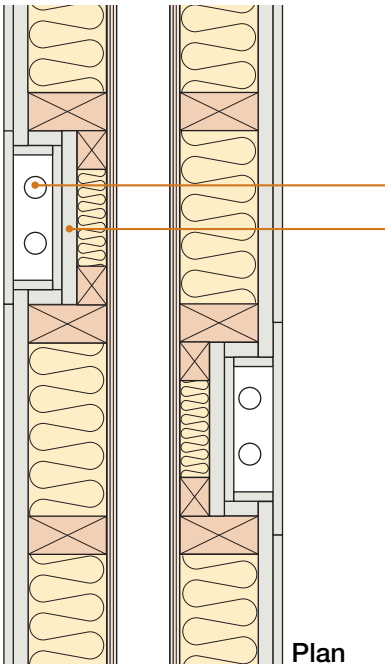
b) They are installed in accordance with the manufacturer's instructions.

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays



Alternatively provide a service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



9.2 – piped services

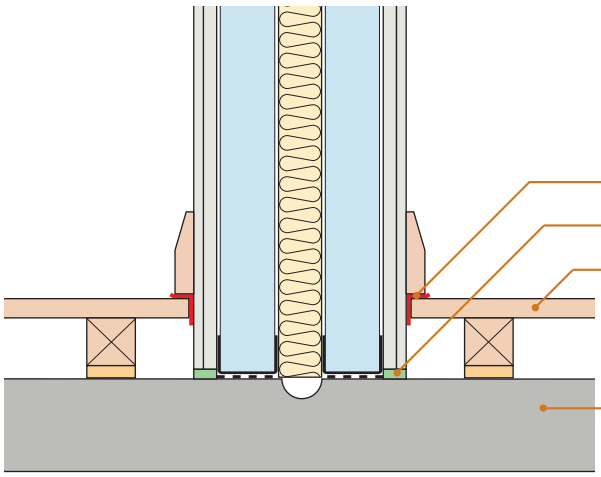
Service duct within separating wall

Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²) to enclose pipes

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes.

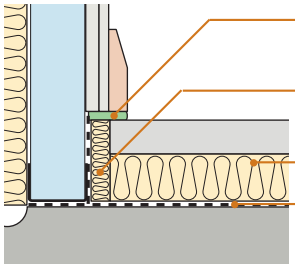
7. Raft foundation



- 5mm (min) resilient flanking strip
- Flexible or acoustic sealant
- A floating floor treatment must be used (for ground floor floating floor treatments mineral fibre quilt is not required between the battens or cradle system)
- Concrete raft - mass per unit area of 365 kg/m² (min)

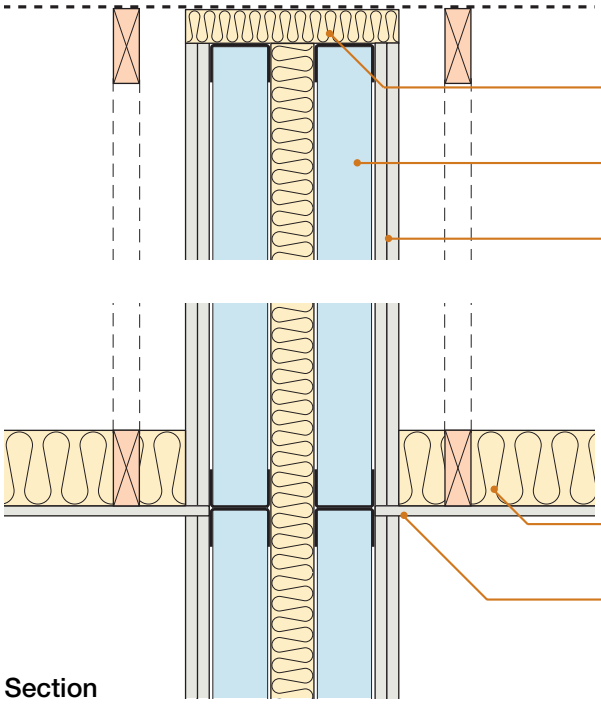
Section

Alternative detail with screed finish



- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from metal frame
- Below screed insulation, isolating screed from raft
- Polyethylene

