Dear Colleague,

Thank you for downloading the first update pack of 2019.

This update includes Fusion’s Thermashield pre-insulated panels as an optional flanking construction to E-WS-1. Thermashield was added as a flanking option to E-FS-3 in June 2018, so this latest amendment now allows plots using this inner leaf construction to be registered for both the wall and the floor Robust Details.

E-FS-3 also includes a new ceiling treatment option offering an alternative to using the HP30 resilient bars. This new treatment specifies a generic 16mm resilient bar, and also a second ceiling with a minimum 150mm void.

Other amendments include clarifying the sheathing and panel spacings requirements for E-WT-2. Please see the Changes Sheet for full details of all updates.

Please update your September 2018, 4th Edition Handbook as follows:

1. Remove and replace just last page 5/6 of E-WM-9.
2. Remove and replace just the first and last page of E-WT-2.
4. Remove and replace just page 9/10 of E-WS-5.
5. Remove and replace just last page 5/6 of E-FC-5.
7. Remove and replace just first page 1/2 of Appendix A2.

Yours sincerely

John Thompson
Chief Executive,
Robust Details Limited
Changes to the fourth edition following January 2019 update

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
<th>Amendment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Separating Wall – Masonry</td>
<td>6</td>
<td>Points 7 &amp; 8 adjusted to read “cement:sand render”.</td>
</tr>
</tbody>
</table>

**Separating Wall – Timber**

| E-WT-2 | 1 | Clarification to show all acceptable sheathing options. |
| DO box | 1 | 2nd bullet point reworded. |
| Checklist | 8 | New item 3 added; subsequent items renumbered. |

**Separating Wall – Steel**

| E-WS-1 | 2 | Fusion Thermashield added as a flanking option. |
| Diagram 1 | | Note added referencing separating floors and Table 3c. |
| Diagram 2 | 2 | Fusion Thermashield added as a flanking option. |
| Checklist | 8 | New item 6 added; subsequent items renumbered. |

| E-WS-5 | 10 | Service void specification corrected to read “1 layer of gypsum board”. |

**Separating Floor – Concrete**

| E-FC-5 | 6 | Resilient system corrected to read “YELOfon® HD10+”. |

**Separating Floor – Steel**

| E-FS-3 | 2 | Option added to space gypsum board lining off Fusion Thermashield. |
| Ceiling treatments | 4 | New CT1 and CT2 options added to allow use of generic resilient bar. |
| Checklist | 6 | Item 6 reworded to cover ceiling treatment options. |
| | | New items 10 & 11 added; subsequent items renumbered. |
| | | Cellecta contact details updated. |

**Appendix A2**

| Icopal-MONARFLOOR BRIDGESTOP | 2 | Description of item 4 amended to reflect revised component name. |
## CHECKLIST (to be completed by site manager/supervisor)

### Company:

### Site:

### Plot: Site manager/supervisor:

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Inspected (initials &amp; date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Are separating wall blocks dense aggregate (1850 to 2300 kg/m$^3$) as featured on the list of acceptable blocks (<a href="http://www.robustdetails.com">www.robustdetails.com</a>)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Are blocks laid for the full 215mm width of the wall (i.e. 215mm blocks laid on side)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Is blockwork laid single course stretcher bond?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Is separating wall breaking the continuity of the inner leaf? (i.e. is the face of the separating wall abutted and tied or bonded into the inner leaf)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Are cavity stops installed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Are all joints fully filled?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Is cement:sand render applied to the whole wall face? (except where it may be omitted between floor joists/beams)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Is cement:sand render at least 13mm thick and scratch finished?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Is mass per unit area of the gypsum based board at least 12.5 kg/m$^2$?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Are all junctions of wall and ceiling boards sealed with tape or caulked with sealant?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Is separating wall satisfactorily complete?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes (include details of any corrective action)

Site manager/supervisor signature: ..................................................
**Separating Wall – Timber Frame**

**E-WT-2**

**Wall width**
- 240mm (min) between inner faces of wall linings.
- 50mm (min) cavity (gap between wall panels)
- 68mm (min) between stud frames

**Wall lining**
- 2 or more layers of gypsum-based board (total nominal mass per unit area 22 kg/m²), both sides - all joints staggered

