



Kingspan **TEK**® Building System

STANDARD DETAILS FOR 172 MM STRUCTURAL
INSULATED PANELS



Fibre-free
Core


Kingspan®

*Low Energy –
Low Carbon Buildings*

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- W19 a *Kingspan TEK® Building System* external (flanking) wall junction with timber separating walls to Robust Details E-WT-1 and E-WT-2.
- W19b *Kingspan TEK® Building System* staggered external (flanking) wall junction with timber separating walls to Robust Details E-WT-1 and E-WT-2.

Floor Details

- F1 Typical separating wall incorporating room in roof.
- F2 Typical separating wall & floor assemblies.
- F3 Separating floor detail. Platform frame. Non-Robust detail pre-completion test (pct) required.
- F4 Typical connection detail for engineered I-joist floor system.
- F5 Alternative I-joist / wall panel connection detail fixed to rim board.
- F6 Internal load bearing floor detail.

Roof Details

- R1 a Typical eaves detail vertical section with *Kingspan TEK®* Building System pitched roof panel.
- R1 b Typical eaves detail vertical section with *Kingspan TEK®* Building System pitched roof panel (insulation at rafter level only).
- R2 Internal roof support details.
- R3 Typical roof panel overlaid ridge detail with & without support.
- R4 Typical ridge connection details.
- R5 Room in roof – dormer perspective & section detail.
- R6 Typical roof light detail.
- R7 Typical valley detail.
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- R9 Roof to roof – change in level detail.
- R10 Typical eaves detail vertical section with truss rafter pitched roof.
- R11 *Kingspan TEK®* Building System gable junction – truss rafter roof with insulation at ceiling level.
- R12 *Kingspan TEK®* Building System gable junction – *Kingspan TEK®* Building System roof panel.
- R13 *Kingspan TEK®* Building System external wall junction with warm deck flat roof – timber frame parapet wall.
- R14 a Typical eaves detail *Kingspan TEK®* Building System external wall junction with pitched roof and internal floor - insulated at line of pitch.
- R14 b Typical eaves detail *Kingspan TEK®* Building System external wall junction with pitched roof - insulated at line of pitch.
- R15 *Kingspan TEK®* Building System external wall junction with pitched roof insulated at line of pitch - gable.

Construction Details

- C1 Typical panel joints for *Kingspan TEK®* Building System wall panels.
- C2 Timber post panel joint.
- C3 OSB3 cassette panel joint.
- C4 Typical wall elevation with window & door openings.
- C5 Typical gable elevation with ridge beam pocket detail.

Miscellaneous Details

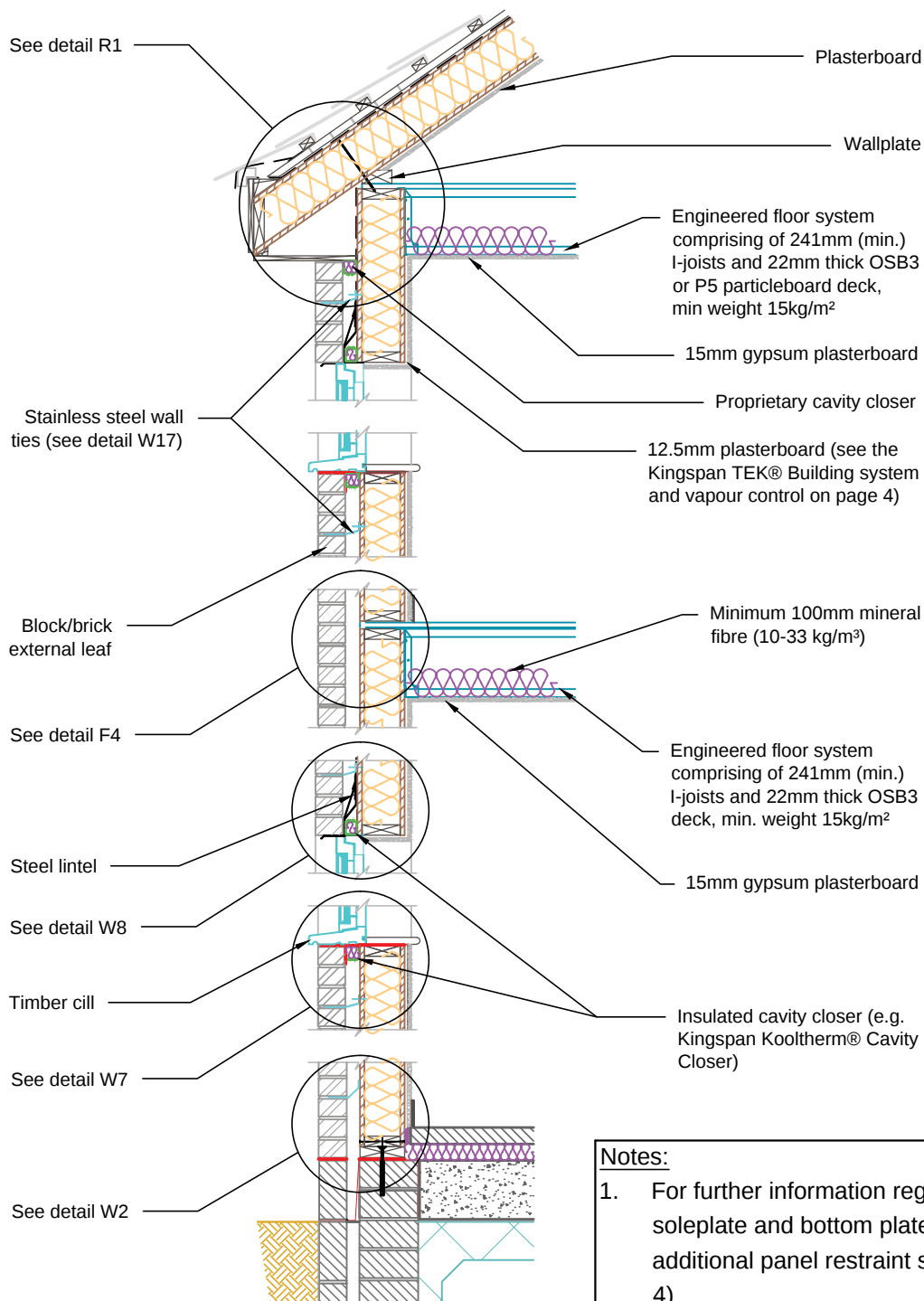
- M1 Standard fixings – sparrennägel, smooth, ringshank nails & SIP screw.
- M2 Standard fixings – hangers & brackets.
- M3 Wall mounted services detail – electrical.
- M4 External fireplace recess & chimney.
- M5 Alternate external fireplace recess & chimney.

NB These details offer general guidance and are not exhaustive, they have been compiled based on best practice and current information at the time of going to press. Please confirm these details are the current edition at the point of need by contacting the *Kingspan TEK®* Technical Service Department (see rear cover). The use of these details and their application remain the responsibility of the principal designer who should at all times verify their suitability, accuracy and likely performance with respect to their intended usage. Accordingly, Kingspan Insulation Ltd accepts no liability for any errors, omissions or claims arising from their use. For further advice on the application of these details, please contact the *Kingspan TEK®* Technical Service Department (see rear cover).

Fixing Specifications

Application	Fastener Type	Spacing
Fixing soleplate or combined soleplate and bottomplate	Specification should be in accordance with project structural engineers' recommendations based upon geography and project foundation substructure	As per project structural engineers' recommendations
Panel straps to substructure / foundations	Specifications should be in accordance with project structural engineers' recommendations based upon geography and project foundation substructure	As per project structural engineers' recommendations
Fixing 50 mm x 110 mm bottomplates to soleplates	3.1 mm x 90 mm galvanized ring-shank nails	200 mm centres in two staggered rows
Fixing 15 mm x 100 mm OSB3 splines into <i>Kingspan TEK® Building System</i> panels	2.8 mm x 63 mm galvanized ring-shank nails	100 mm centres both sides of the panel
Fixing 50 mm x 110 mm bottomplates, headplates, end timbers, edge timbers into <i>Kingspan TEK® Building System</i> panels	2.8 mm x 63 mm galvanized ring-shank nails	50 mm centres both sides of the panel
Fixing 100 mm x 110 mm timber posts into <i>Kingspan TEK® Building System</i> panels	2.8 mm x 63 mm galvanized ring-shank nails	50 mm centres both sides of the panel
Fixing 110 mm x 150 mm bevelled headplate to <i>Kingspan TEK® Building System</i> panels	2.8 mm x 63 mm galvanized ring-shank nails	50 mm centres both sides of the panel
Fixing <i>Kingspan TEK® Building System</i> wall panels at corner joints	4.8 mm x 225 mm FastenMaster Headlok	Typically 350 mm centres for FastenMaster Headlok screws
Fixing <i>Kingspan TEK® Building System</i> roof sections at wall/floor junctions, ridge beams, intermediate purlins and gable walls	4.8 mm x 225 mm FastenMaster Headlok	Typically 350 mm centres for FastenMaster Headlok screws
Fixing joist hangers to headplate or laminated beams (fixings may vary depending on specification of joist hanger – please refer to manufacturers' instructions floor system)	3.75 mm x 32 mm square twist shank nails or Simpson N10 nails	Into side and top of headplate in locations marked out
Fixing I-beams / joist to joist hanger (fasteners may vary depending on specification of joist hanger – please refer to manufacturers' instructions floor system)	3.75 mm x 32 mm square twist shank nails or Simpson N10 nails	In pre-drilled holes for bottom flange
Fixing OSB3 / P5 floor decking to joists / headplate or header joist	2.8 mm x 63 mm galvanized ring-shank nails	Maximum 200 mm centres
Fixing rim board to headplate	Skew nail 3.75 mm x 75 mm round wire nails	150 mm
Fixing OSB3 / P5 floor decking to joists / rimboard	3.35 mm x 65 mm round wire nails	200 mm
Fixing brickwork cavity wall ties to <i>Kingspan TEK® Building System</i> wall panels	BTS 50 SCR tie / screw kits (Simpson Strong-Tie BTS 50 & ABC Spax 30 mm x 4.0 mm stainless steel flange head)	Varies with the geographical location of the building. Follow wall tie manufacturer's recommendations.
Fixing treated timber counter battens to <i>Kingspan TEK® Building System</i> wall / roof panels for ventilation	ABC Spax 5 mm x 60 mm or EJOT M5 70 mm stainless steel screws or equivalent (to penetrate through 15 mm OSB/3 face)	Typically 300 mm centres. For further guidance follow project structural engineers' recommendations

NB. Contact Kingspan TEK® Technical Services Department for further information. Heads of nail fixings should be flush with the surface of the OSB3 / P5 facing.



Notes:

1. For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)
2. Internal floor to provided a minimum R_w of 40dB



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Typical Wall Section TEK 172

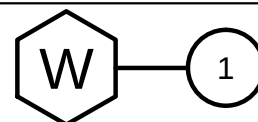
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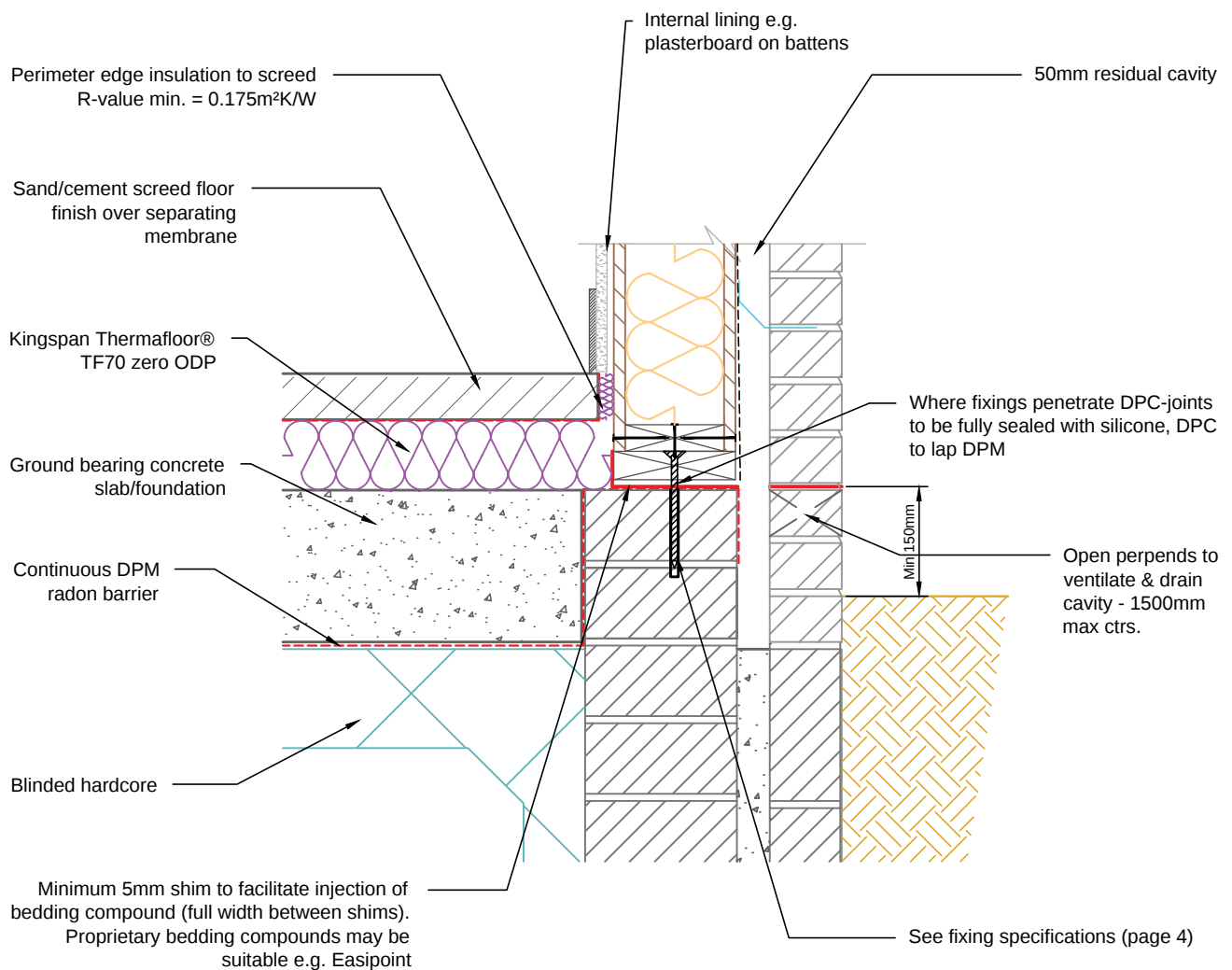
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Scale:
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Notes:

1. For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)
2. Slab should be levelled and shimmed along line of walls to create a level platform for wall construction.



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Sectional Elevation through soleplate fixing detail.

Ground bearing slab.

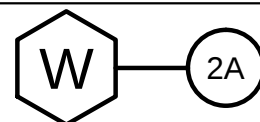
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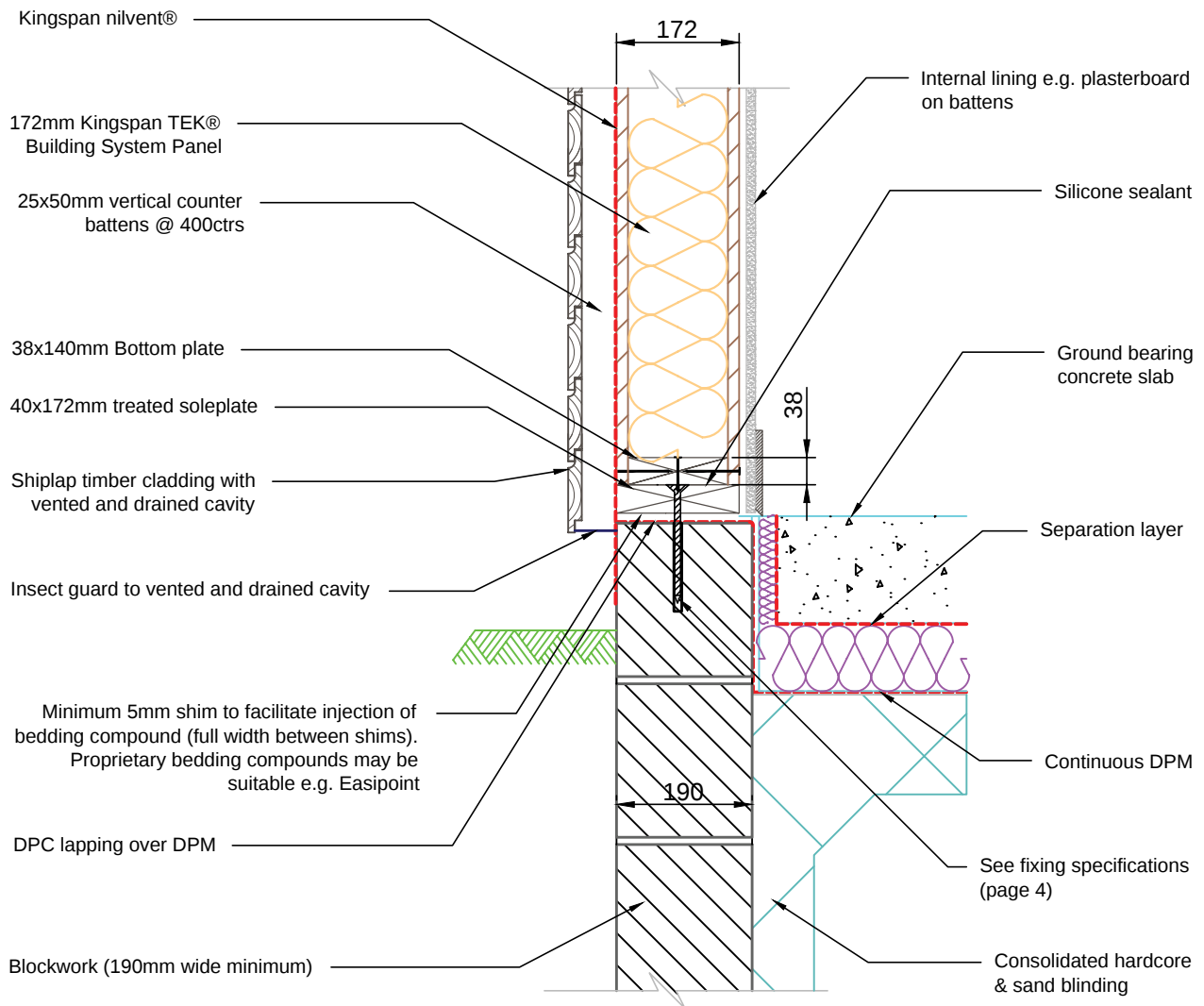
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Scale:
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Notes:

- For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)



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Typical ground bearing floor slab detail with ventilated cladding.