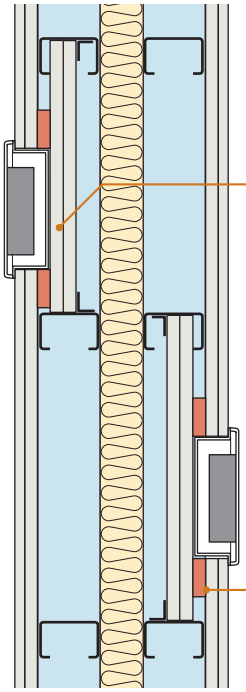
8. Roof junction - pitched roof with no room-in-roof



- Junction between separating wall and roof filled with flexible closer.
- Cavity separating wall continuous to underside of roof
- Wall lining above ceiling – 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 16 kg/m²), both sides, all joints staggered
- 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
- 100mm (min) mineral wool insulation, 10 kg/m³ (min), between ceiling joists
- Seal all perimeter joints with tape or caulk with sealant

Section

9. Services and sockets in the separating wall



Plan

9.1 – electrical sockets, switches, etc.

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

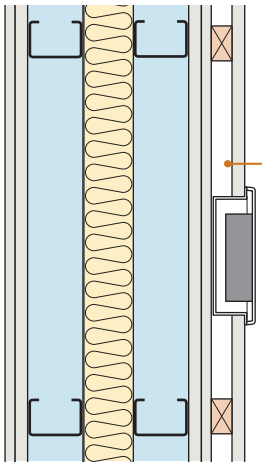
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

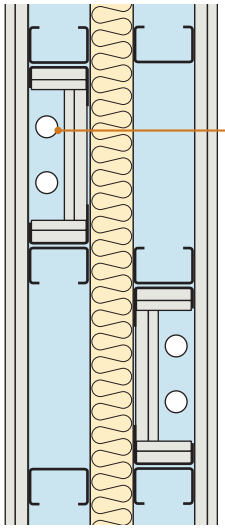
Fire resistant seal where required by Part B of the Building Regulations



Plan

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen.

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure.



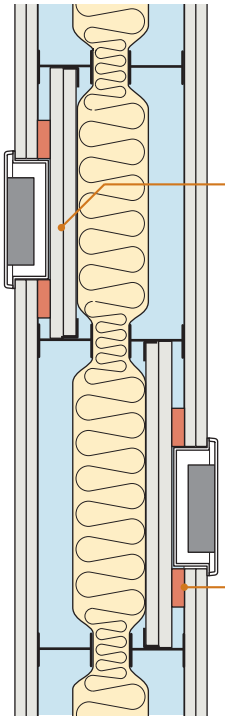
Plan

9.2 – piped services

Stagger services on each side of wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes

10. Services and sockets in the separating wall



Plan

10.1 electrical sockets, switches etc

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

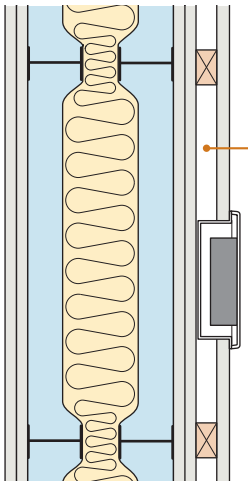
Provide two or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m^2) to enclose electrical boxes

Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than rdΔR_w+C_{tr} = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

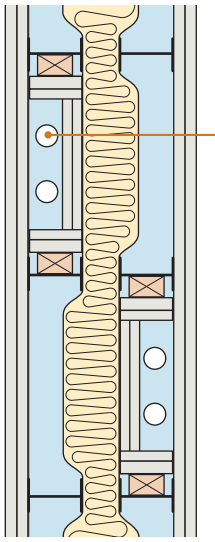
Fire resistant seal where required by Part B of the Building Regulations



Plan

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure



Plan

10.2 piped services

Stagger services on each side of the wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes

CHECKLIST (to be completed by site manager/supervisor)

Company:

Site:

Plot: Site manager/supervisor:

Ref.	Item	Yes (✔)	No (✔)	Inspected (initials & date)
1.	Are wall linings at least 190mm apart?			
2.	Is absorbent material 100mm (min) Isover mineral wool quilt (min density 10 kg/m^3)?			
3.	Is quilt compressed between studs?			
4.	Is separating wall lining two layers of 15mm Gyproc SoundBloc plasterboard on both sides?			
5.	Are all joints in wall lining staggered?			
6.	Are all joints sealed with tape or caulked with sealant?			
7.	Are services and sockets installed in accordance with sketches 10.1 and 10.2?			
8.	Is separating wall satisfactorily complete?			

