## July 2022 Update Pack

Dear Colleague,

Thank you for downloading this July 2022 update.

Upon completion of the 12-month transition period (as notified in the June 2021 update), the Plasmor Aglite Ultima block is no longer within the E-WM-22 specification – so anyone wanting to construct an unparged wall with the Aglite Ultima block, and 100mm insulated cavity, should now ensure plots are registered for E-WM-34 instead.

Following a rebranding exercise by the supplier, the "Regupol E48" resilient layer in E-FC-6 has now been renamed "REGUPOL sonus curve 8". Both the material and installation process are unchanged. Just to add that any sites building-out with Regupol E48-branded material will continue to be compliant with the **robust**details<sup>®</sup> requirements.

And finally, the wording in the E-FC-5 checklist has been enhanced to emphasise that the floor must have a min.200mm plank <u>and</u> min.150mm ceiling void if all the flanking walls are constructed from aircrete.

#### Please update your April 2022, 4th Edition Handbook as follows:

- 1. Remove and replace **pages 3/4** of the Introduction.
- 2. Remove and replace **all pages** of E-WM-22.
- 3. Remove and replace page 5/6 of E-FC-5.
- 4. Remove and replace **all pages** of E-FC-6.

Yours sincerely

John Thompson Chief Executive, Robust Details Limited



Section

Page Amendment

#### Introduction

Table 14E-WS-6 was mistakenly omitted in<br/>the April update. This is now back<br/>on the list.

#### Separating Wall – Masonry

#### E-WM-22

All Plasmor Aglite Ultima block type removed from this Detail. Refer to E-WM-34 ongoing.

#### **Separating Floor – Concrete**

E-FC-5			
Checklist	6	Point 2 reworded to emphasise that min.200mm planks are required where aircrete is used in all flanking walls.	
		Point 10 reworded to emphasise that ceiling treatment CT5 is required where aircrete is used in all flanking walls.	

#### E-FC-6

All "Regupol E48" has been renamed "REGUPOL sonus curve 8".

## **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 <sup>®</sup> Party Wall (gypsum-based board) with minimum 100mm cavity
E-WM-29	masonry – Porotherm clay blockwork (Ecoparge and gypsum-based board) with 75mm minimum insulated cavity
E-WM-30	masonry – aircrete blockwork Knauf Supafil® Party Wall (gypsum-based board) with 100mm min cavity
E-WM-31	masonry – H+H – Celcon Elements (gypsum-based board) with 100mm minimum insulated cavity
E-WM-32	masonry – lightweight aggregate blockwork Knauf Earthwool Masonry Party Wall Slab (gypsum-based board) with minimum 75mm cavity
E-WM-33	masonry – lightweight aggregate blockwork Superglass Superwhite 34 (gypsum-based board) with 100mm minimum cavity
E-WM-34	masonry – Plasmor "Aglite Ultima' lightweight aggregate blockwork (render and gypsum-based board) with full-fill cavity insulation

#### See over for timber and steel frame walls

## Introduction

## **List of Robust Details**

## Table 1 (continued) – Separating walls

E-WT-1	timber frame – without sheathing board
E-WT-2	timber frame – with sheathing board
E-WT-3	timber frame – 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
E-WS-6	steel frame – modular steel frame volumetric housing

# Separating Wall – Cavity Masonry

## E-WM-22

- Lightweight aggregate blocks
- Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll
  - or URSA Cavity Batt 35 or URSA PARTY WALL ROLL

#### Gypsum-based board (nominal 10 kg/m²) on dabs ■



## DO

- Keep cavity, insulation rolls and wall ties free from mortar droppings and debris
- Fully fill all blockwork joints with mortar
- Make sure there is no connection between the two leaves except for wall ties, insulation and foundation
- Ensure that only solid blocks (i.e. not hollow or cellular) are used in the construction of separating and flanking walls
- Ensure all insulation sections are tightly butted together and half cuts are made with a clean sharp knife and are installed in accordance with the manufacturer's instructions

- Keep any chases for services to a minimum and fill well with mortar.
   Stagger chases on each side of the wall to avoid them being back to back
- Refer to Appendix A
- Ensure that either 'KI MPWS' is printed on the insulation material where 100mm Knauf Earthwool Masonry Party Wall Slab is specified; or 'Superglass Party Wall Roll' is printed on the insulation material where this is specified. Where URSA insulation is used, ensure it is branded with the URSA 'bear' logo