TEK 172

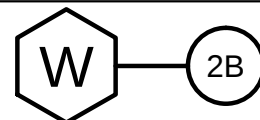
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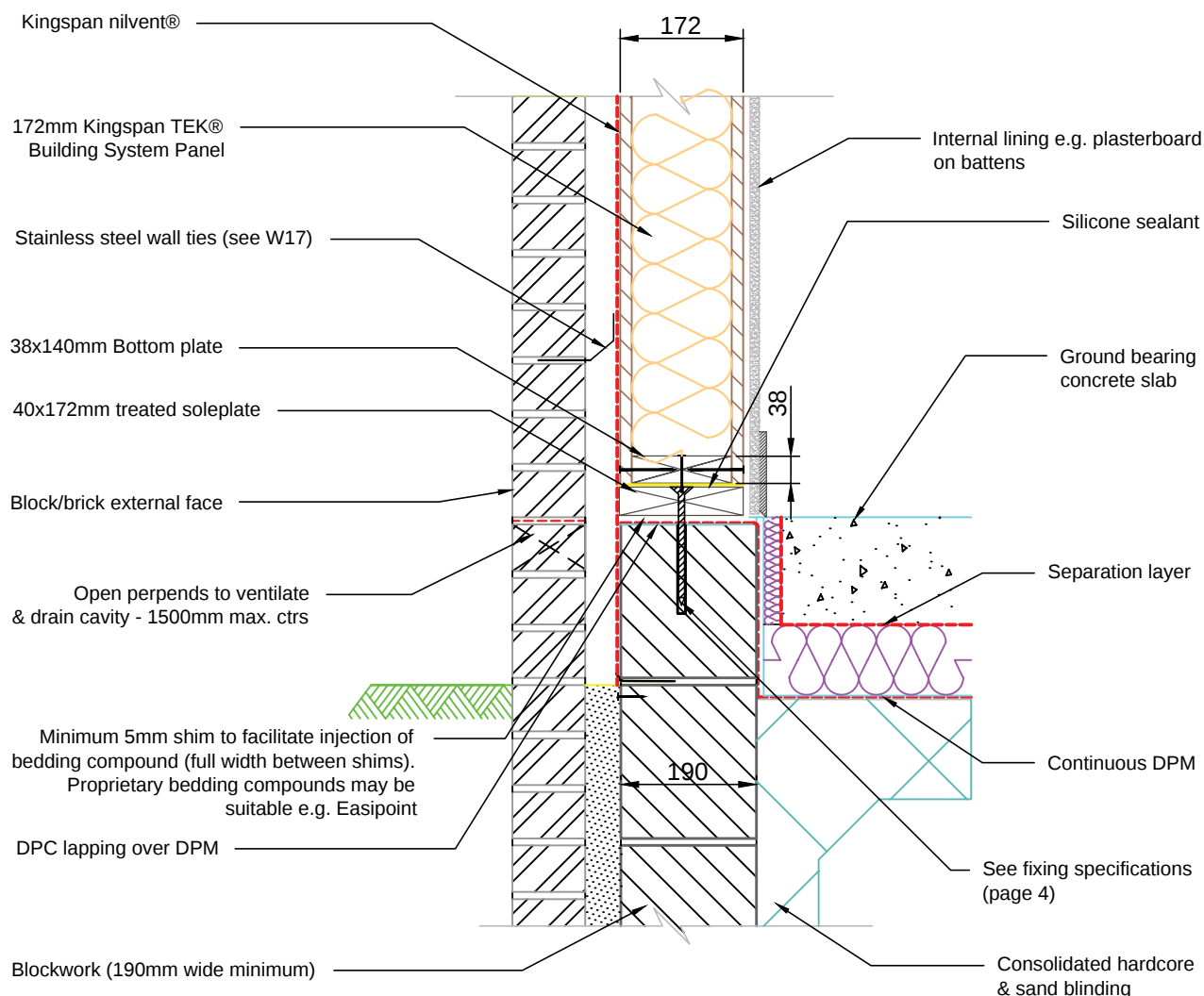
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Notes:

- For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)



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Typical ground bearing floor slab detail with
blockwork wall.

TEK 172

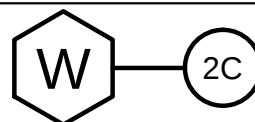
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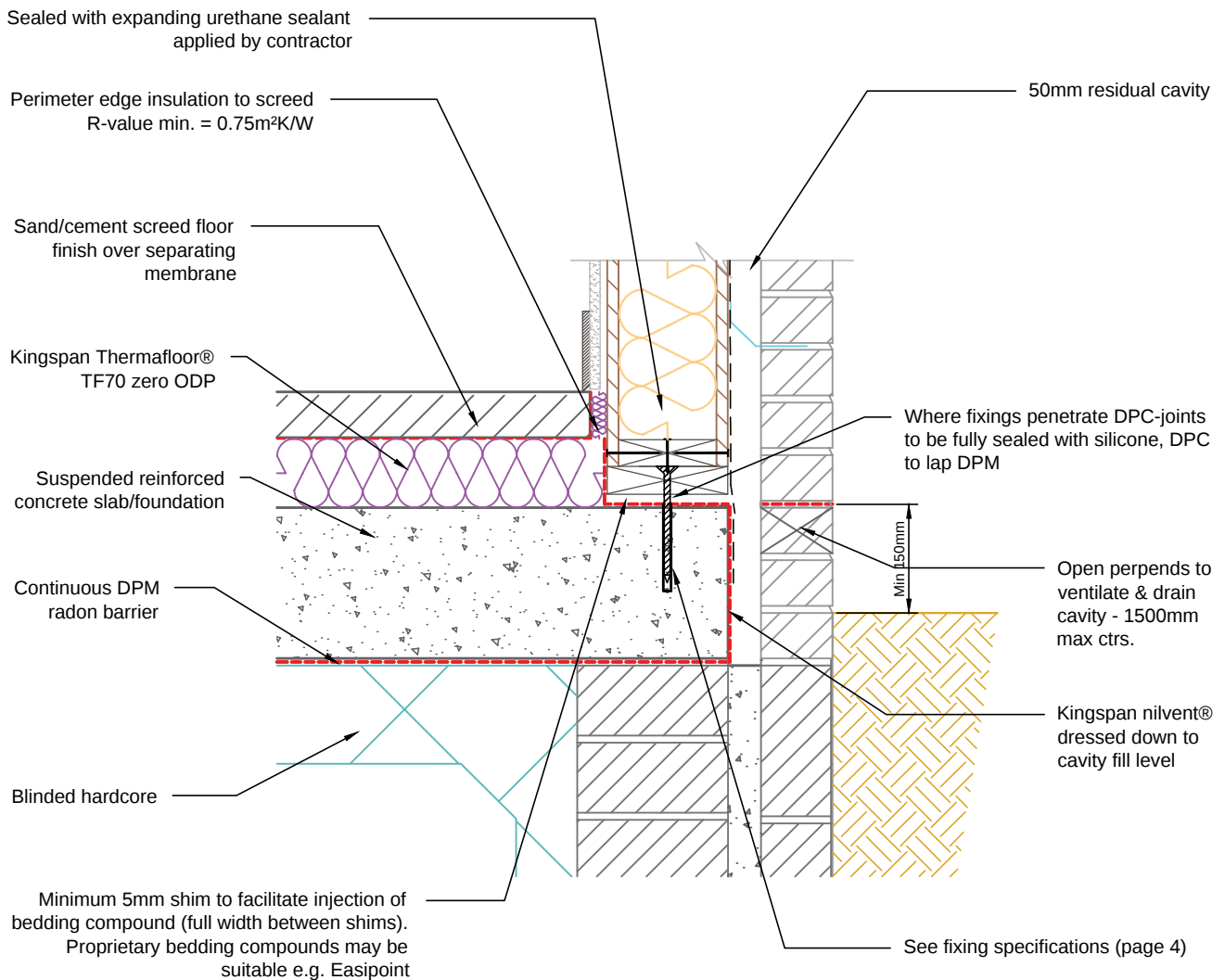
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Notes:

1. For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)
2. Slab should be leveled and shimmed along line of walls to create a level platform for wall construction.



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Sectional Elevation through soleplate fixing detail.

Suspended reinforced concrete slab.

TEK 172

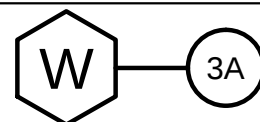
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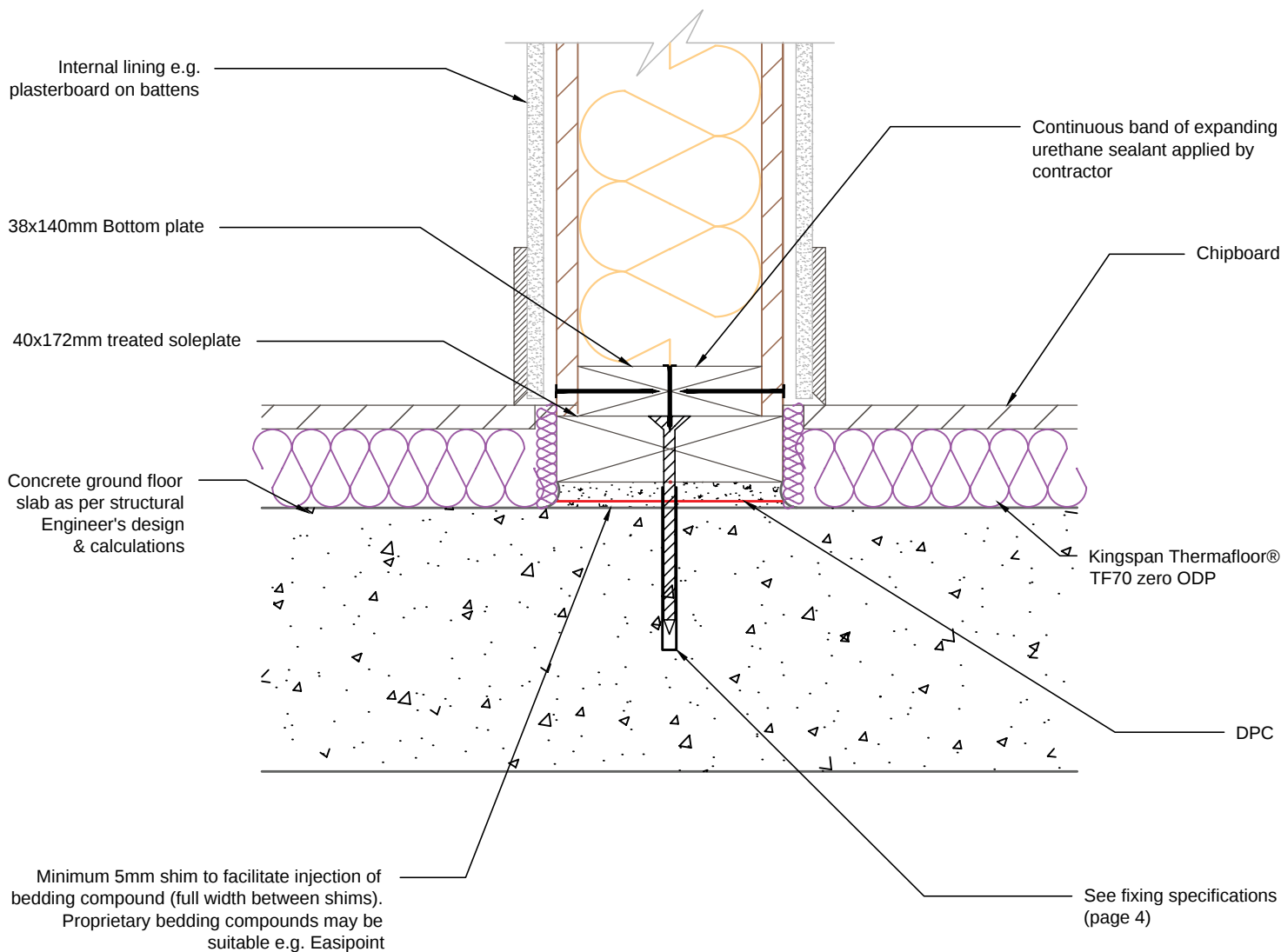
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Notes:

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2. Slab should be levelled and shimmed along line of walls to create level platform for wall construction.



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Sectional elevation through wall junction
with ground floor slab.

TEK 172

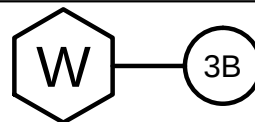
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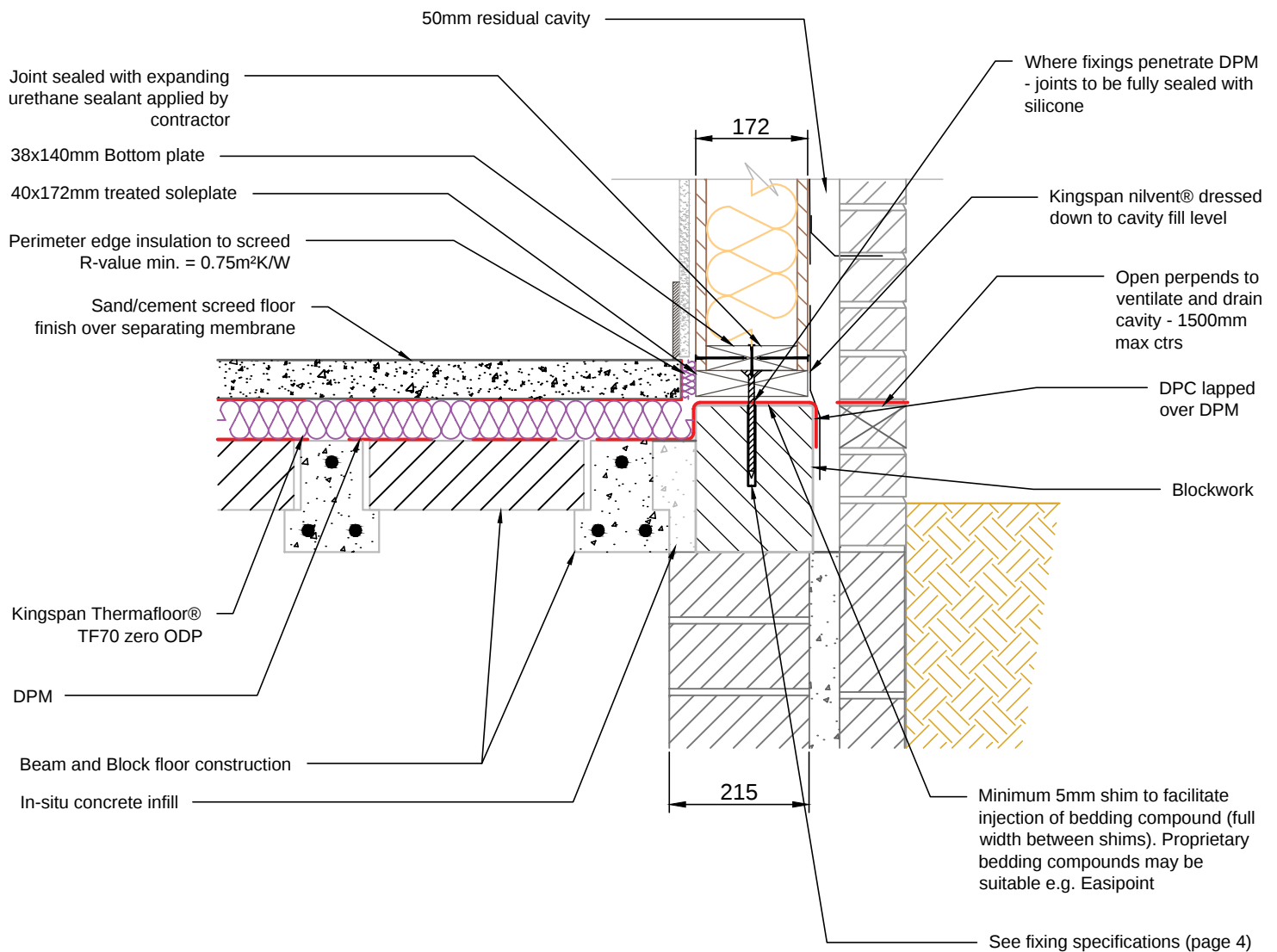
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Notes:

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Sectional elevation through beam and block floor

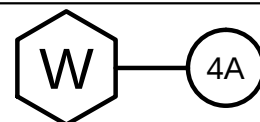
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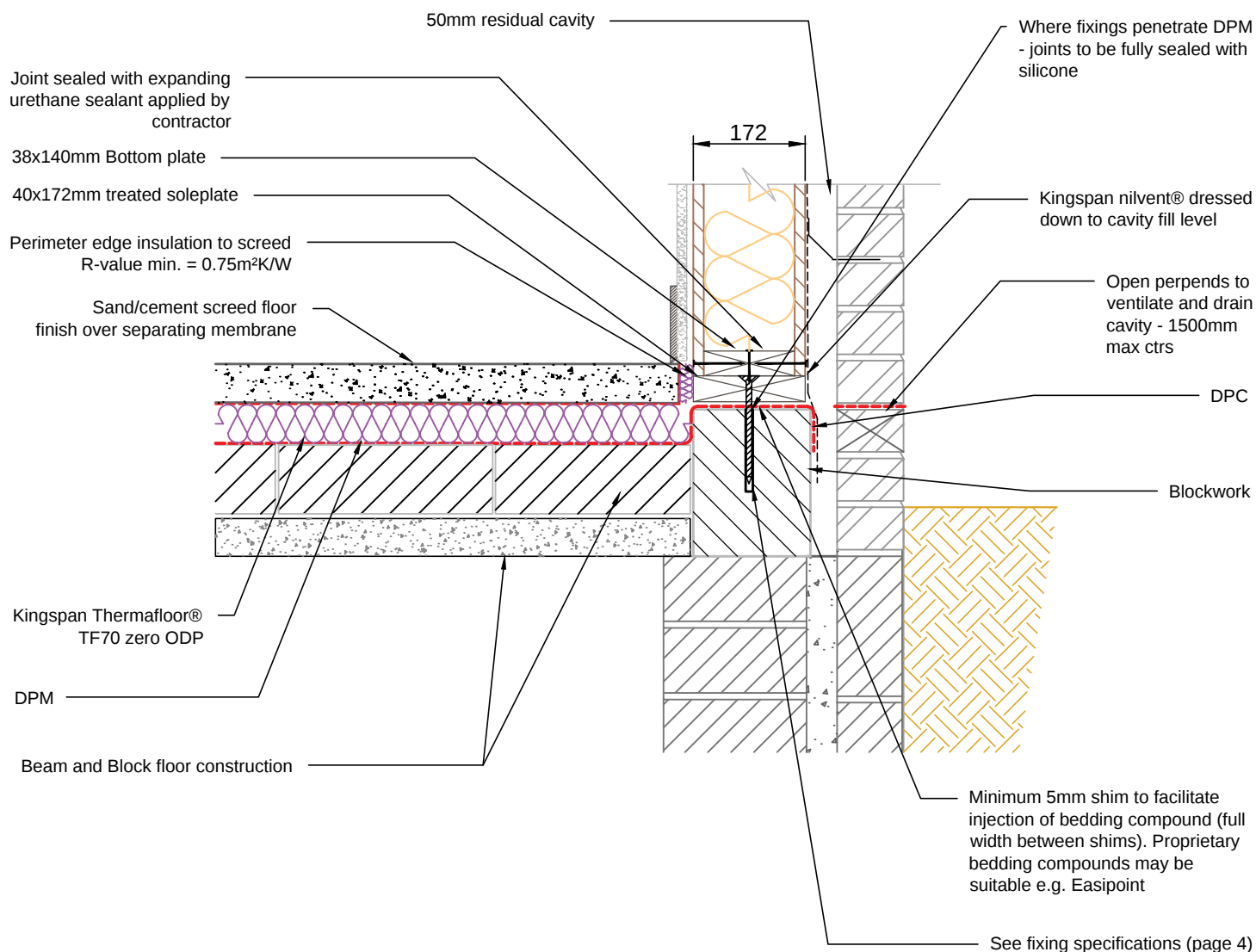
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Notes:

- For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)



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Sectional elevation through beam and block floor support