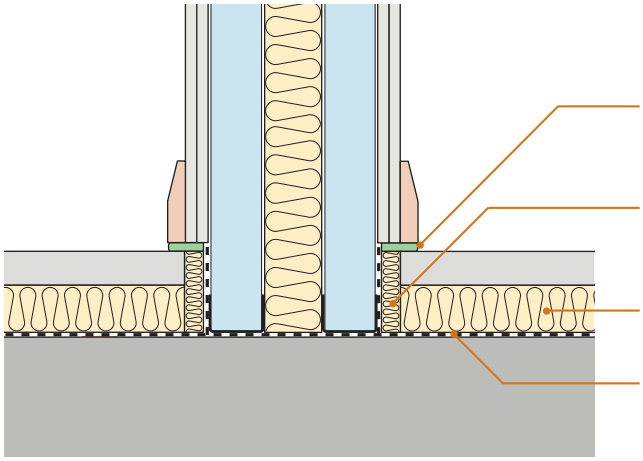
Contact details for technical assistance from British Gypsum, manufacturer of Gypwall QUIET IWL steel frames:

Telephone: 0844 800 1991 **Fax:** 0844 561 8816 **E-mail:** bgtechnical.enquiries@bpb.com

Notes (include details of any corrective action)

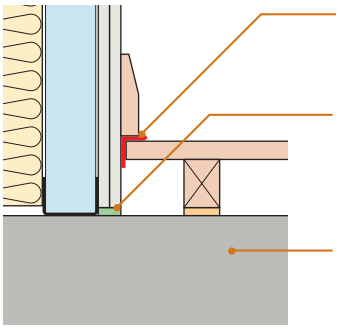
Site manager/supervisor signature . . . . . .

9. Ground floor junction

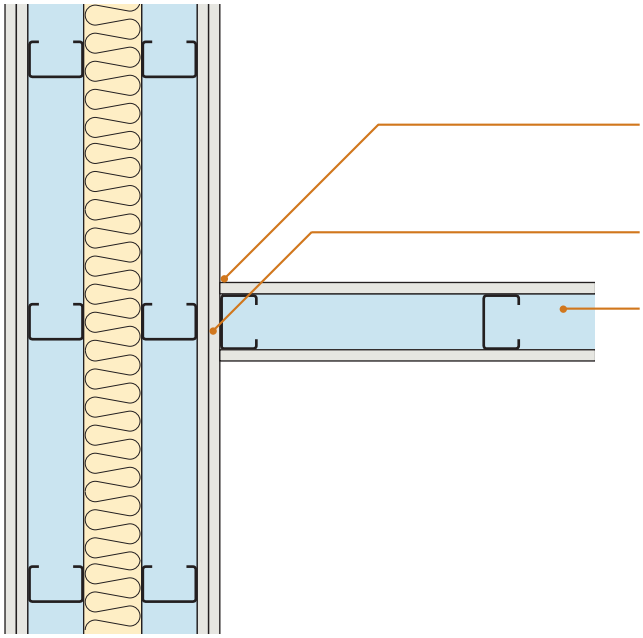


Section

Alternative detail with timber floating floor finish



10. Internal wall junction

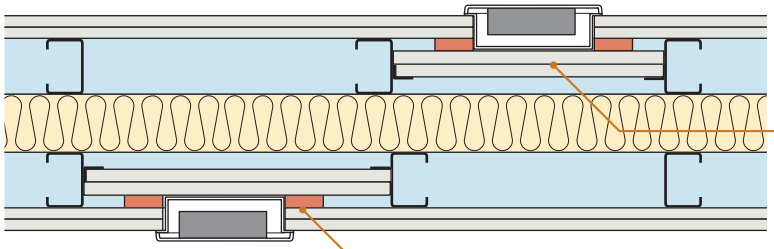


Plan

Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

11. Services and sockets in the separating wall

11.1 Electrical sockets, switches etc



Plan

Stagger sockets, switches, etc. on each side of the wall such that they are not positioned in opposite bays

Provide two or more layers of gypsum-based board (total nominal mass per unit area 20 kg/m²) to enclose electrical boxes