#### 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)

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

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

- 100mm (min) concrete block (1350 kg/m<sup>3</sup> to 1600 kg/m<sup>3</sup>) or aircrete block (450 kg/m<sup>3</sup> to 800 kg/m<sup>3</sup>)
- internal finish 13mm plaster or nominal 8 kg/m<sup>2</sup> gypsum-based board

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

- if using **robust**details<sup>®</sup> for floor, refer to Table 3a in introduction to select an acceptable **robust**details<sup>®</sup> 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



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

2 of 6

**robust**details<sup>®</sup>

#### 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



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

#### 5. Separating floor junction



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



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

Ground floor not continuous between dwellings

Ground floor construction:

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

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

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



Junction between separating wall and roof filled with flexible closer

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

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

Continuous horizontal ribbon of adhesive

100mm (min) mineral wool insulation – 10 kg/m<sup>3</sup> (min)

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

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

Junction between separating wall and roof filled with flexible closer 100mm (min) mineral wool insulation minimum density 10 kg/m<sup>3</sup> or 60mm (min) foil faced PUR or PIR insulation, minimum density 30 kg/m<sup>3</sup> (See Appendix A) 2 layers of nominal 8 kg/m<sup>2</sup> gypsum-based board. Where used rigid insulation may be placed between and/or directly beneath rafters Continuous horizontal ribbon of adhesive Cavity masonry separating wall continuous to underside of roof covering 100mm Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL (no gaps to remain) Room-in-Room-inroof roof 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 Section bonded to one leaf 100mm (min)

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

## CHECKLIST (to be completed by site manager/supervisor)

Com	ipany:				
Site:					
Plot	:	Site manager/supervisor:			
Ref.	Item		Yes No	Inspected	
1.	Is separating wall ca	wity at least 100mm?		(initials & date)	
2.	ls external (flanking)	wall cavity at least 50mm?			
3.	Are separating wall blocks lightweight aggregate (1350 to 1600 kg/m <sup>3</sup> )				
4.	Is cavity free from droppings and debris?				
5.	Are separating wall ties to Approved Document E "Tie type A" (see Appendix A)?				
6.	Are cavity stops installed where specified in the Robust Detail?				
7.	Are joints fully filled?				
8.	Is 100mm Knauf Earthwool Masonry Party Wall Slab or Superglass Party Wall Roll or URSA Cavity Batt 35 or URSA PARTY WALL ROLL used?				
9.	Are insulation sectio	ns tightly butted together?			
10.	Are voids around flo	or joists, chases, etc. fully filled/sealed?			
11.	Where there is a sep the resilient flanking	parating floor (e.g. flats/apartments) has strip been installed?			
12.	Are all junctions of v or caulked with seal	vall and ceiling boards sealed with tape ant?			
13.	Is separating wall sa	tisfactorily complete?			
No	<b>tes</b> (include details of	any corrective action)			
Site	manager/supervisor	signature	••		

® UK registered trade mark no. 2291665

© Robust Details Limited 2011. All rights reserved. No part of this Handbook (other than the checklists) may be reproduced in any material form or issued or communicated to the public (including photocopying or storing it in any medium by electronic means, and whether or not transiently or incidentally to some other use of this Handbook) without the prior written permission of Robust Details Limited except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

Warning: the doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution.

### 6. Services - Service pipes through separating floor



Sketch shows CT0 type ceiling treatment

## CHECKLIST (to be completed by site manager/supervisor)

Corr	ipany:			
Site:				
Plot:		Site manager/supervisor:		
Ref.	Item		Yes No	Inspected
1.	Has training been re	ceived from Cellecta®?		
2.	Are precast concrete (min) where all walls 300 kg/m <sup>2</sup> (min)?	e planks 150mm (min) thick; or 200r are aircrete; and of mass per unit a	nm nea	
3.	Are inner leaves to external (flanking) walls of the correct block density and appropriate for precast concrete plank thickness and ceiling treatment?			
4.	Are joints between p	recast concrete planks grouted and	sealed?	
5.	Are precast concrete planks built into the masonry walls?			
6.	Is the <i>E-strip</i> perime perimeter walls (inclu- thresholds and into sealed with <i>J-strip</i> t	eter edging installed around all room uding door openings, cupboards, ac wall recesses) and service pipes and ape?	n cross dijoints	
7.	Are <b>YELOfon<sup>®</sup> HD1</b> described in Section	<b>0+</b> resilient layer joints formed as 4 and sealed with <b>J-strip</b> tape?		
8.	Is <b>YELOfon® HD10+</b> perimeter edging and	resilient layer overlapping the <b>E-str</b> joints sealed with <b>J-strip</b> tape?	ip	
9.	Are the skirting boar perimeter edging?	ds isolated from the screed by the <b>I</b>	E-strip	
10.	Is ceiling treatment (	CT5 used where all walls are aircrete	e?	
11.	Are all ceiling board sealant?	joints sealed with tape or caulked v	vith	
12.	Are service pipes wra of nominal 8 kg/m <sup>2</sup> g	apped in quilt and boxed in with two ypsum-based board?	layers	
13.	Is separating floor sa	atisfactorily complete?		
Cor <b>Tel</b>	ntact details for technical a ephone: 01634 29667	assistance from <i>Cellecta</i> ®, manufacturer of 7 Fax: 01634 226630 E-m	i YELO <i>fon®</i> HD10+ syste aail: technical@cellec	m: ta.co.uk
No	<b>tes</b> (include details of	any corrective action)		
Site	e manager/supervisor	signature		