**Sheathing**
- 9mm (min) thick board

**Absorbent material**
- 60mm (min) mineral wool batts or quilt (density 10 – 60 kg/m³) both sides. Material may be unfaced, paper faced or wire-reinforced

**Ties**
- Ties between frames not more than 40mm x 3mm, at 1200mm (min) centres horizontally, one row of ties per storey height vertically

**External (flanking) wall**
- Outer leaf masonry with minimum 50mm cavity

---

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

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

---

**Separating wall cavity insulation (optional)**

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

---

**DO**

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

---

**Edition 4**

January 2019 Update

robustdetails®
1. External (flanking) wall junction

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Sheathing board

**Inner leaf where there is no separating floor, e.g. for houses**
- one layer of gypsum-based board nominal 8 kg/m²

**Inner leaf where there is a separating floor, e.g. for flats/apartments**
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

- Close cavity with a cavity stop (see Appendix A)
- Seal all perimeter joints with tape or caulk with sealant

- Mineral wool insulation 10 kg/m³ (min); 70mm (min) EPS or foil faced PIR with no gaps

2. Staggered external (flanking) wall junction

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)

**Inner leaf where there is no separating floor, e.g. for houses**
- one layer of gypsum-based board nominal 8 kg/m²

**Inner leaf where there is a separating floor, e.g. for flats/apartments**
- if using robustdetails® for floor, refer to Table 3b in introduction to select an acceptable robustdetails® separating floor and use two layers of gypsum-based board nominal 8kg/m² each layer
- if using floor requiring pre-completion testing, seek specialist advice

- Seal all perimeter joints with tape or caulk with sealant

- Close cavity with a cavity stop (see Appendix A)

- Mineral wool insulation 10 kg/m³ (min); 70mm (min) EPS or foil faced PIR with no gaps
10. 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

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.
**CHECKLIST** (to be completed by site manager/supervisor)

Company: 

Site: 

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

**Notes** (include details of any corrective action)

Site manager/supervisor signature: ........................................
**Wall lining**
- 2 or more layers of gypsum-based board (minimum total nominal mass per unit area 22 kg/m²) both sides
- all joints staggered

**Wall width**
200mm (min) between inner faces of wall linings.

**Absorbent material**
- one layer 50mm (min) unfaced mineral wool batts (density 33-60 kg/m³), or
- two layers 25mm (min) unfaced mineral wool batts (density 33-60 kg/m³), or
- two layers 25mm (min) unfaced mineral wool quilt (density min 10 kg/m³)

**External (flanking) wall**
Outer leaf masonry with minimum 50mm cavity

---

**Notes:** The steel frame profiles shown are indicative only. Other profiles are acceptable.

This Robust Detail is only suitable for use in lightweight steel frame houses and flats/apartments. When using this Robust Detail in flats/apartments please refer to Tables 3 and 4 of the Introduction. In relation to separating floors the inner leaf of external (flanking) walls may require further treatments – seek specialist advice.

All sketches show one layer of mineral wool batts placed between the studs. It is also acceptable to place a layer of mineral wool batts or quilt on both sides of the wall.

---

**DO**
- Keep wall linings at least 200mm apart
- Ensure the batts or quilt cover whole wall area and are fitted together tightly
- Make sure batts or quilt are not tightly compressed by the twin frames
- 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
- Stagger joints in wall linings to avoid air paths
- Seal all joints in outer layer with tape or caulk with sealant
- Refer to Appendix A
1. External (flanking) wall junction

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Fill the void between between studs with mineral wool batt, 10 kg/m³ (min), for 600mm (min) from separating wall or use Fusion Thermashield
- Inner leaf – one layer of gypsum-based board nominal 8 kg/m² or if using Fusion Thermashield, nominal 9.8 kg/m² spaced off by min 38mm battens or 25mm resilient bars
- If using robustdetails® for floor, refer to Table 3c in Introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop

2. Staggered external (flanking) wall junction

- Masonry outer leaf (min 100mm thick)
- External wall cavity (min 50mm)
- Fill the void between between studs with mineral wool batt, 10 kg/m³ (min), for 600mm (min) from separating wall or use Fusion Thermashield
- Inner leaf – one layer of gypsum-based board nominal 8 kg/m² or if using Fusion Thermashield, nominal 9.8 kg/m² spaced off by min 38mm battens or 25mm resilient bars
- If using robustdetails® for floor, refer to Table 3c in Introduction to select an acceptable robustdetails® separating floor. Then refer to separating floor Robust Detail to identify acceptable inner leaf construction
- Seal all perimeter joints with tape or caulk with sealant
- Close cavity with a flexible cavity stop
3. Internal floor junction