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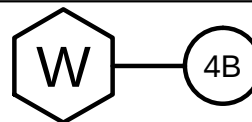
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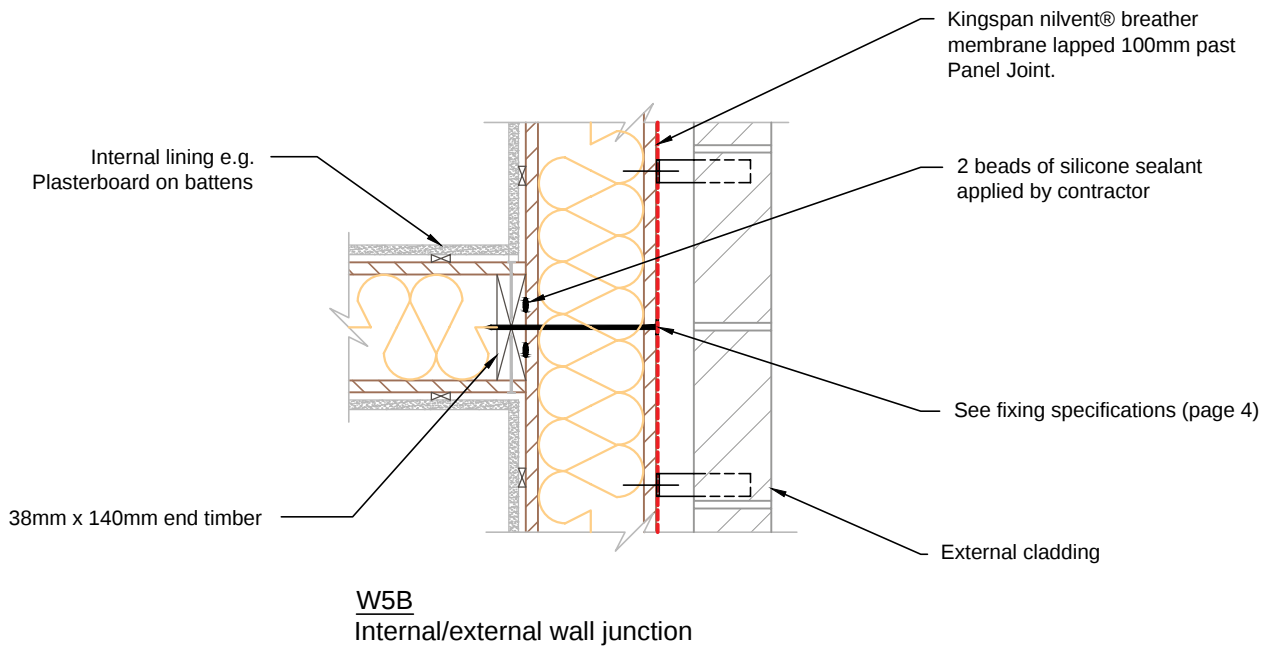
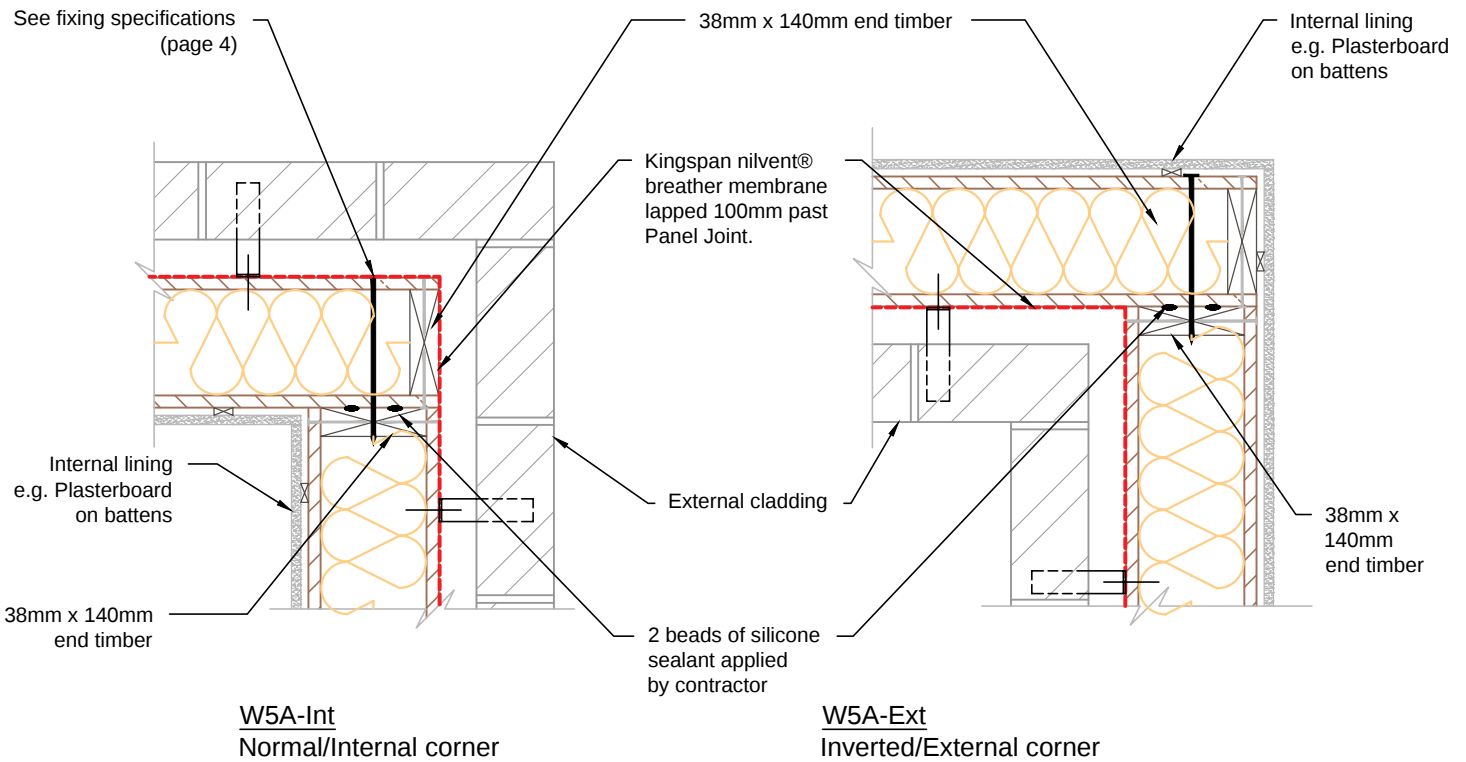
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Plan showing typical wall connection detail Corner & T-junction

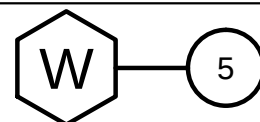
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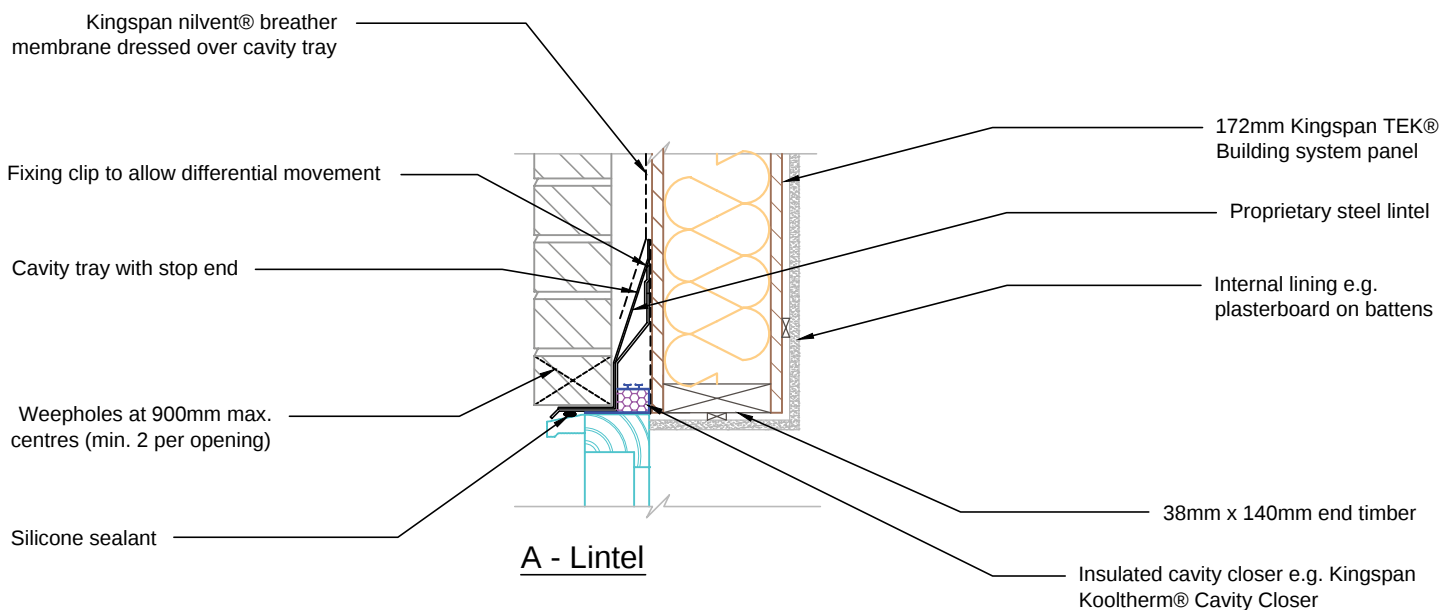
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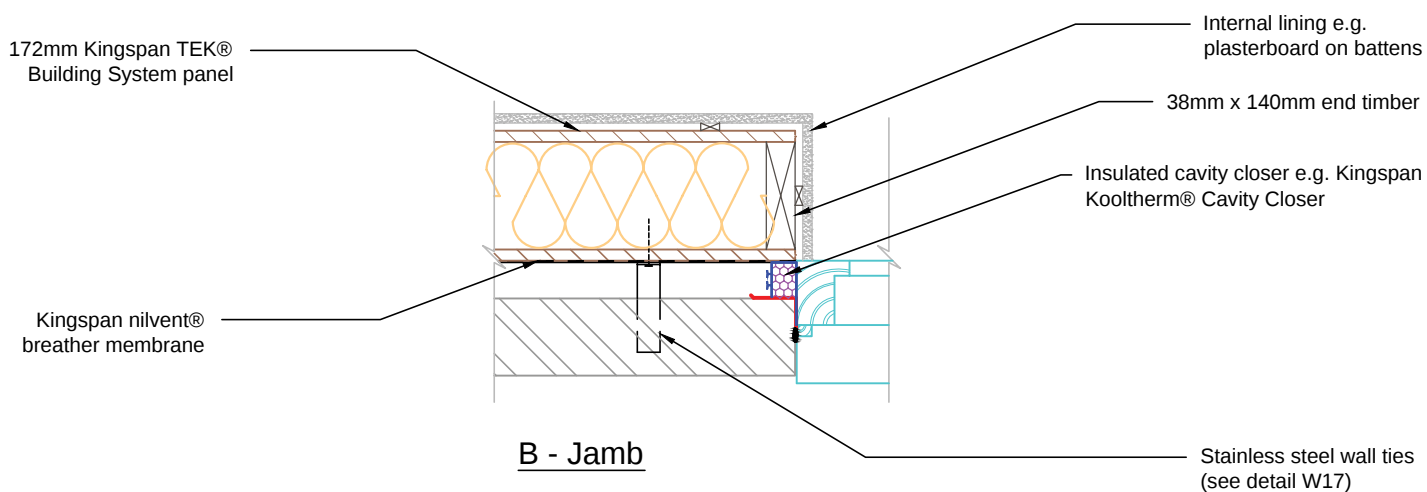
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NB - Restraint clips typically required @ 600mm ctrs along top edge of lintel.
 Fixings to be used in accordance with lintel manufacturer's recommendations



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Typical window detail - brickwork
 external leaf detail

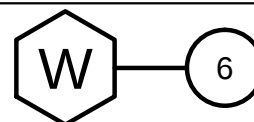
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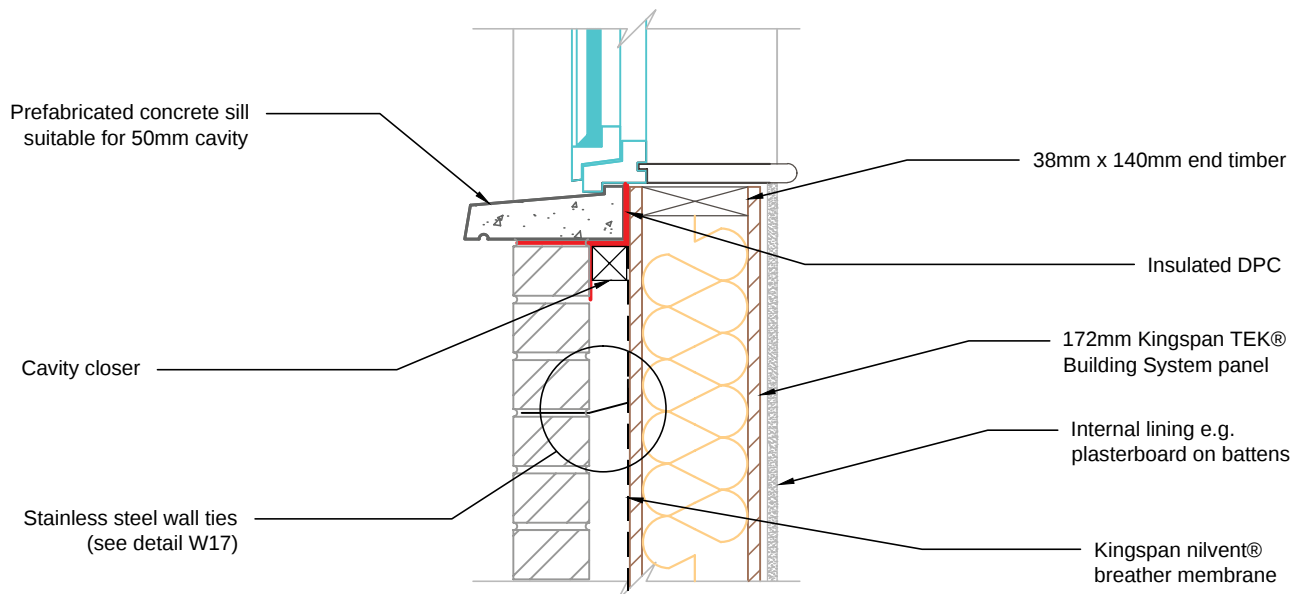
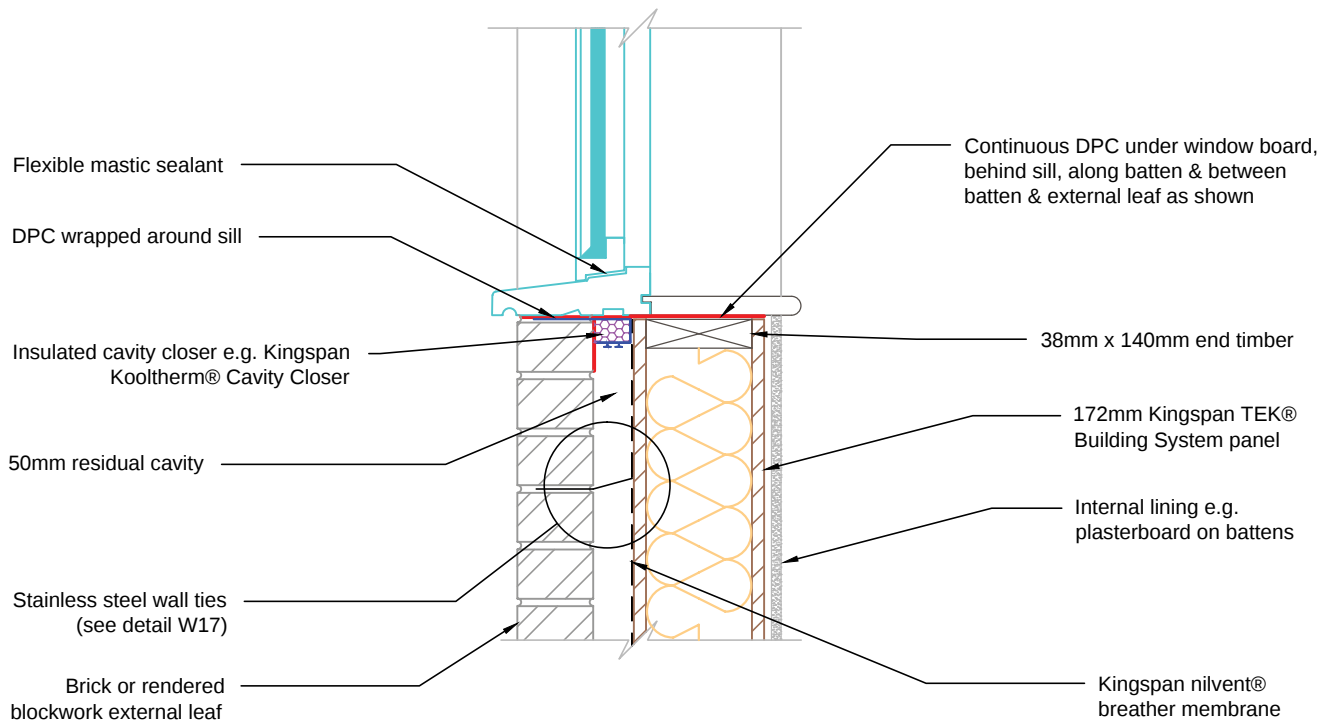
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Typical section at window sill - brickwork
external leaf detail

TEK 172

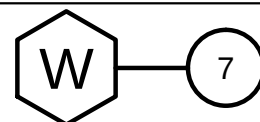
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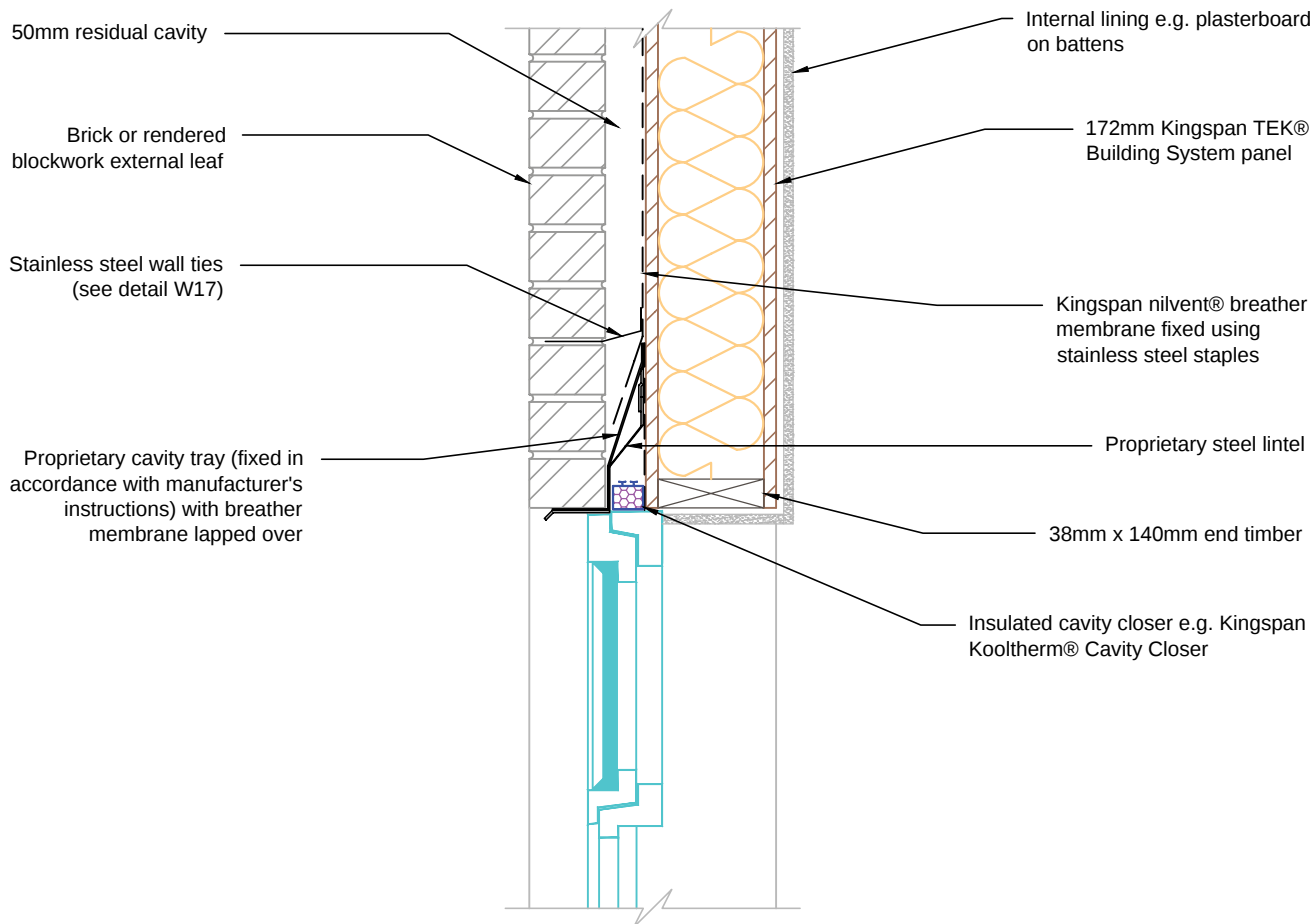
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Notes:

1. Restraint clips typically required @ 600mm ctrs along top edge of lintel. Fixings to be used in accordance with lintel manufacturer's recommendations.