® UK registered trade mark no. 2291665

© Robust Details Limited 2011. All rights reserved. No part of this Handbook (other than the checklists) may be reproduced in any material form or issued or communicated to the public (including photocopying or storing it in any medium by electronic means, and whether or not transiently or incidentally to some other use of this Handbook) without the prior written permission of Robust Details Limited except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

Warning: the doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution.

# E-FC-6

# Separating Floor – Concrete

Beam and block floor with precast or in-situ edge beams

Screed laid on REGUPOL sonus curve 8 resilient layer system (formerly known as Regupol E48) ■ For use with dense aggregate block flanking walls only



E-FC-6



1 of 10

# 1. External (flanking) wall junction – beams parallel with wall (using precast edge beams)



Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m<sup>3</sup>)

REGUPOL sonus curve 8\* **must isolate screed** from all perimeter masonry walls, wall linings and skirting REGUPOL sonus curve 8\* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape Beam and block floor:

- min 50mm concrete topping to all floor blocks
- walls must not be continuous between storeys
- floor blocks to be tightly abutted (see section 7 for floor block types)
- precast concrete edge beam min 300mm wide must break vertical continuity of wall leaves (NB: edge beam shape may vary between manufacturers)
- all voids between edge beam and inner leaf blockwork filled with mortar or flexible sealant
- Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation
- Continuous horizontal ribbon of adhesive
- Nominal 8kg/m<sup>2</sup> gypsum-based board or 13mm plaster





#### 3. External (flanking) wall junction - beams bearing on wall



Masonry outer leaf

External wall cavity (min 50mm)

Inner leaf (min 100mm) dense aggregate concrete block (1850-2300kg/m<sup>3</sup>)

REGUPOL sonus curve 8\* **must isolate screed** from all perimeter masonry walls, wall linings and skirting REGUPOL sonus curve 8\* must have 50mm (min) overlapped joints and be sealed with REGUPOL tape

Beam and block floor:

- min 50mm concrete topping to all floor blocks
- in-situ downstand beam must be min 75mm wide and must break vertical continuity of wall leaves
- walls must not be continuous between storeys
- floor blocks to be tightly abutted (see section 7 for floor block types)
- junction between floor blocks and wall must be closed (see section 7)

Close cavity with a flexible cavity stop unless it is fully filled with mineral wool insulation

Continuous horizontal ribbon of adhesive

Nominal 8kg/m<sup>2</sup> gypsum-based board or 13mm plaster

## 4. Separating wall junction



Sketch shows E-WM-3 separating wall

#### 5. Loadbearing internal wall - floor beams parallel to wall



6. Loadbearing internal wall - floor beams bearing onto wall



## 7. Floor block types

#### **Beam/block variations**

To minimise the overall floor depth, rebated or 'T' shape dense blocks may be used.

Alternatively, as indicated in 'C' and 'D' below, plain dense blocks may be used.

In all cases, the C20 topping must be applied such that it provides a minimum 50mm cover to the blocks.



#### Cut rows

No more than one cut row of floor blocks may be used per room floor with minimum 25mm concrete topping.

Where a cut row junctions with perimeter walls ensure that no gap is left and that a cut block or brick slip is used to seal this junction prior to applying concrete topping.

#### Wall head and floor block junctions

No gaps should remain where the last floor block junctions at the wall head.

Where the floor block does not close this gap, brick slips or cut blocks may be used.

(min) 25mm concrete topping covering cut row (min) 50mm Cut row



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

#### 8. Ceiling treatments for E-FC-6

All ceiling treatments must be installed in accordance with the manufacturer's instructions. All ceiling joints must be sealed with tape or caulked with sealant.

The minimum depth between top of beams and ceiling board **must not be less** than 300mm.