- Flexible or acoustic sealant
- Lightweight steel 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 where joists are at right angles to wall
- Seal all perimeter joints with tape or caulk with sealant
- Fill the void between between studs with mineral wool batt for 300mm (min) down from ceiling

4. Separating floor junction

- Mineral wool insulation batts, 33-60kg/m³, between studs to 600mm (min) above bottom rail of steel frame
- 5mm (min) flanking strips installed at perimeter and turned beneath skirting board
- Flexible acoustic sealant below wall lining
- Separating floor:
  - if using robustdetails® for floor, refer to Table 3c in Introduction and see Robust Detail for separating floor for floating floor and ceiling options
  - if using floor requiring pre-completion testing, seek specialist advice
- Floors should not be continuous between dwellings
- Fixing angle
- Resilient bar below joists at 450mm centres fixed through joist flange to manufacturer’s detail
- Mineral wool insulation batts, 33-60kg/m³, between studs to 600mm (min) below decking level
5. Internal wall junction

Seal all perimeter joints with tape or caulk with sealant
Separating wall lining continuous
Where required internal wall to comply with Building Regulations Requirement E2
Other junction details are acceptable provided all joints are sealed with tape or caulked with sealant

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

Ground floors not continuous between dwellings
Flexible or acoustic sealant
Ground floor construction:
- 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
- cast-in situ concrete suspended slab, or
- ground bearing slab
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)

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
9. Services and sockets in the separating wall

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/m²) to enclose electrical boxes

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

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
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
blank page
See overleaf for checklist
**CHECKLIST** (to be completed by site manager/supervisor)

Company: ____________________________

Site: ________________________________

Plot: ____________________________ Site manager/supervisor: ____________________________

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Inspected</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Are wall linings at least 200mm apart?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Is the absorbent material unfaced mineral wool batts or quilt of appropriate density and thickness?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Are batts or quilt fitted together tightly?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Are all joints in the wall lining staggered?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Is separating wall lining correct mass per unit area on both sides?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Where Fusion Thermashield is used, is the inner leaf gypsum board 9.8 kg/m² and spaced off by min 38mm battens or 25mm resilient bars?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Are all joints sealed with tape or caulked with sealant?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Are services installed in accordance with sketches 8.1 &amp; 8.2?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Is separating wall satisfactorily complete?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes** (include details of any corrective action)

Site manager/supervisor signature: ____________________________

---

© 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.
9. **Ground floor junction**

- Mastic sealant, ensure skirting and wall lining are isolated from screed
- Perimeter insulation, isolating screed from metal frame
- Below screed insulation, isolating screed from slab
- DPM (if required)

**Section**

- Alternative detail with timber floating floor finish
  - 5mm (min) resilient flanking strip
  - Flexible or acoustic sealant
  - Insitu concrete, minimum mass per unit area 365 kg/m²

10. **Internal wall junction**

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

**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

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

11.2 Electrical sockets and switches in service void

- 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

- 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.
6. Services – Service pipes through separating floor

- 25mm (min) mineral wool quilt (min 10 kg/m³) around pipe
- Pipe boxed in with two layers gypsum-based board, each layer nominal 8 kg/m²
- **J-strip** tape
- All voids around pipe sealed

Sketch shows CT0 type ceiling treatment
# CHECKLIST

(to be completed by site manager/supervisor)