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Typical section at window head - brickwork
external leaf detail

TEK 172

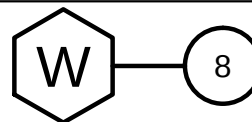
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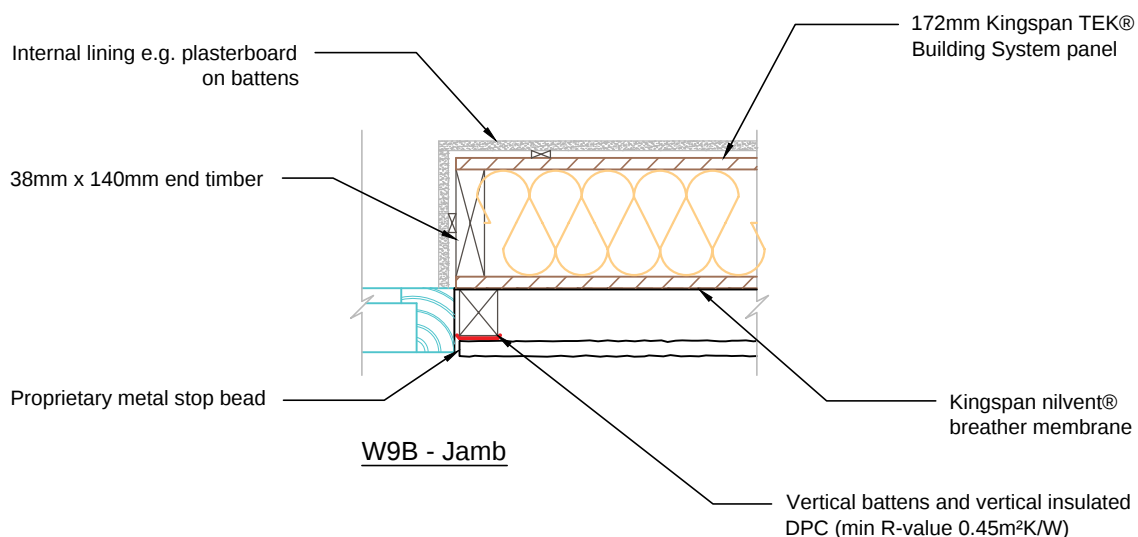
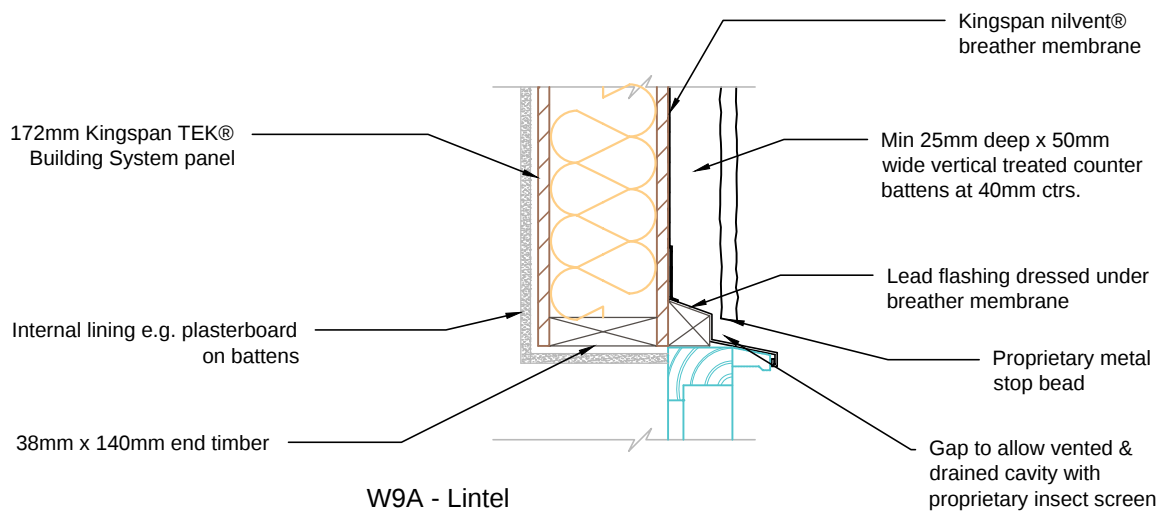
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09/10/14

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H.E.

Scale:
1:10





Notes:

1. Restraint clips typically required @ 600mm ctrs along top edge of lintel. Fixings to be used in accordance with lintel manufacturer's recommendations.



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Typical window detail - ventilated cladding cavity

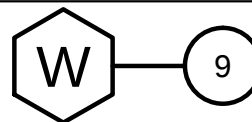
TEK 172

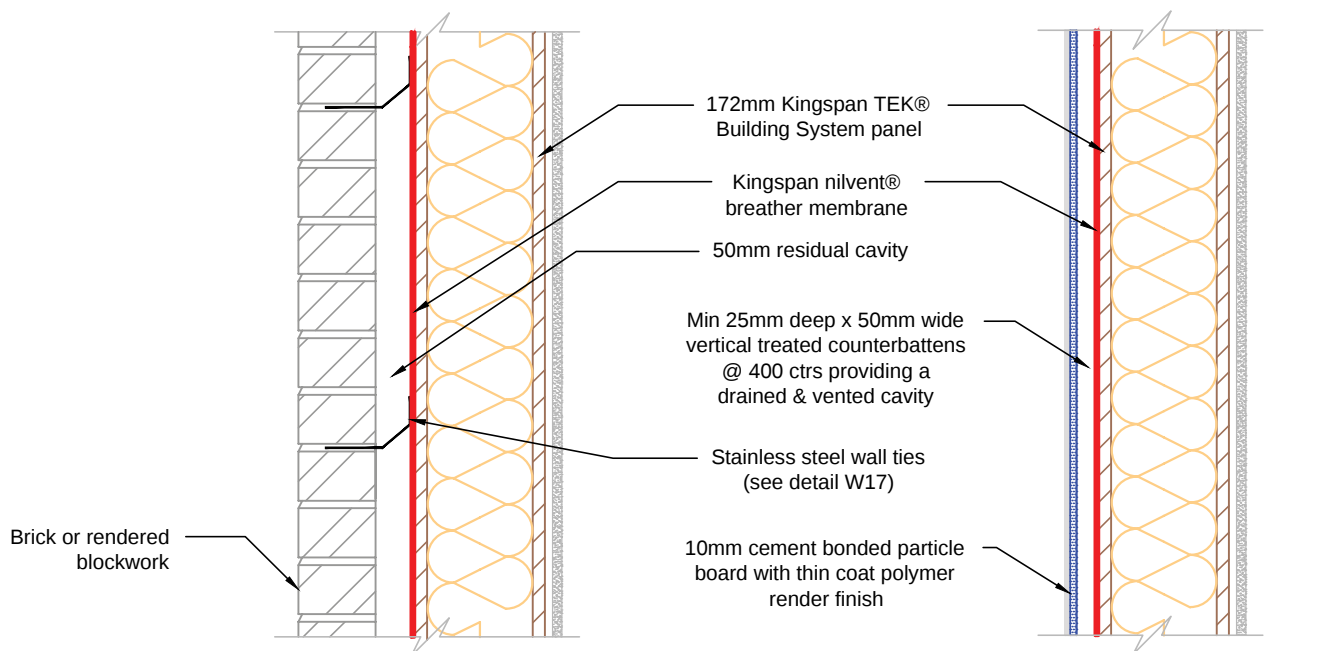
KIL-W9TEK-172

Date:
10/10/14

Drawn by:
H.E.

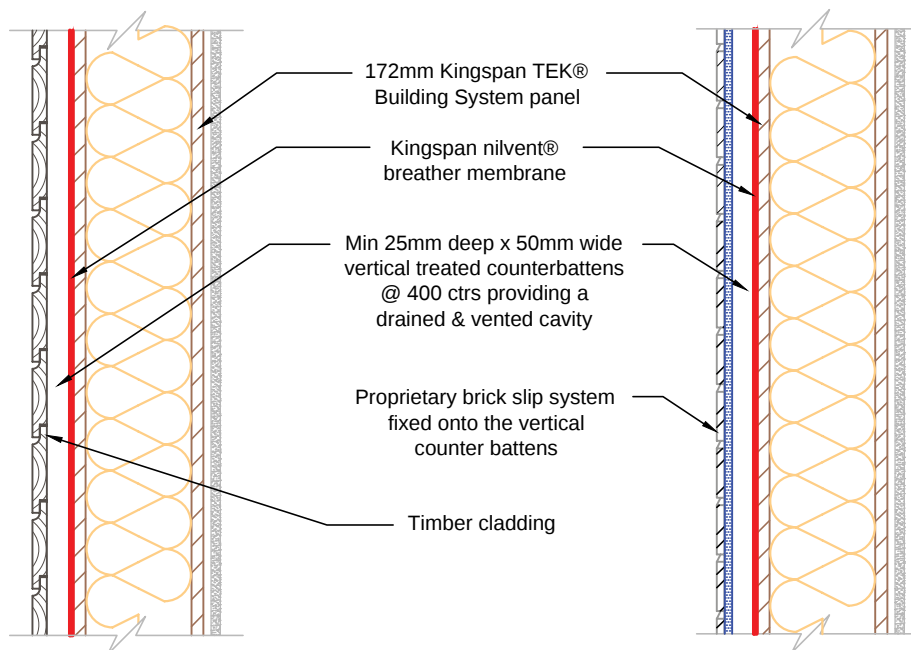
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1:10





Brick cavity finish

Thin coat polymer render on vertical battens



Horizontal timber cladding finish on vertical battens

Proprietary brick slip finish on vertical battens

N.B. Screw fixings can be inserted directly into OSB3 skins



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Standard external finishes

TEK 172

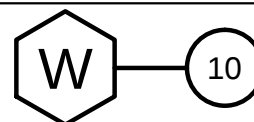
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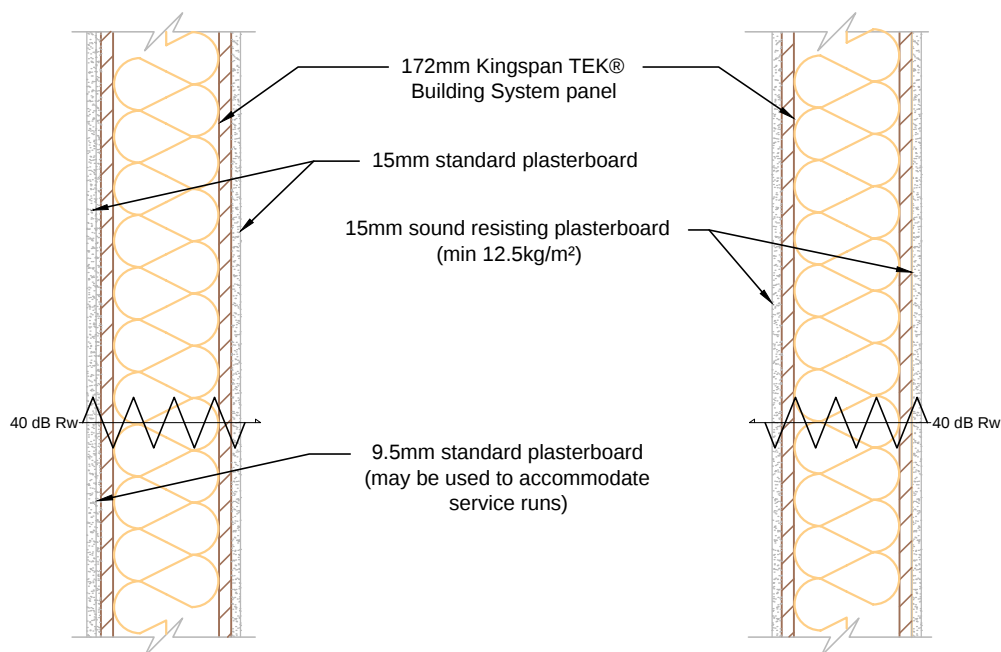
Date:

10/10/14

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H.E.

Scale:
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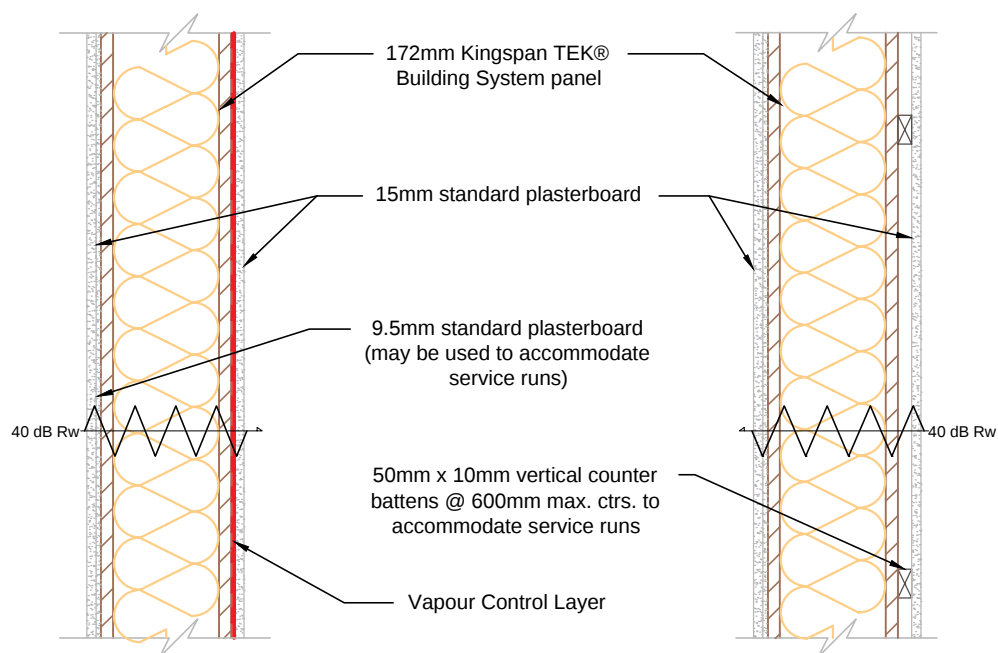


Preferred internal wall construction (1)

(Rw = 40dB - See SRL test report C/03/5L/0848/1)

Preferred internal wall construction (2)

(Rw = 40dB - See BTC 13505 test report)



Alternative wall construction with plasterboard & vapour control layer

Alternative wall construction with plasterboard fixed on counter battens

N.B. Screw fixings can be inserted directly into OSB3 skins



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Plan view of internal Kingspan TEK® Building System Walls
TEK 172

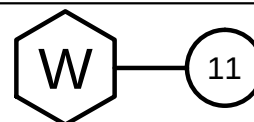
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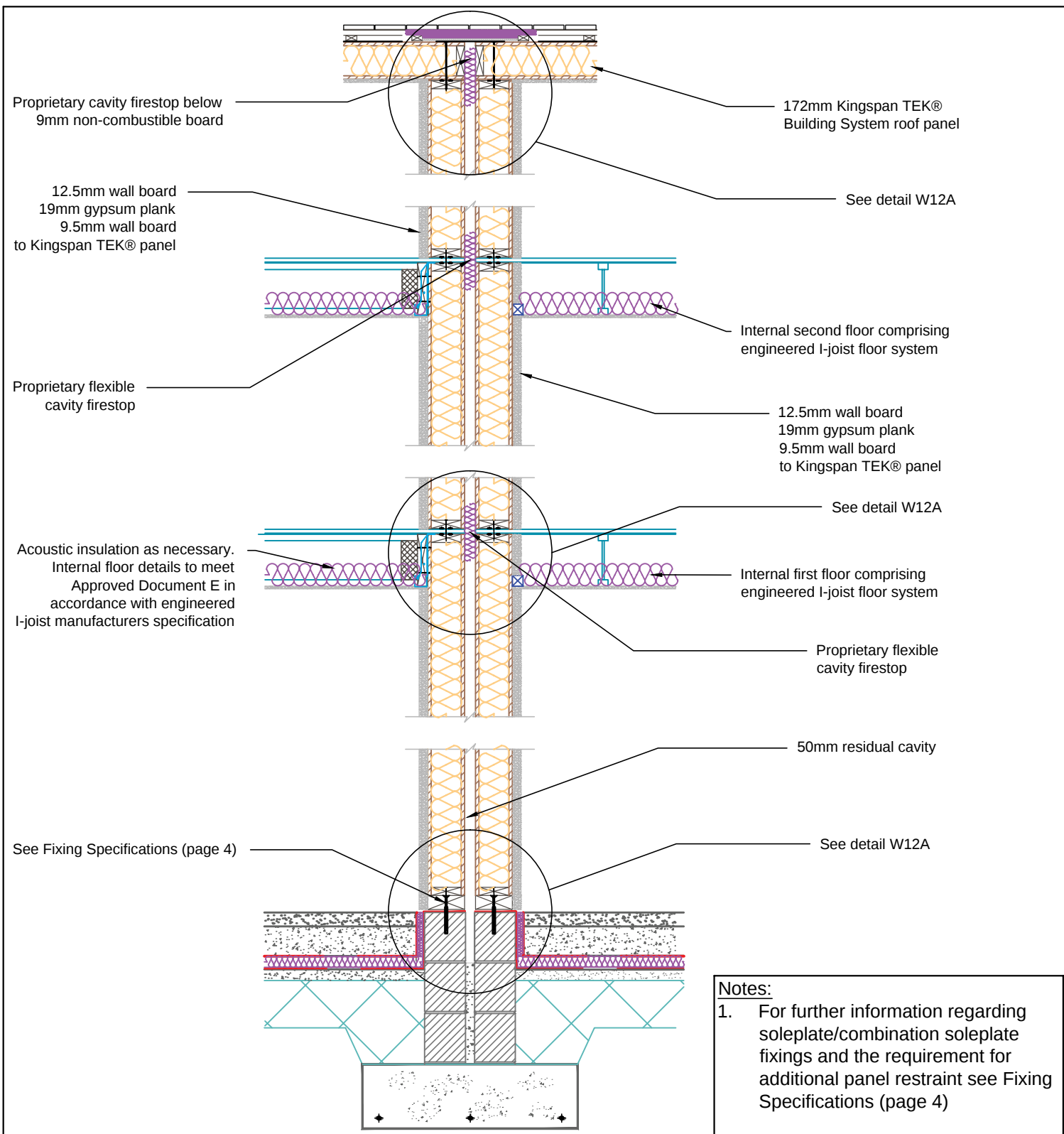
Date:

10/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical separating wall section incorporating room in roof TEK 172

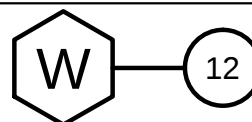
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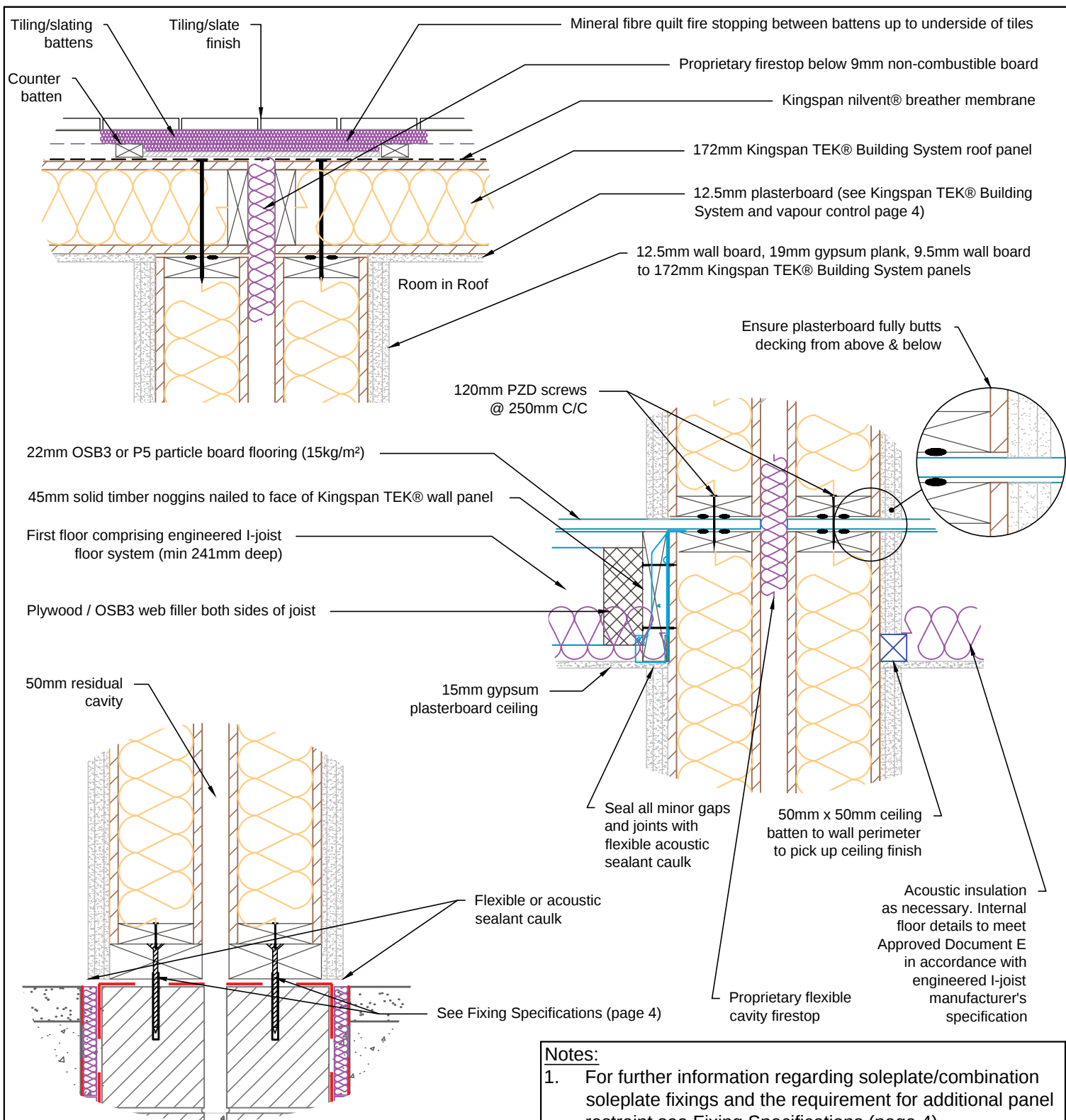
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10/10/14

Drawn by:
H.E.