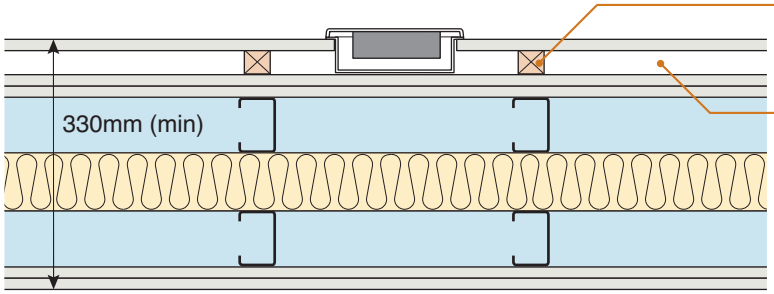
Alternatively, fire resistant putty pads or other proprietary liner may be used with sockets, provided:

a) They achieve a laboratory performance of no worse than $rd\Delta R_w+C_{tr}$ = -1dB
See Appendix H.

b) They are installed in accordance with the manufacturer's instructions.

Fire resistant seal where required by Part B of the Building Regulations

11.2 Electrical sockets and switches in service void



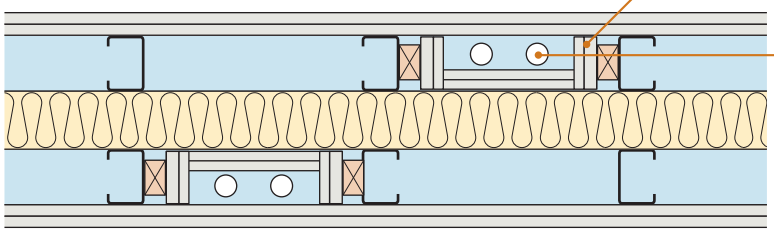
Plan

Service void using min 25mm battens or steel studs with 1 layer of gypsum board

Service void on surface of separating wall. This is the preferred method where more than one socket, switch, etc. are close together, e.g. in a kitchen

Studs or battens used to create the service zone should be securely fixed back to the separating wall structure

11.3 Piped services located within wall



Plan

Provide two or more layers of gypsum-based board (total nominal mass per unit area 20 kg/m²) to enclose pipes

Stagger services on each side of the wall such that they are not positioned in opposite bays

Note: this detail is not applicable for SVPs or gas pipes

Ensure studs, top and bottom rails or gypsum boards do not bridge between the twin frames

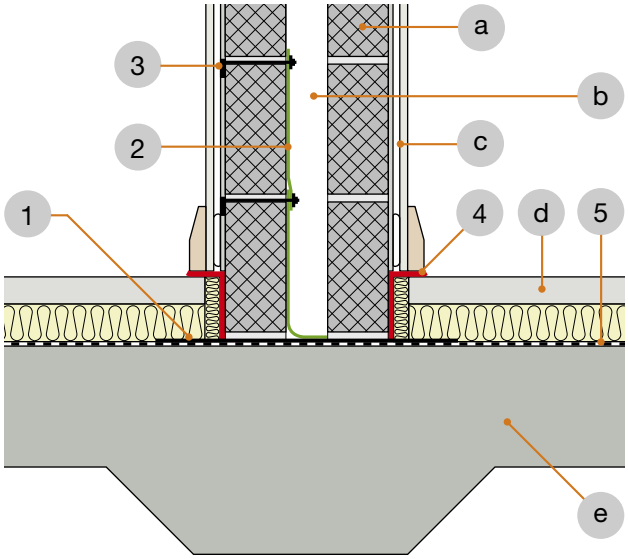
Appendix A2 – Specific Flanking Conditions

Contents

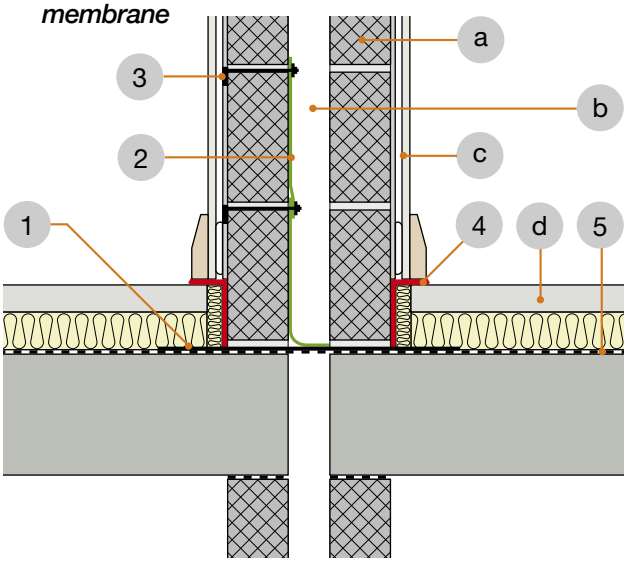
Appendix A2 – Specific Flanking Conditions