**Company:**

**Site:**

**Plot:**

**Site manager/supervisor:**

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Inspected (initials &amp; date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Has training been received from Cellecta®?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Are precast concrete planks 150mm (min) thick and of mass per unit area 300 kg/m² (min)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Are inner leaves to external (flanking) walls of the correct block density and appropriate for precast concrete plank thickness and ceiling treatment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Are joints between precast concrete planks grouted and sealed?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Are precast concrete planks built into the masonry walls?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Is the <strong>E-strip</strong> perimeter edging installed around all room perimeter walls (including door openings, cupboards, across thresholds and into wall recesses) and service pipes and joints sealed with <strong>J-strip</strong> tape?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Are <strong>YELOfon® HD10+</strong> resilient layer joints formed as described in Section 4 and sealed with <strong>J-strip</strong> tape?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Is <strong>YELOfon® HD10+</strong> resilient layer overlapping the <strong>E-strip</strong> perimeter edging and joints sealed with <strong>J-strip</strong> tape?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Are the skirting boards isolated from the screed by the <strong>E-strip</strong> perimeter edging?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Is appropriate ceiling treatment used to suit wall block type?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Are all ceiling board joints sealed with tape or caulked with sealant?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Are service pipes wrapped in quilt and boxed in with two layers of nominal 8 kg/m² gypsum-based board?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Is separating floor satisfactorily complete?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Contact details for technical assistance from Cellecta®, manufacturer of YELOfon® HD10+ system:**

- **Telephone:** 01634 296677
- **Fax:** 01634 226630
- **E-mail:** technical@cellecta.co.uk

**Notes** (include details of any corrective action)

**Site manager/supervisor signature** ..........................
Separating Floor – Metal Joists

**DO**

- Lay quilt (min 100mm thick) between all joists, including doubled up joists, ensuring no gaps remain.
- Apply Collecta SB adhesive to all ScreedBoard® 28 decking joints.
- Install YELOfor® 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 4).
- Stagger joints in ceiling layers.
- Refer to Appendix A.

**Floating floor** Collecta ScreedBoard® 28

**Floor decking** 18mm thick (min) wood based board, density 600 kg/m³ (min)

**Joists** 254mm (min) deep metal joists

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

**Ceiling** See section 4 for suitable ceiling treatment.
1. External (flanking) wall junction – masonry outer leaf

- Masonry outer leaf (min 100mm thick)
- 50mm (min) cavity
- 55mm (min) rigid insulation board
  (not required if using Fusion Thermashield)
- Mineral wool insulation batts, 33-60 kg/m³, between studs or use Fusion Thermashield
- YELOfon® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Joists may span in either direction
- Close cavity with a cavity stop (see Appendix A)
- 100mm mineral wool insulation quilt,
  10-36 kg/m³ (min)
- Cellecta HP30 resilient bar
- Seal all perimeter joints with tape or caulk with sealant
- 2mm resilient strip on top of wall panels
- Two layers gypsum-based board fixed to external steel frame nominal 25 kg/m² combined, or if using Fusion Thermashield, two layers gypsum-based board nominal 17.5 kg/m² combined, spaced off frame by min 25mm resilient bar or min 38mm battens

2. Separating wall junction

- If using robustdetails® for wall - refer to Table 3c in Introduction to select an appropriate robustdetails® separating wall
- If using wall requiring pre-completion testing - seek specialist advice
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) above bottom rail of steel frame
- YELOfon® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Flexible acoustic sealant below plasterboard
- 254mm (min) deep metal joists
- 100mm mineral wool insulation quilt,
  10-36 kg/m³ (min)
- Ceiling treatment (see section 4)
- Resilient bar below joists at 600mm (max) centres fixed through joist flange to manufacturer's detail
- 2mm resilient strip on top of wall panels
- Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level
3. Internal wall junction

Where required internal wall to comply with Building Regulations Requirement E2

YELOfon® FS50 flanking angle

ScreedBoard® 28

Joist stiffener if required

Collecta HP30 resilient bar

Mineral wool insulation batts, 33-60 kg/m³, between studs to 600mm (min) below decking level
4. Ceiling treatment for E-FS-3

- 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

CT3 – Optional 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 $rd\Delta Rw+Ct=17\text{dB}$ and $rd\Delta Lw=16\text{dB}$) – 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 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.
5. Underfloor heating systems below ScreedBoard®

- YELOfon® FS50 flanking angle
- 20mm ScreedBoard® 20
- 25mm (min) extruded or expanded polystyrene panel with underfloor heating pipes
- 8mm FIBREfon® resilient layer
- Collecta HP30 resilient bar
- Seal all perimeter joints with tape or caulk with sealant
- 2mm resilient strip on top of wall panels