Scale:
1:25





Notes:

1. For further information regarding soleplate/combination soleplate fixings and the requirement for additional panel restraint see Fixing Specifications (page 4)



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Section through typical separating wall & internal floor assemblies incorporating room in roof. TEK 172

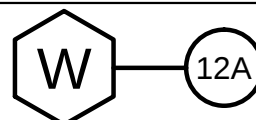
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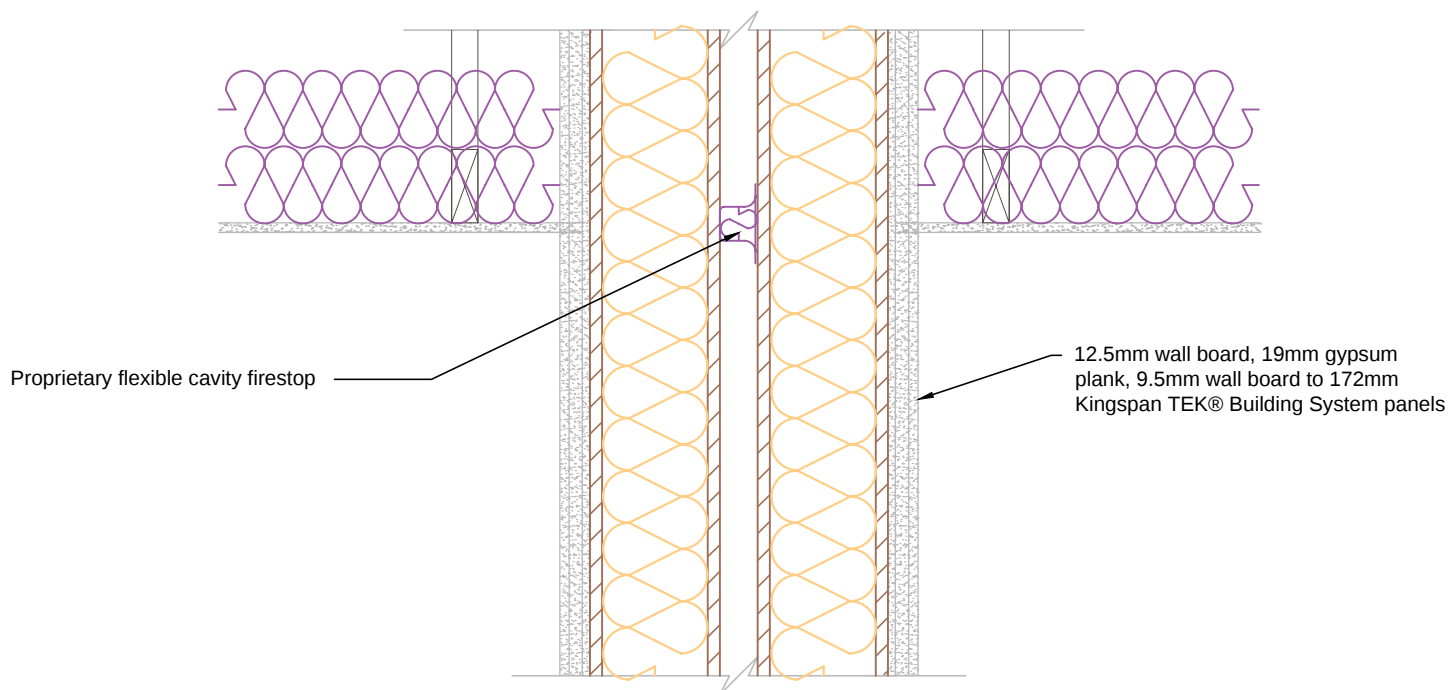
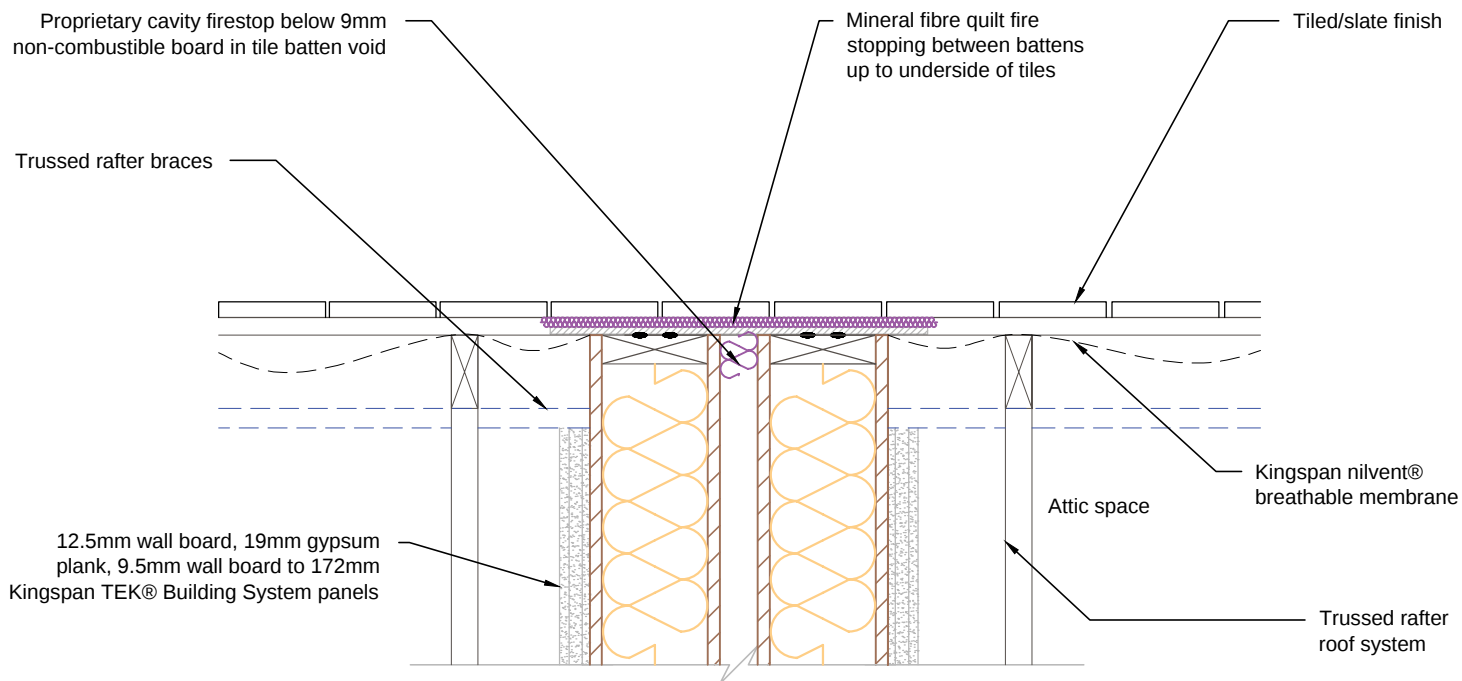
Date:

13/10/14

Drawn by:
H.E.

Scale:
1:10





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Section through typical separating wall
assemblies incorporating trussed rafter roof.

TEK 172

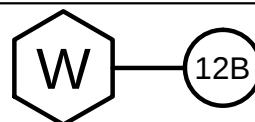
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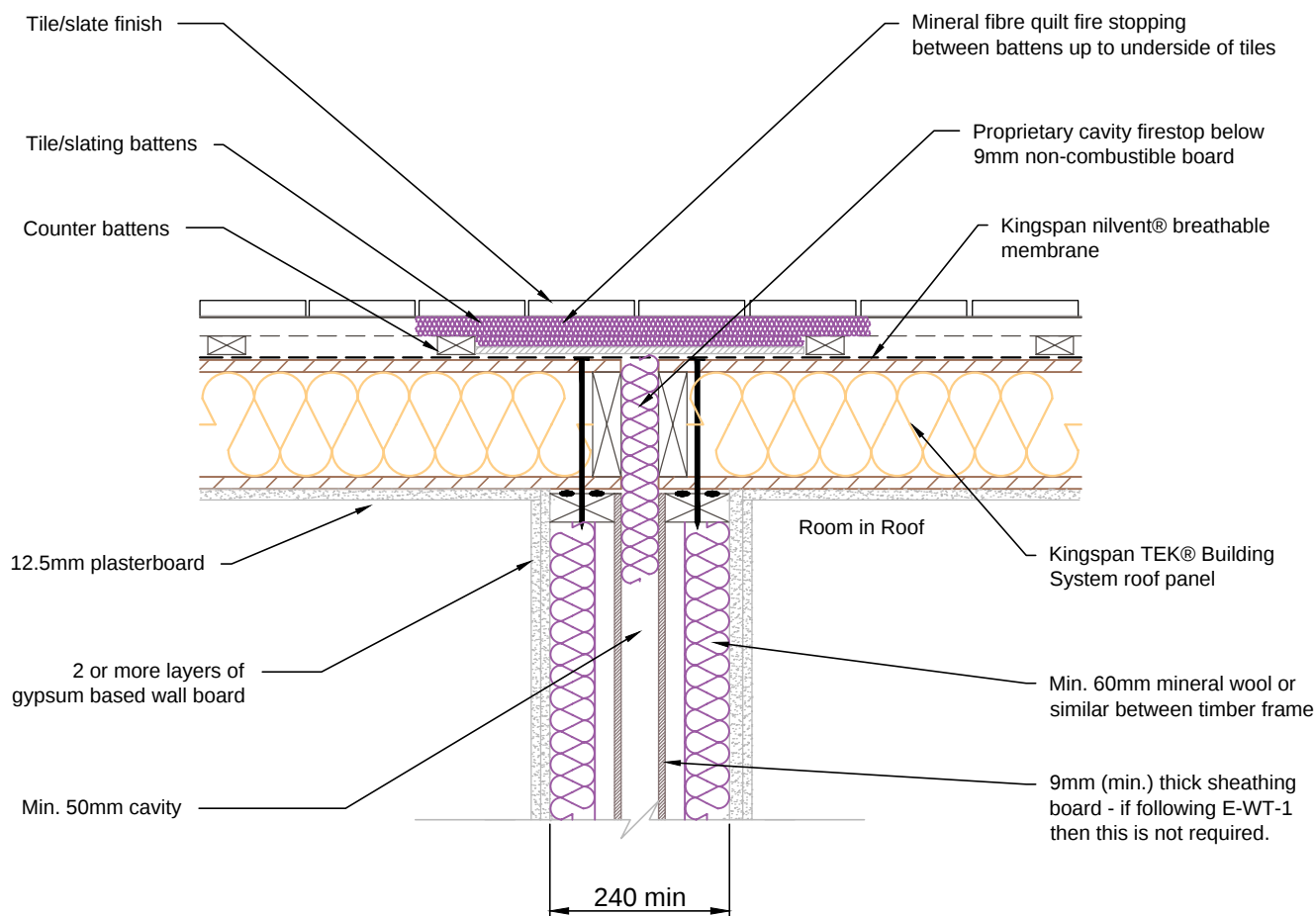
Date:

13/10/14

Drawn by:
H.E.

Scale:
1:10





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Section through typical separating partial fill timber frame wall (E-WT-2) with TEK Roof TEK 172

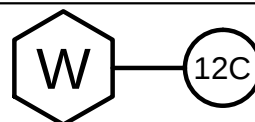
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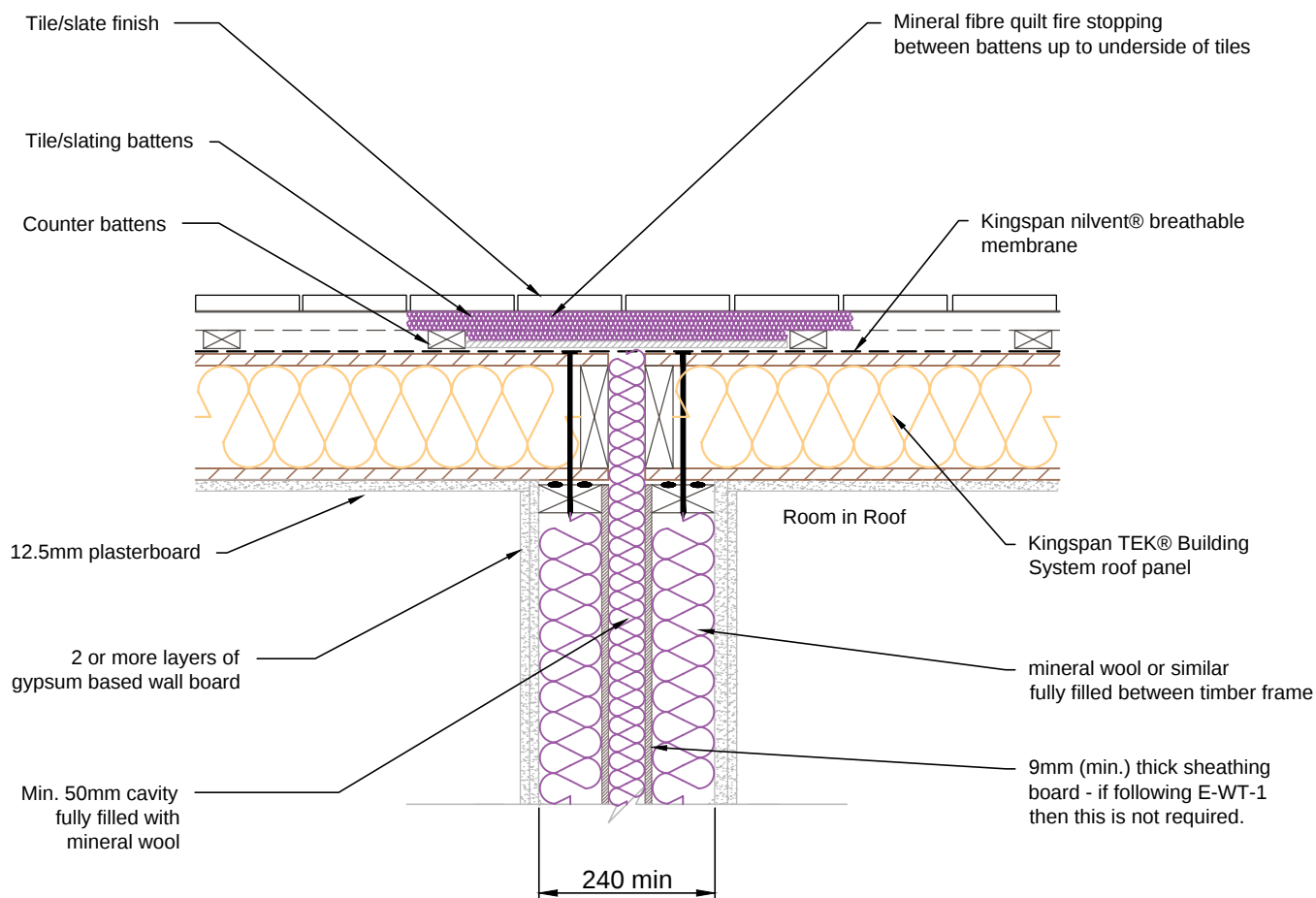
Date:

03/11/14

Drawn by:
H.E.

Scale:
1:10





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Section through typical separating full fill timber frame wall (E-WT-2) with TEK Roof TEK 172

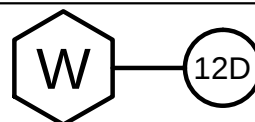
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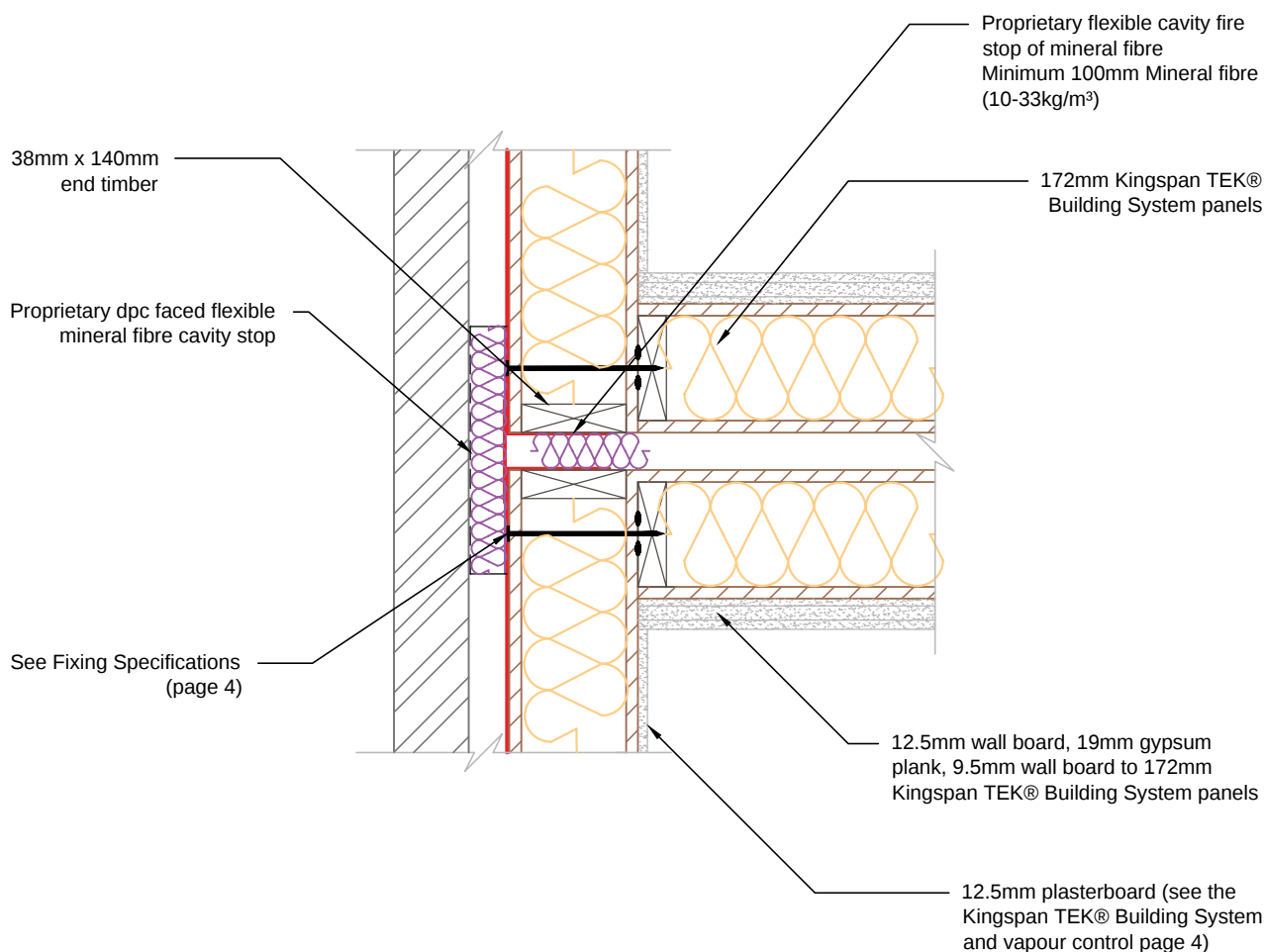
Date:

03/11/14

Drawn by:
H.E.