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

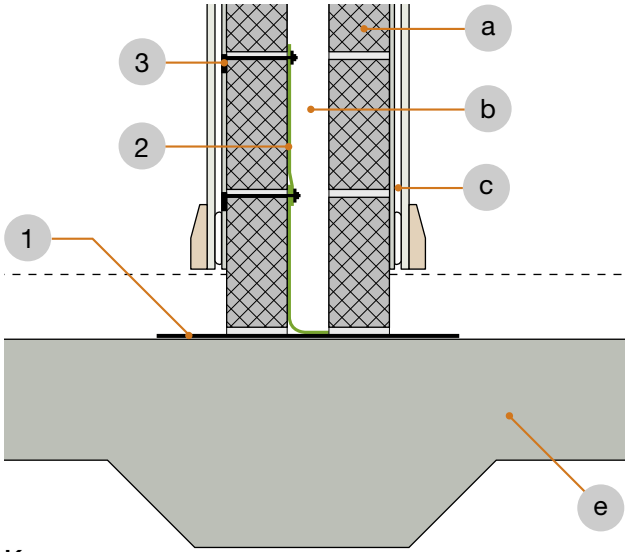
1. Separating wall – direct support on raft



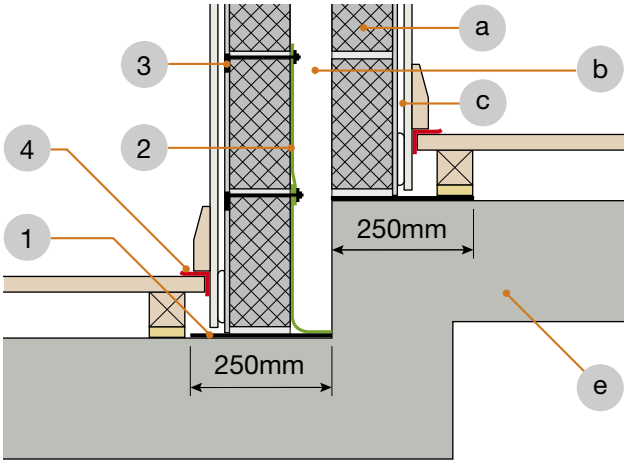
2. Separating wall – suspended floor with gas membrane



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 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.

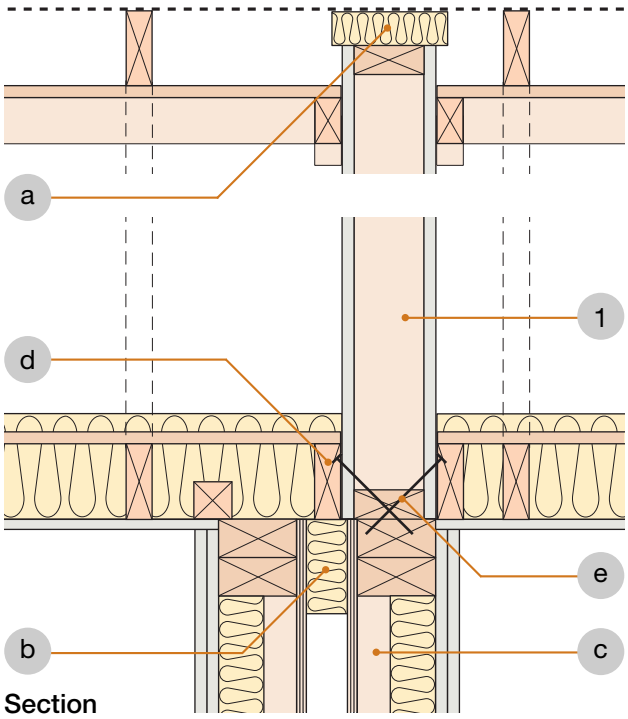
Contact details for Icopal-MONARFLOOR®:

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

Appendix A2 – Specific Flanking Conditions

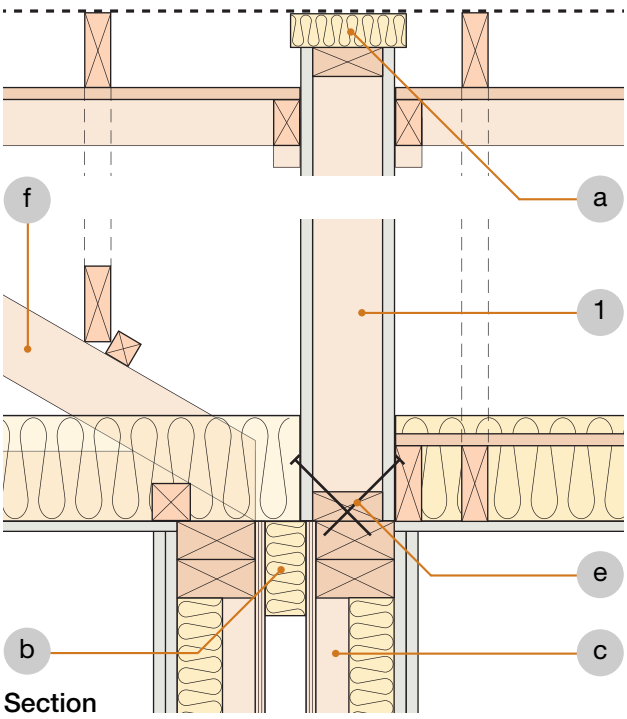
Donaldson Timber Systems Single Leaf Spandrel Panel System for use on robustdetails® timber separating walls in non room-in-roof situations. Refer to Table 6 in Introduction.

1. Spandrel panel located parallel to trussed rafters



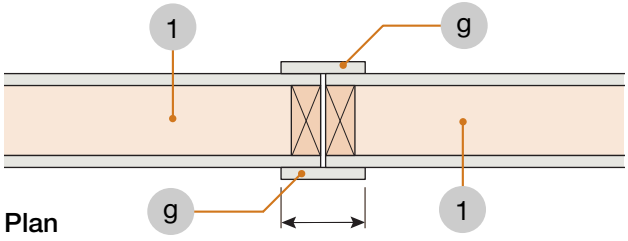
Section

2. Spandrel panel located across trussed rafters



Section

3. Spandrel panel joint detail
Panels secured together using angled screw fixings



Plan

Key

1 Donaldson Timber Systems Single Leaf Spandrel Panel System.

a Mineral wool closer.

b Flexible cavity stop.

c Timber frame separating wall.

d Site-fixed runners must not contact both wall leafs.

e Angled screw fixings to secure spandrel to wall head.

f Trusses and rafters must not contact both wall leafs.

g Gypsum board cover strip.

Refer also to manufacturer's guidance

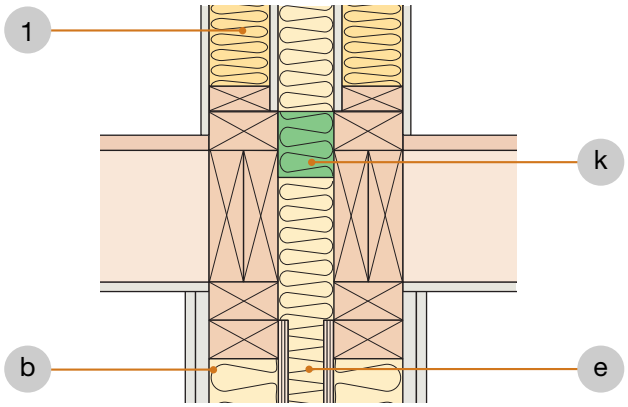
Contact details for
Donaldson Timber Systems Limited:

Telephone: 0845 009 2774
Email: help@donaldsontimbersystems.com
Web: www.donaldsontimbersystems.com