6. Services – pipes through separating floor

- Service pipe
- 25mm mineral fibre quilt insulation (10-36 kg/m³) installed around the complete perimeter of the service pipe. Where the service pipe penetrates the separating floor, all voids are to be packed with insulation quilt
- YELOfon® FS50 flanking angle installed at perimeter and turned under skirting board
- ScreedBoard® 28
- Close cavity with a cavity stop (see Appendix A)
- Proprietary fire collar fitted around pipe and fixed to underside of steel joists
- Collecta HP30 resilient bar
- 2 layers of gypsum-based board nominal 16 kg/m² combined fixed to 45mm metal frame stud forming duct. Joints to be staggered and taped
- Mineral wool insulation batts, 33-60 kg/m³, between studs
## CHECKLIST (to be completed by site manager/supervisor)

**Company:**

**Site:**

**Plot:**

**Site manager/supervisor:**

<table>
<thead>
<tr>
<th>Ref.</th>
<th>Item</th>
<th>Yes</th>
<th>No</th>
<th>Inspected (initials &amp; date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Are metal joists minimum 254mm deep?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Is sub-deck minimum 18mm, 600 kg/m²?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Are YELOfon® FS50 flanking angles installed correctly?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Has the ScreedBoard® 28 floating floor treatment been fitted in accordance with the manufacturer’s instructions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Where underfloor heating is used, is FIBREfon® 8 installed in addition to the ScreedBoard® 20?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Are the correct type of resilient ceiling bars used and fitted, in accordance with the manufacturer’s instructions, at right angles to the joists (Collecta® HP30 bars must be used if second ceiling is not included)?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Has quilt (min 100mm thick) been fitted between the joists?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Has ceiling system been fitted in accordance with the manufacturer’s instructions?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Are the ceiling treatments fixed to the resilient bars with correct screws, such that the screws do not touch or penetrate the joists?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>For CT1 or CT2 is secondary ceiling void minimum 150mm?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Where Fusion Thermashield is used, is the inner leaf lined with 2 layers gypsum-based board nominal 17.5 kg/m² combined, spaced off inner leaf frame by min 25mm resilient bar or min 38mm batten?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Are all joints sealed with tape or caulked with sealant?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Are vertical service pipes wrapped in quilt and boxed in with two layers of gypsum-based board combined nominal mass per unit area of 16 kg/m²?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>Is separating floor satisfactorily complete?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Contact details for technical assistance from Collecta, manufacturer of ScreedBoard® 28 system:**

**Telephone:** 01634 296677  
**Fax:** 01634 226630  
**E-mail:** technical@collecta.co.uk

**Notes** (include details of any corrective action)

**Site manager/supervisor signature**

---

© 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.

®: UK registered trade mark no. 2291665
# Appendix A2 – Specific Flanking Conditions

## Contents

<table>
<thead>
<tr>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Icopal-MONARFLOOR® BRIDGESTOP® System for robustdetails® masonry cavity walls</td>
</tr>
<tr>
<td>Smartroof complete Interlocking “room-in-roof” panel system using robustdetails® timber or masonry cavity walls</td>
</tr>
<tr>
<td>Kingspan TEK inner leaf flanking condition for robustdetails® timber separating walls</td>
</tr>
<tr>
<td>Prestoplan PresPeak 60 interlocking single spandrel panel system for robustdetails® timber separating walls</td>
</tr>
<tr>
<td>Icopal-MONARFLOOR® Wall Cap RDA2 System for robustdetails® separating floors with cavity flanking walls</td>
</tr>
<tr>
<td>RoofSpace I-Roof™ “room-in-roof” panel system using robustdetails® timber or masonry cavity walls</td>
</tr>
<tr>
<td>Space4 “room-in-roof” panel system using robustdetails® timber or masonry cavity walls</td>
</tr>
<tr>
<td>Stewart Milne Timber Systems Sigma® Roof Spandrel Panel System for robustdetails® timber separating walls</td>
</tr>
<tr>
<td>NYTROOF RAPID FIT SYSTEM for robustdetails® masonry cavity walls</td>
</tr>
<tr>
<td>Lightweight external cladding for robustdetails® timber separating walls</td>
</tr>
<tr>
<td>Flanking construction to robustdetails® precast concrete separating floors around private stairs</td>
</tr>
</tbody>
</table>
Appendix A2 – Specific Flanking Conditions

Icopal-MONARFLOOR® BRIDGESTOP® System for robust details® 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.

BRIDGESTOP® is the subject of Patent Application ref GB2429719

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

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