Scale:
1:10





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Plan showing separating wall detail with
brickwork external leaf incorporating flanking detail
TEK 172

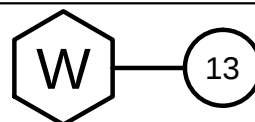
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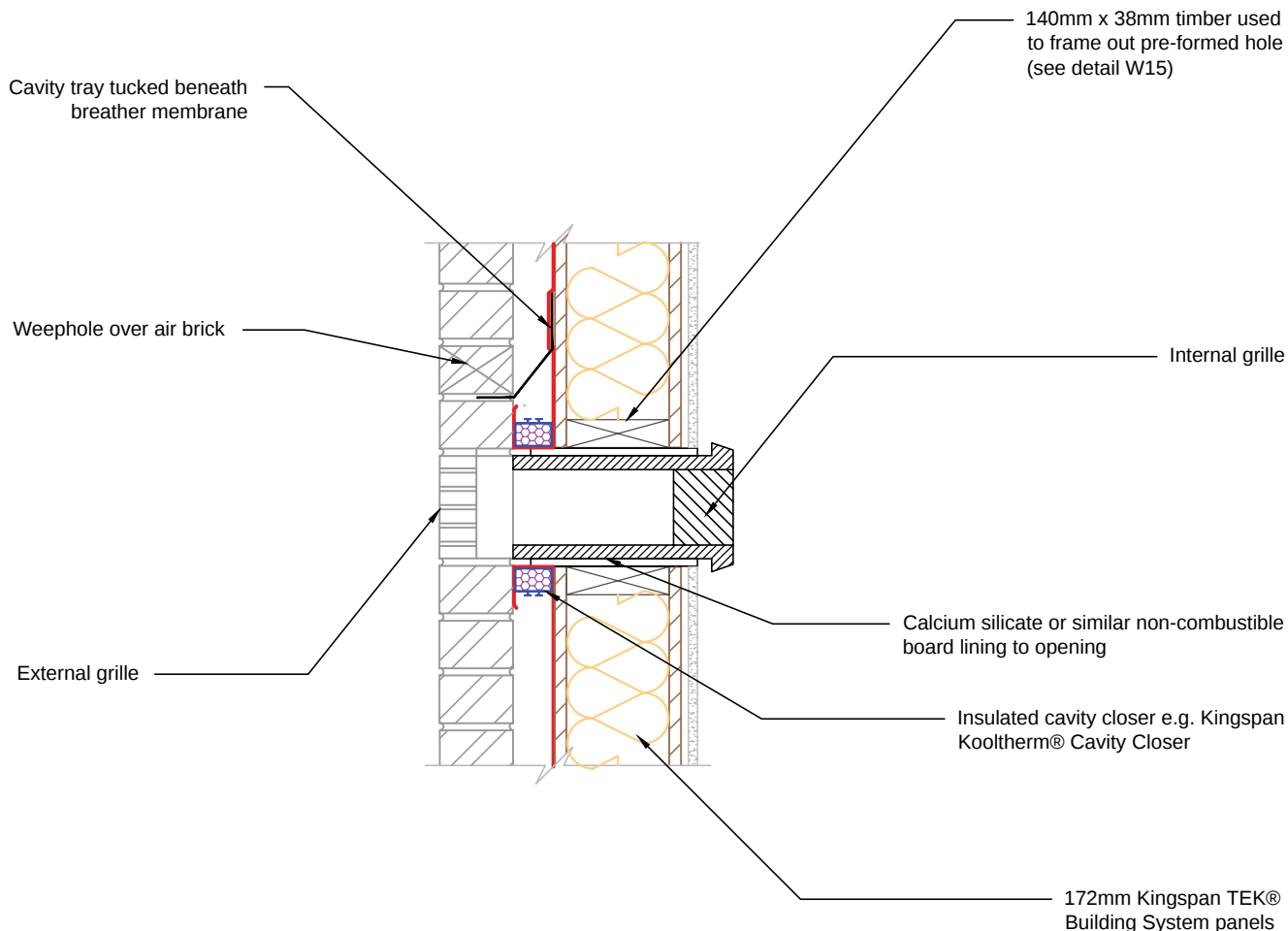
Date:

13/10/14

Drawn by:
H.E.

Scale:
1:10





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Sectional elevation of ventilation inlet/outlet
 e.g. for MVHR system.

TEK 172

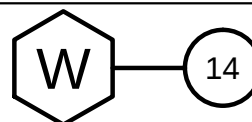
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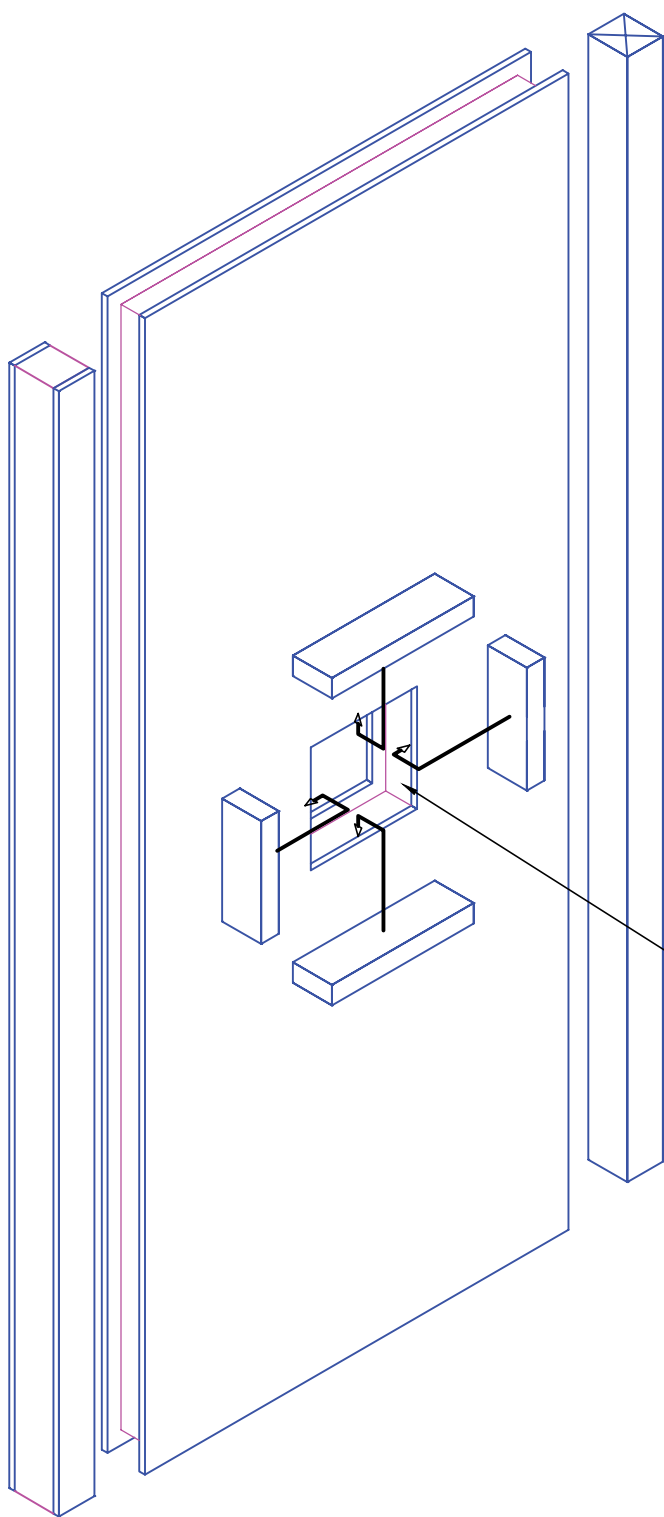
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Scale:
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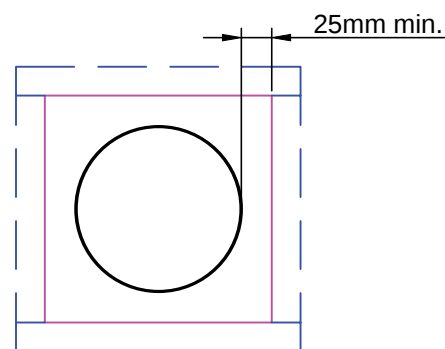
When an appliance is not suitable for direct mounting on a wall panel it should be separated from the wall structure by a 75mm air gap or by 25mm of non-combustible material.

The latter is usually achieved by non-combustible board to the plasterboard lining.

Wall mounted boilers should be fixed to the wall panel as per boiler manufacturer's instructions using fully threaded screws.

A pre-formed opening is to be framed out using 50 x 110mm timber scabs nailed @ 50mm min. cts. to receive flue leaving a minimum 25mm gap all round. When twin walled flue is used the minimum distance is measured from the outer face of the inner flue.

Wall openings cut on site must be agreed with Kingspan Insulation prior to cutting. Generally opening should be cut central to wall panels & minimum 500mm from top of panel.



Front elevation - 1:10



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Wall hung boiler installation

TEK 172

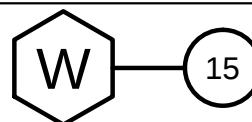
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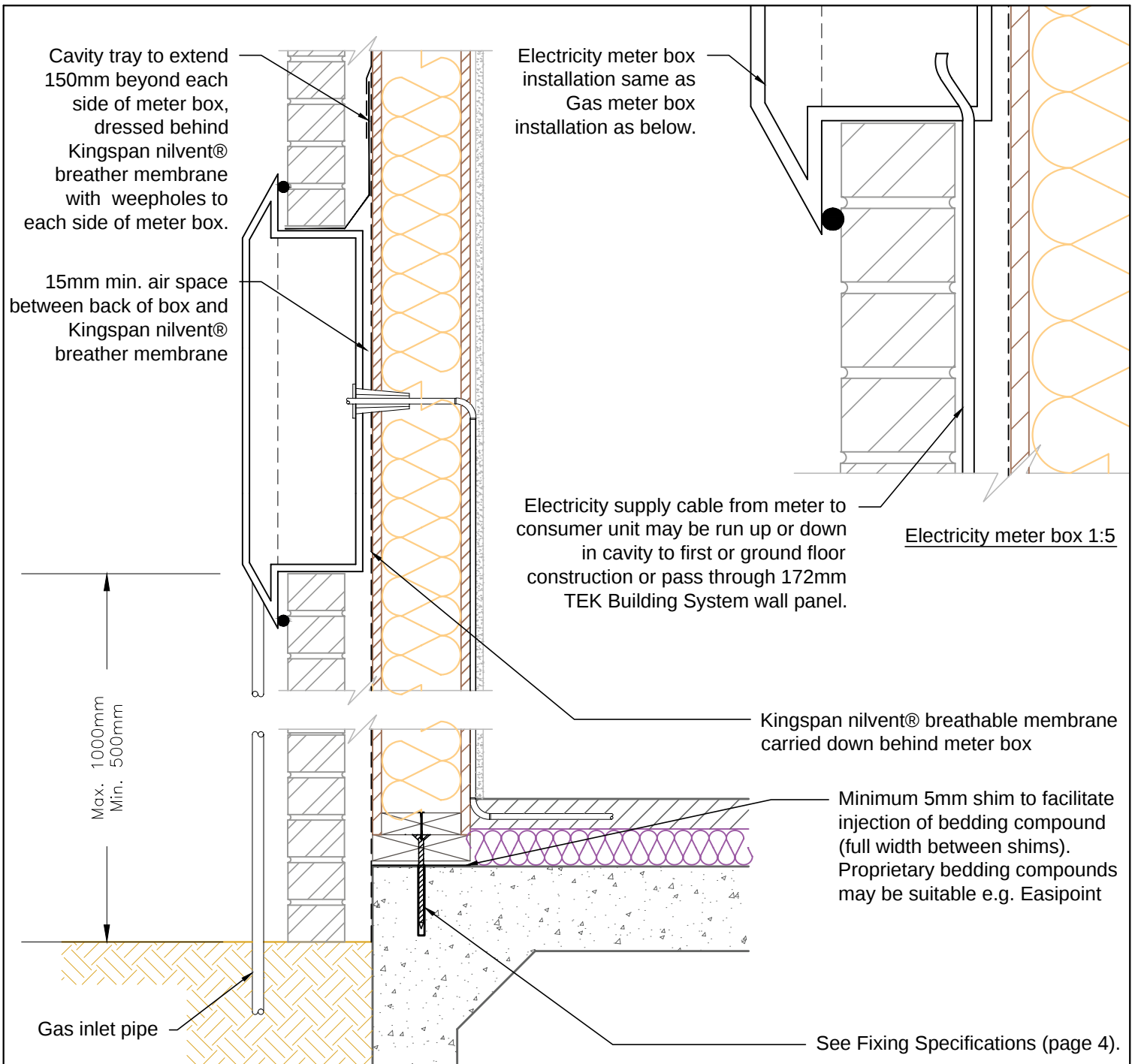
Date:

13/10/14

Drawn by:
H.E.

Scale:
NTS





Notes:

1. For further information regarding soleplate/combination soleplate and bottom plate fixings and requirement for additional panel restraint see Fixing Specifications (page 4)



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Gas + electricity meter box installation

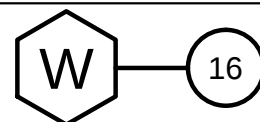
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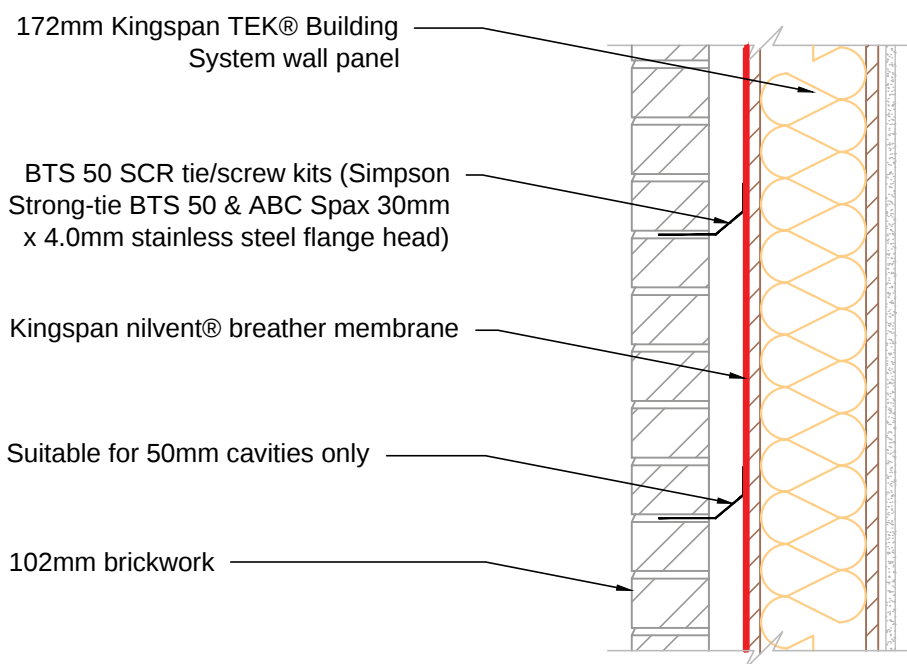
KIL-W16-TEK-172

Date:
13/10/14

Drawn by:
H.E.

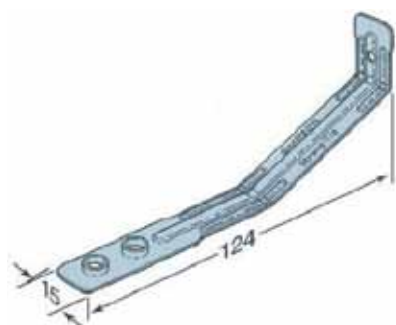
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1:10





Preferred Fixing of External brick cladding
Simpson Strong Tie - BTS 50 SCR
tie/screw kits

BTS50



ABC Spax flange head pozi-drive screw



Density of ties (wind speed less than or equal to 52m/sec) - 4.4 ties per m² (spacing - 600 x 375mm)

Density of ties (wind speed greater than 52m/sec) - 7.0 ties per m² (spacing 600 x 225mm)



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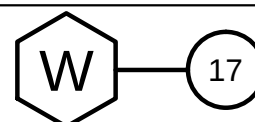
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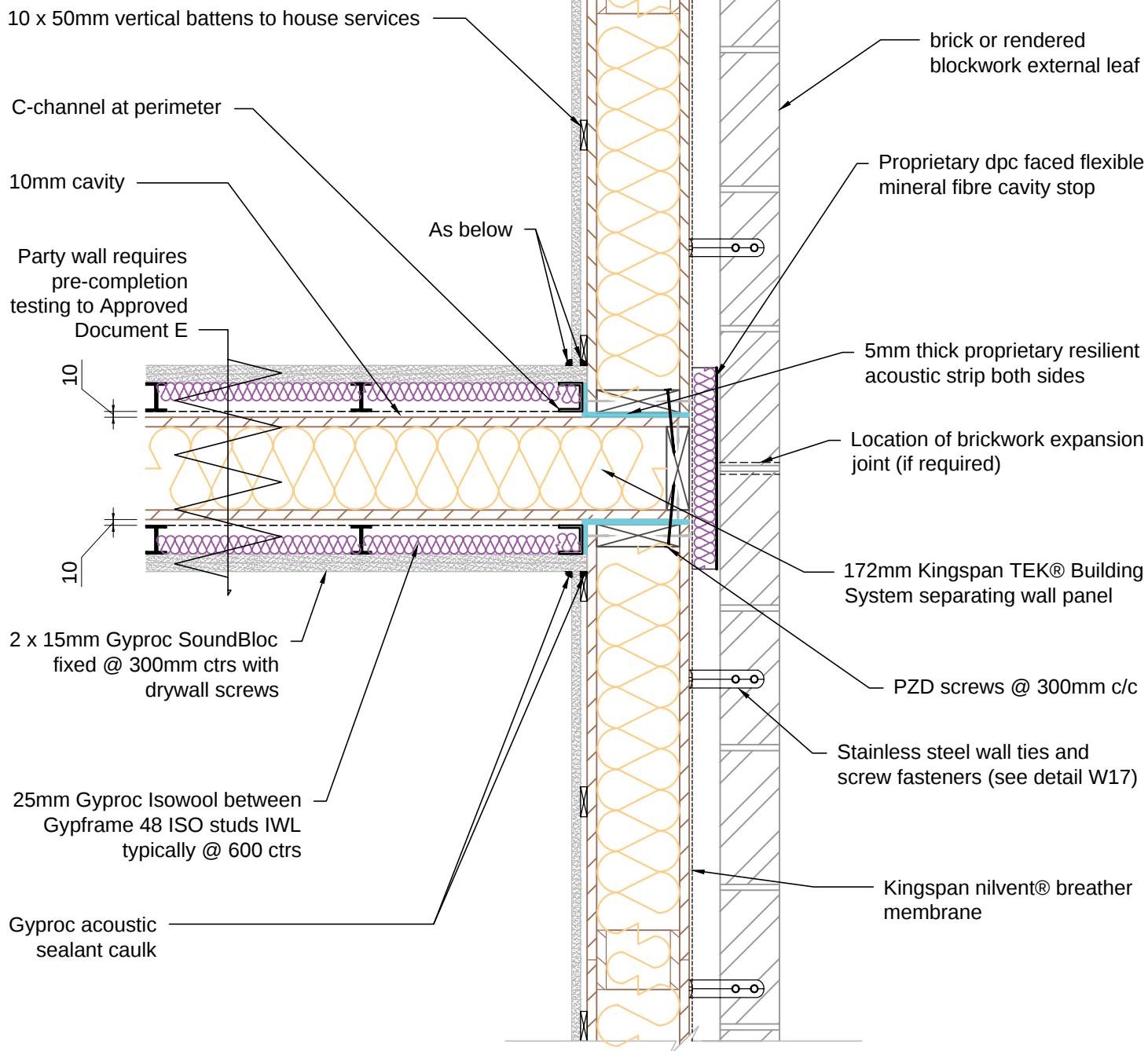
External brick tie details for buildings not
 exceeding 4-storeys high

TEK 172

KIL-W17-TEK-172

Date: 14/10/14
 Drawn by: H.E.
 Scale: 1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK® Building System single separating wall junction with external wall.