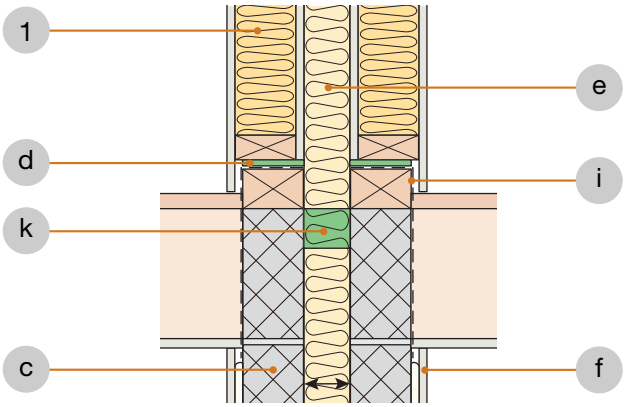
Appendix A2 – Specific Flanking Conditions

NTSROOF *RAPID FIT SYSTEM* for **robust**details® timber or masonry cavity walls for "room-in-roof" situations. Refer to Table 6 in Introduction.

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

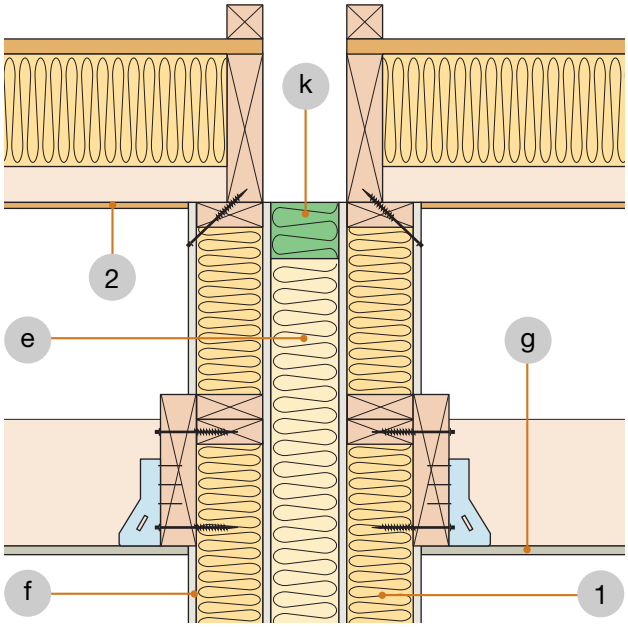


2. Room-in-roof junction with masonry cavity walls

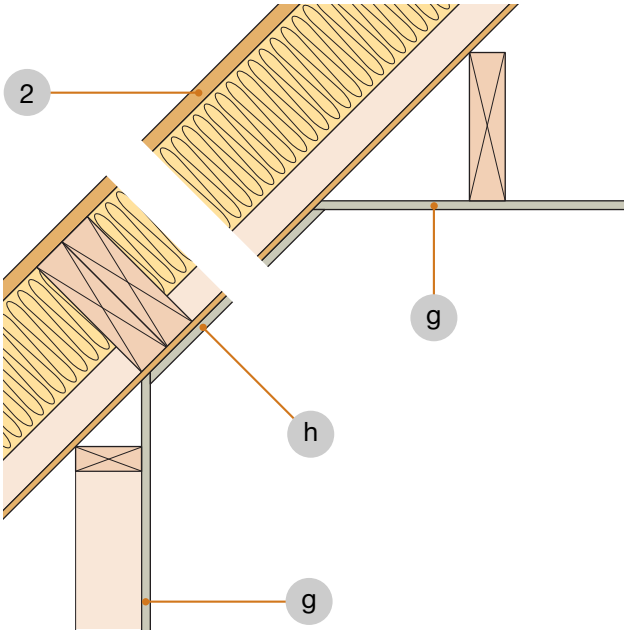


Min 75mm

3. Separating wall – roof junction



4. Room-in-roof lining requirements



Key

a Outer leaf of external wall.

b Timber robustdetails® wall (see Table 6 in Introduction).

c Blockwork dependent on Robust Detail used.

d Intumescent sealant.

e Cavity insulation dependent on Robust Detail used.

f Gypsum-based board (nominal 10 kg/m²).

g Gypsum-based board (nominal 8 kg/m²)

h Min. 1 layer gypsum-based board (nominal 10 kg/m²).

i Vertical metal straps if required. Straps must not extend into the cavity.

j Wall plate bedded on mortar, notched to take straps.

k Cavity closer if required for other Regulations.

1 **NTS**ROOF spandrel panel.

2 **NTS**ROOF roof cassette.

Contact details for National Timber Systems:

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Fax: 01609 788388
E-mail: george.rayden@nationaltimbersystems.co.uk
Web: www.nationaltimbersystems.co.uk