Note: the sound insulation performance of all ceiling treatments is increased if:

- resilient hangers are used
- increased thickness or density of mineral fibre quilt is used. (Do not fully fill the ceiling void with quilt.)



#### Downlighters and recessed lighting

Downlighters or recessed lighting may be installed in the ceiling:

- in accordance with the manufacturer's instructions
- at no more than one light per 2m<sup>2</sup> of ceiling area in each room or see 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.

# Floor depth requirements and ceiling treatments

All E-FC-6 floors must have a minimum depth of 300mm **between top of beam and ceiling board** 

Only suspended metal frame ceilings systems may be used

Min 50mm mineral fibre quilt (min 10kg/m<sup>3</sup>) in the ceiling void to cover whole ceiling board area

One layer of nominal 10kg/m<sup>2</sup> gypsum-based board

#### 9. Resilient layer installation



#### SCREED TYPE

65mm (min) cement:sand screed or 40mm (min) proprietary screed, nominal 80 kg/m<sup>2</sup> mass per unit area

- REGUPOL sonus curve 8\* must be laid dimpled side down
- overlap all REGUPOL sonus curve 8\* joints (both along and across the roll) by at least 50mm and tape all joints using REGUPOL tape
- turn up REGUPOL sonus curve 8\* at walls to ensure screed will not touch the walls and is of sufficient length to lap under wall linings and skirtings
- lay a waterproof membrane (min 0.2mm thick) over the entire floor

#### 10. Underfloor heating

Underfloor heating systems (including connectors and fixings) installed within the screed must not penetrate the resilient layer or bridge the screed to the slab.

Underfloor heating systems which have a supporting layer/board may be laid on top of the REGUPOL sonus curve 8\*

Appropriate screed depth cover to the heating system must be designed for – contact underfloor heating manufacturer for guidance.



7 of 10

robust details®

#### 11. Services - service pipes through separating floor



#### 12. Service - service pipes through separating floor (using precast edge beams)



blank page See overleaf for checklist



E-FC-6

# CHECKLIST (to be completed by site manager/supervisor)

Corr	ipany:				
Site:					
Plot:		Site manager/supervisor:			
Ref.	Item		Yes No	Inspected	
1.	Are the external wall dense aggregate blo	inner leaves and separating walls of ockwork (min 1850-2300kg/m³)?		(initials & dato)	
2.	Are all floor blocks of tightly abutted?	of dense aggregate (1850-2300kg/m <sup>3</sup> ) and			
3.	Are min 300mm wide 75mm in-situ concre are parallel to the ext	e precast concrete edge beams, or min te downstands installed where the beams ternal or separating flanking walls?			
4.	Are in-situ concrete the beams are bearin	downstand beams min 75mm wide where g on the external or separating flanking walls?			
5.	Is the concrete toppi	ng to the floor blocks at least 50mm thick?			
6.	Is the REGUPOL sol covering the whole f and sealed with REG	nus curve 8* dimple side down and loor area with min 50mm overlapped joints iUPOL tape?			
7.	Is the REGUPOL sor perimeter walls, wall	nus curve 8* isolating the screed from the linings and skirting?			
8.	Is the ceiling system fibre quilt laid over the depth from top of be	n metal frame, with min 50mm mineral he whole ceiling and of min 300mm eam to ceiling board?			
9.	Is the ceiling board 1 or caulked with seala	0kg/m <sup>2</sup> and are all joints sealed with tape ant?			
10.	Are service pipes wr of nominal 8kg/m <sup>2</sup> g	apped in quilt and boxed with two layers ypsum-based board?			
11.	Is the separating floo	or satisfactorily complete?			
Cor resi	ntact details for technical lient layer system:	assistance from CMS Acoustics, sole distributor of I	REGUPOL sonus	curve 8*	
Tel	ephone: 01925 57771	1 Fax: 01925 577733 E-mail: info	@cmsacoustic	s.co.uk	
<b>No</b> t	t <b>es</b> (include details of e manager/supervisor	any corrective action)			

#### ® UK registered trade mark no. 2291665

© Robust Details Limited 2011. All rights reserved. No part of this Handbook (other than the checklists) may be reproduced in any material form or issued or communicated to the public (including photocopying or storing it in any medium by electronic means, and whether or not transiently or incidentally to some other use of this Handbook) without the prior written permission of Robust Details Limited except in accordance with the provisions of the Copyright, Designs and Patents Act 1988.

Warning: the doing of an unauthorised act in relation to a copyright work may result in both a civil claim for damages and criminal prosecution.