TEK 172

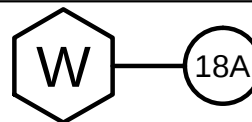
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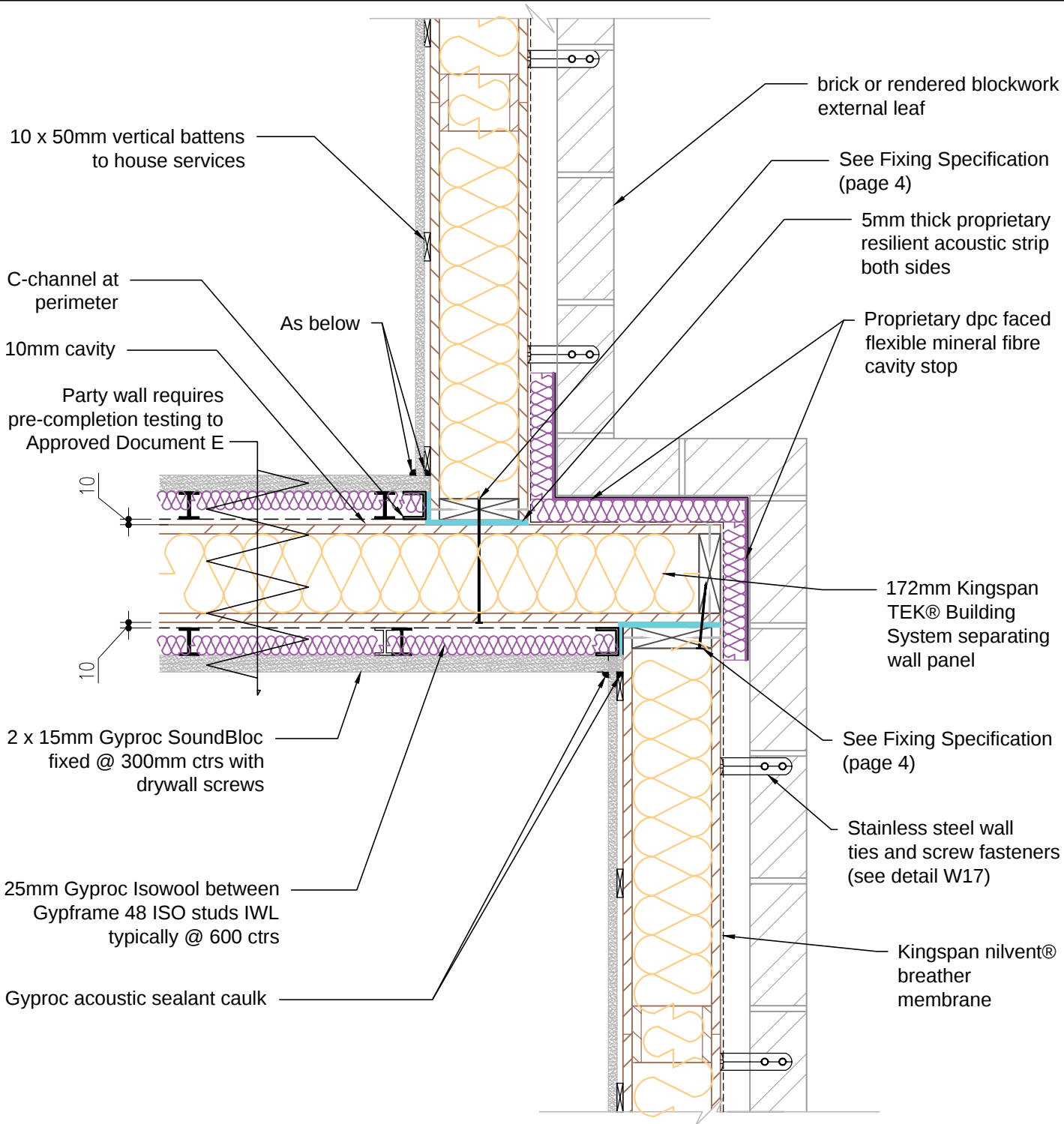
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK® Building System single separating wall junction - stepped external wall detail TEK 172

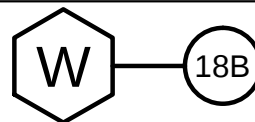
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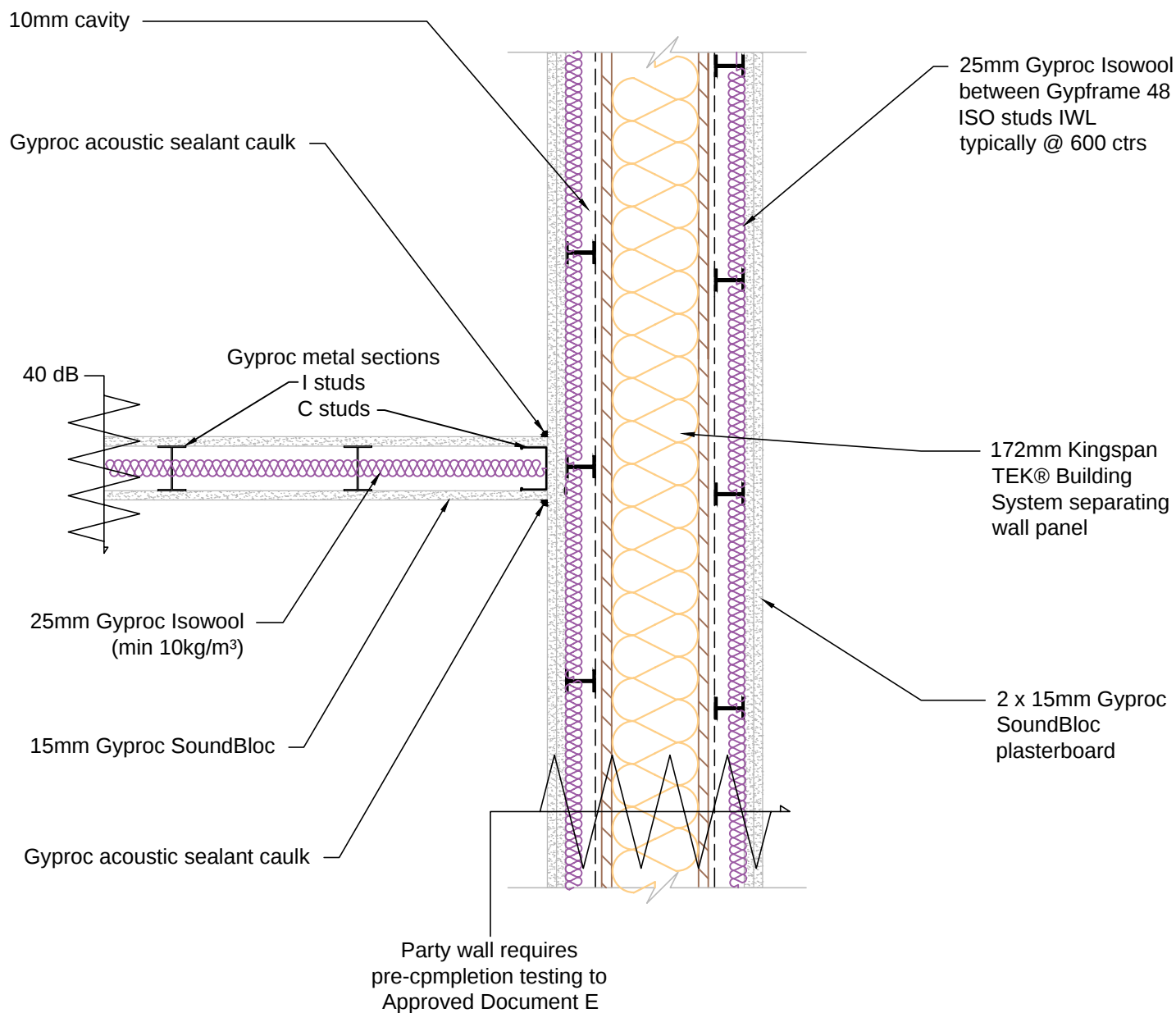
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Lightweight frame internal wall connection
onto Kingspan TEK® Building System single
separating wall

TEK 172

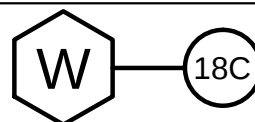
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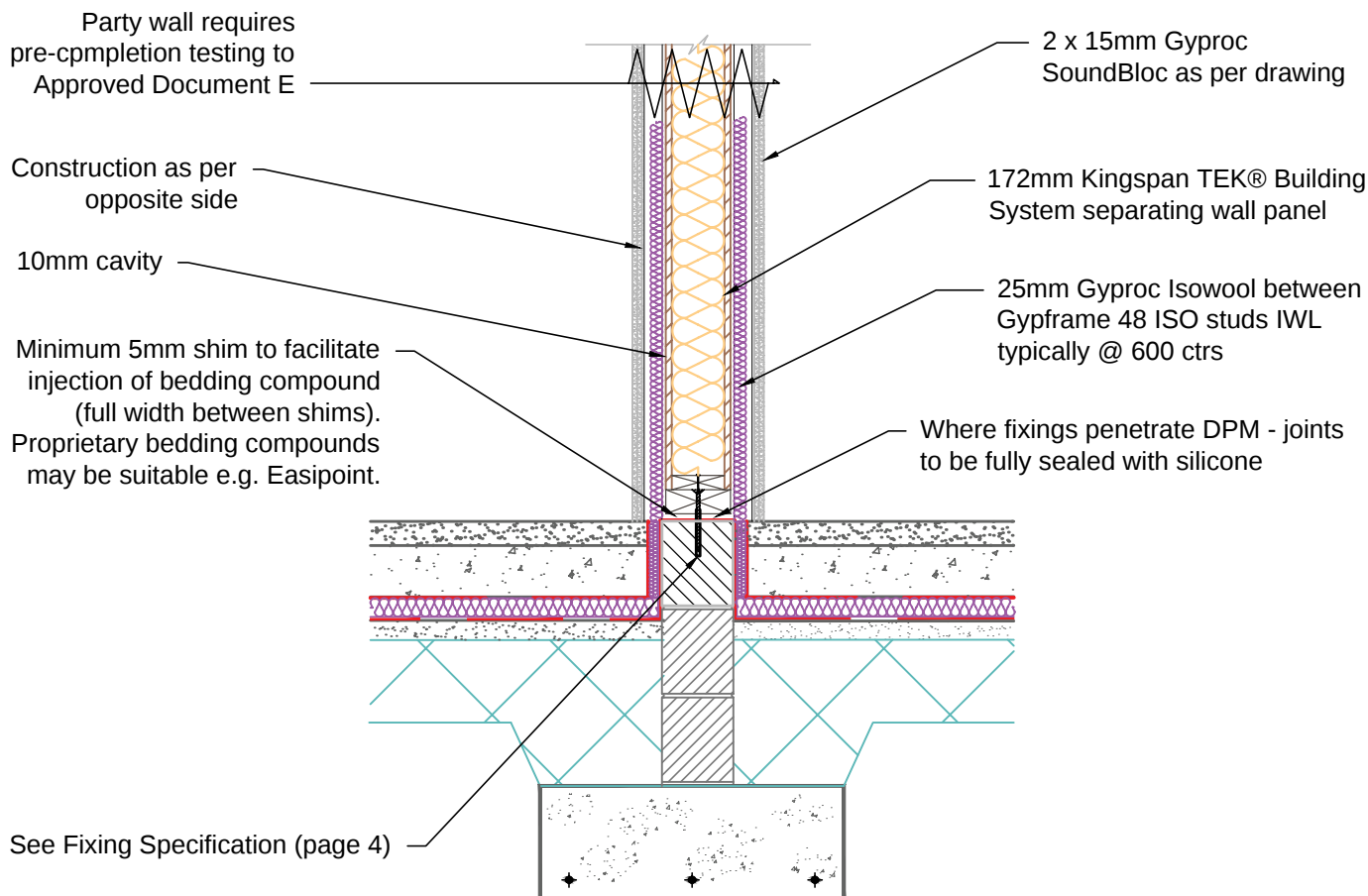
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. For further information regarding soleplate / combination soleplate and bottom plate fixings and the requirement for additional panel restraint see Fixing Specifications (page 4).
2. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - ground floor slab detail TEK 172

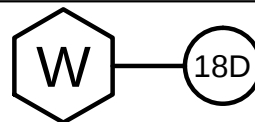
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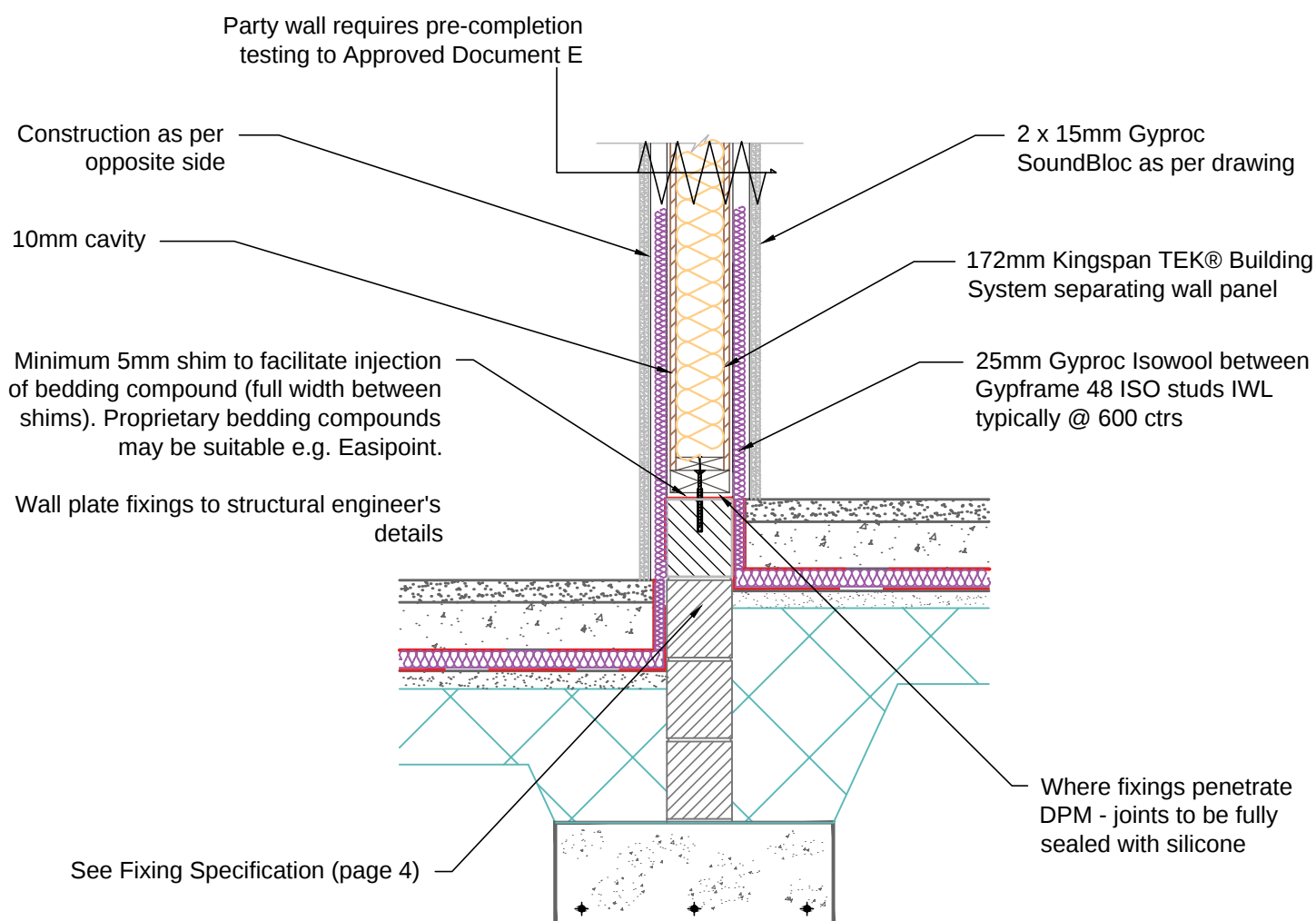
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:20





Notes:

1. For further information regarding soleplate / combination soleplate and bottom plate fixings and the requirement for additional panel restraint see Fixing Specifications (page 4).
2. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - stepped ground floor slab detail TEK 172

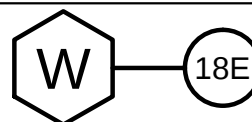
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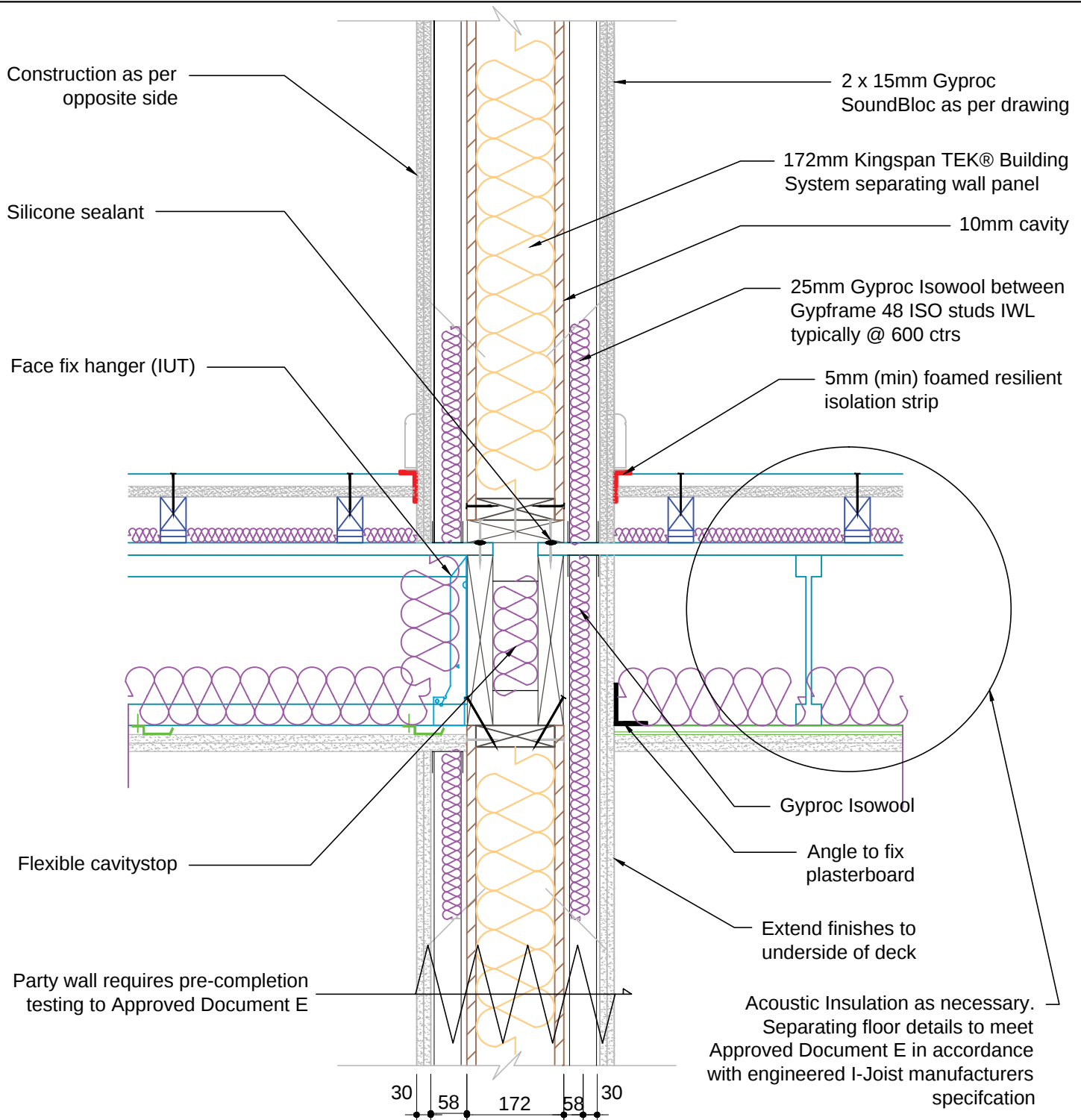
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:20





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - separating floor detail TEK 172

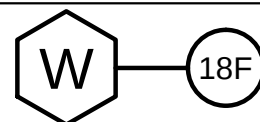
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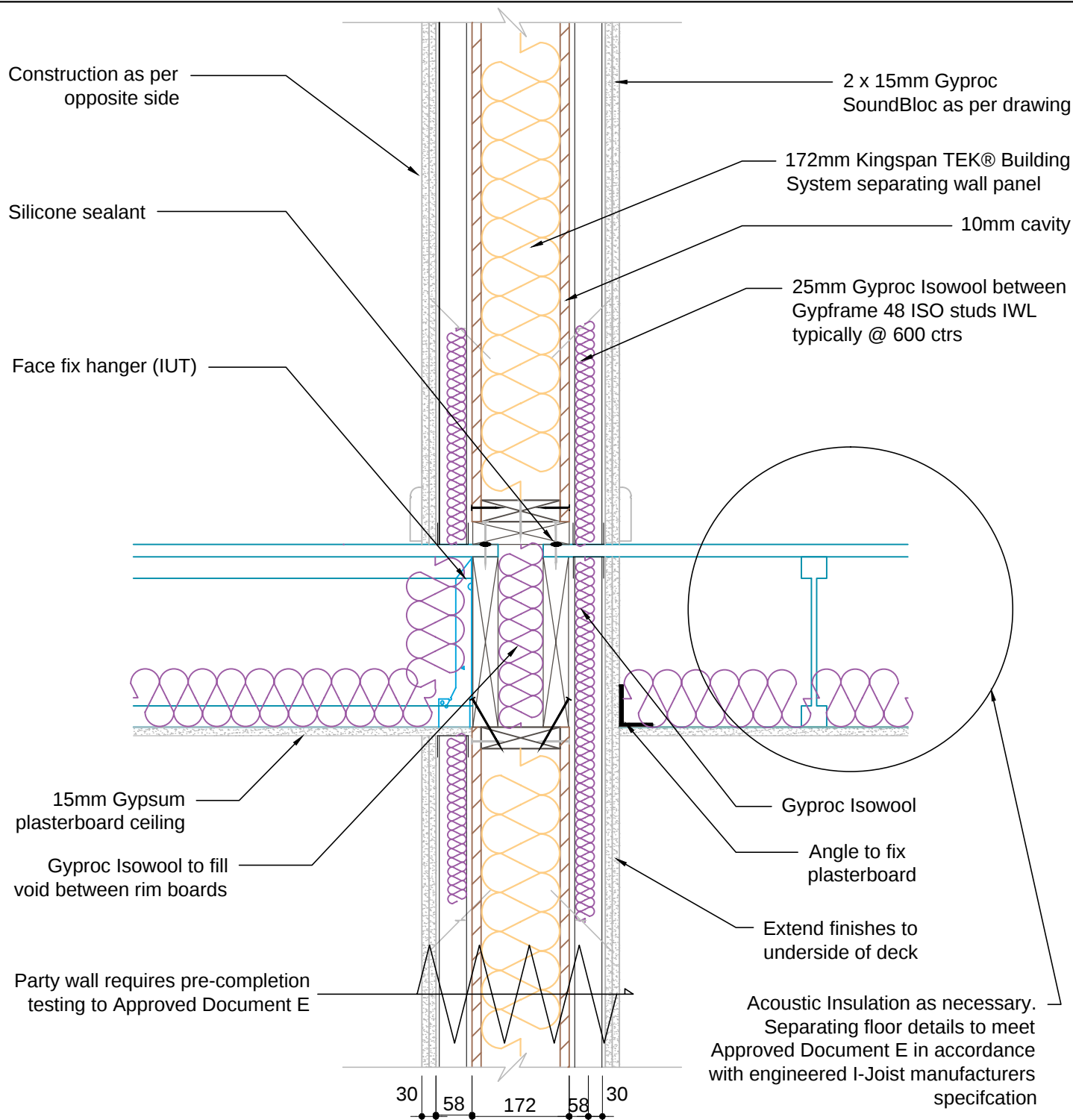
Date:

14/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - internal floor junction TEK 172

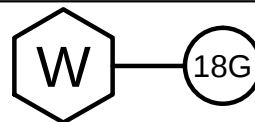
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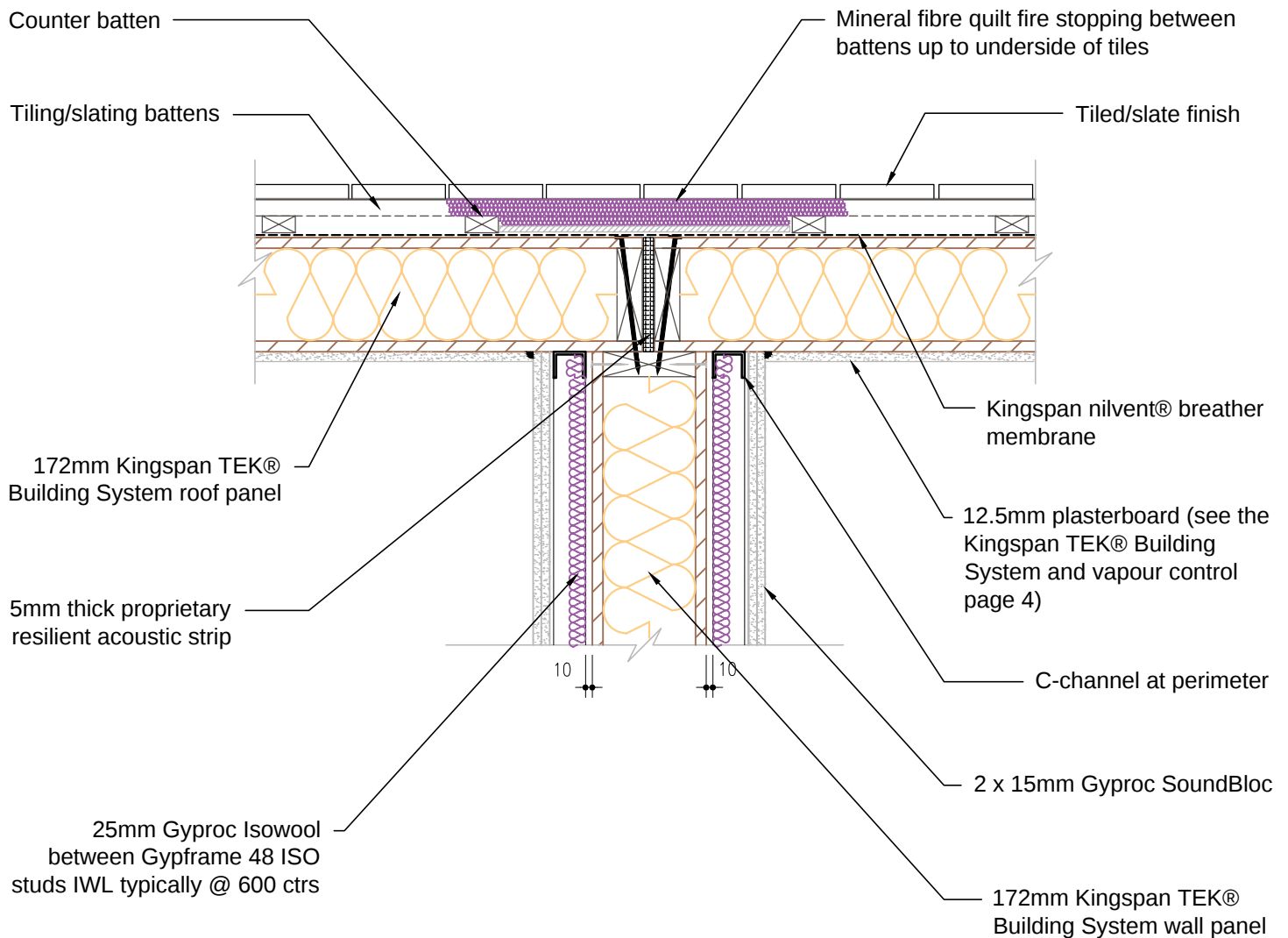
Date:

16/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - room in roof detail TEK 172

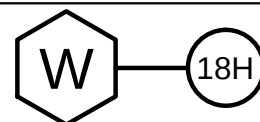
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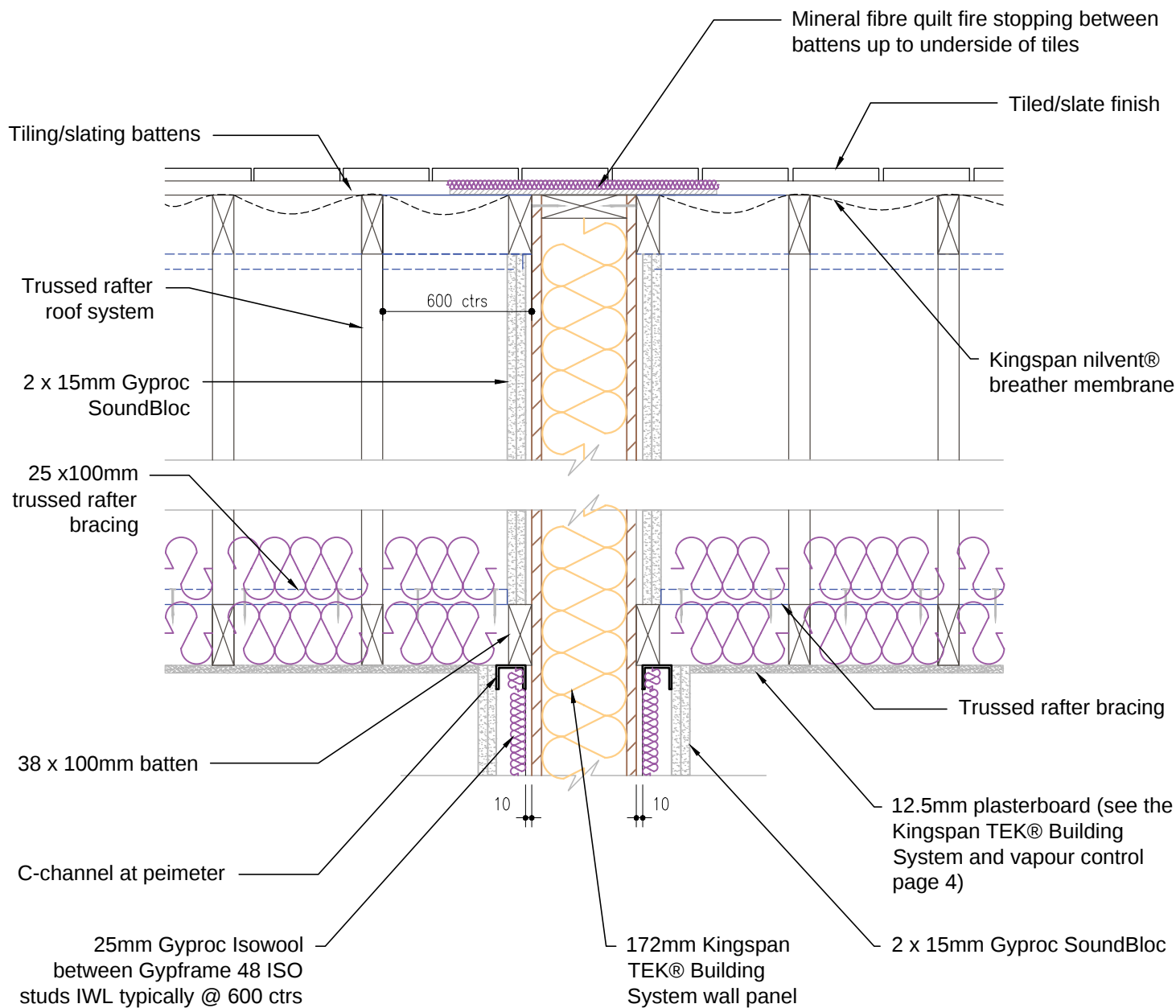
Date:

16/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System single separating wall junction - trussed rafter roof detail TEK 172

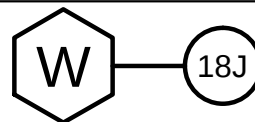
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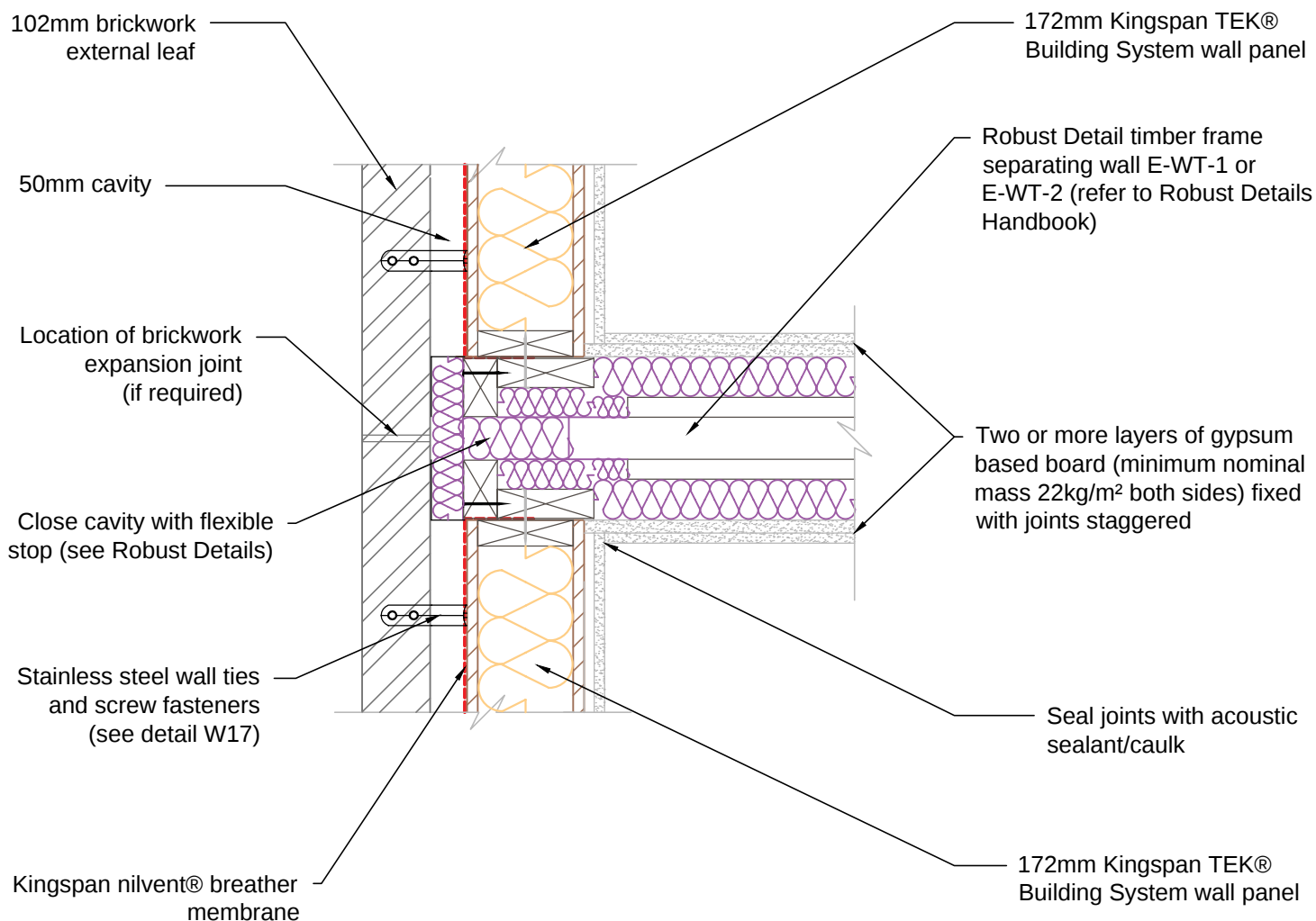
Date:

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Drawn by:
H.E.

Scale:
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Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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**Kingspan TEK Building System external
(flanking) wall junction with timber separating walls
to Robust Details E-WT-1 and E-WT-2**

TEK 172

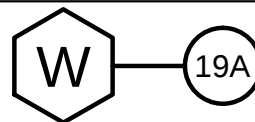
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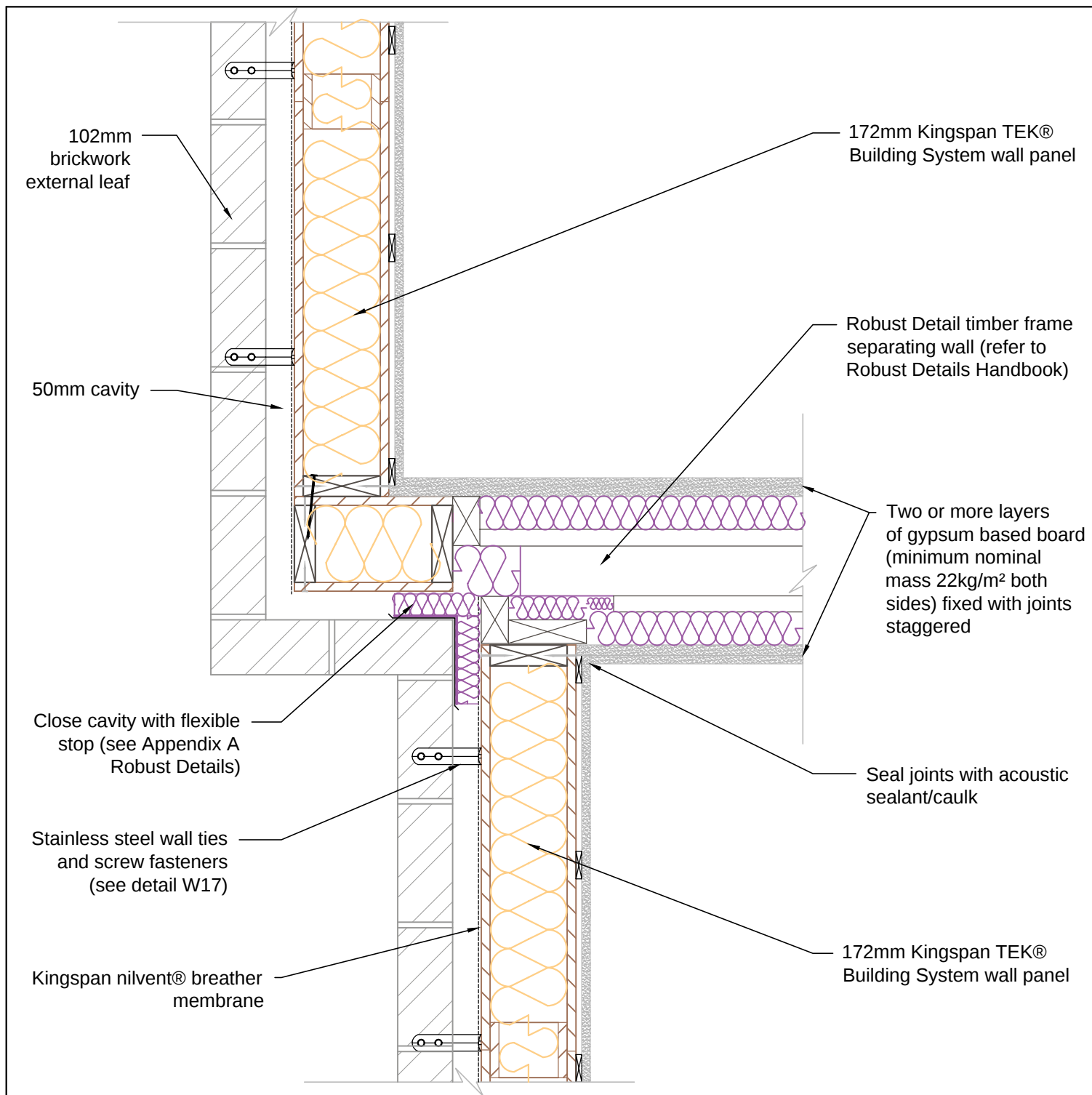
Date:

16/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. All joints/gaps to be sealed with tape or Gyproc Acoustic sealant caulk



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Kingspan TEK Building System staggered external (flanking) wall junction with timber separating walls to Robust Details E-WT-1 and E-WT-2

TEK 172

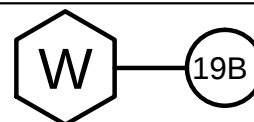
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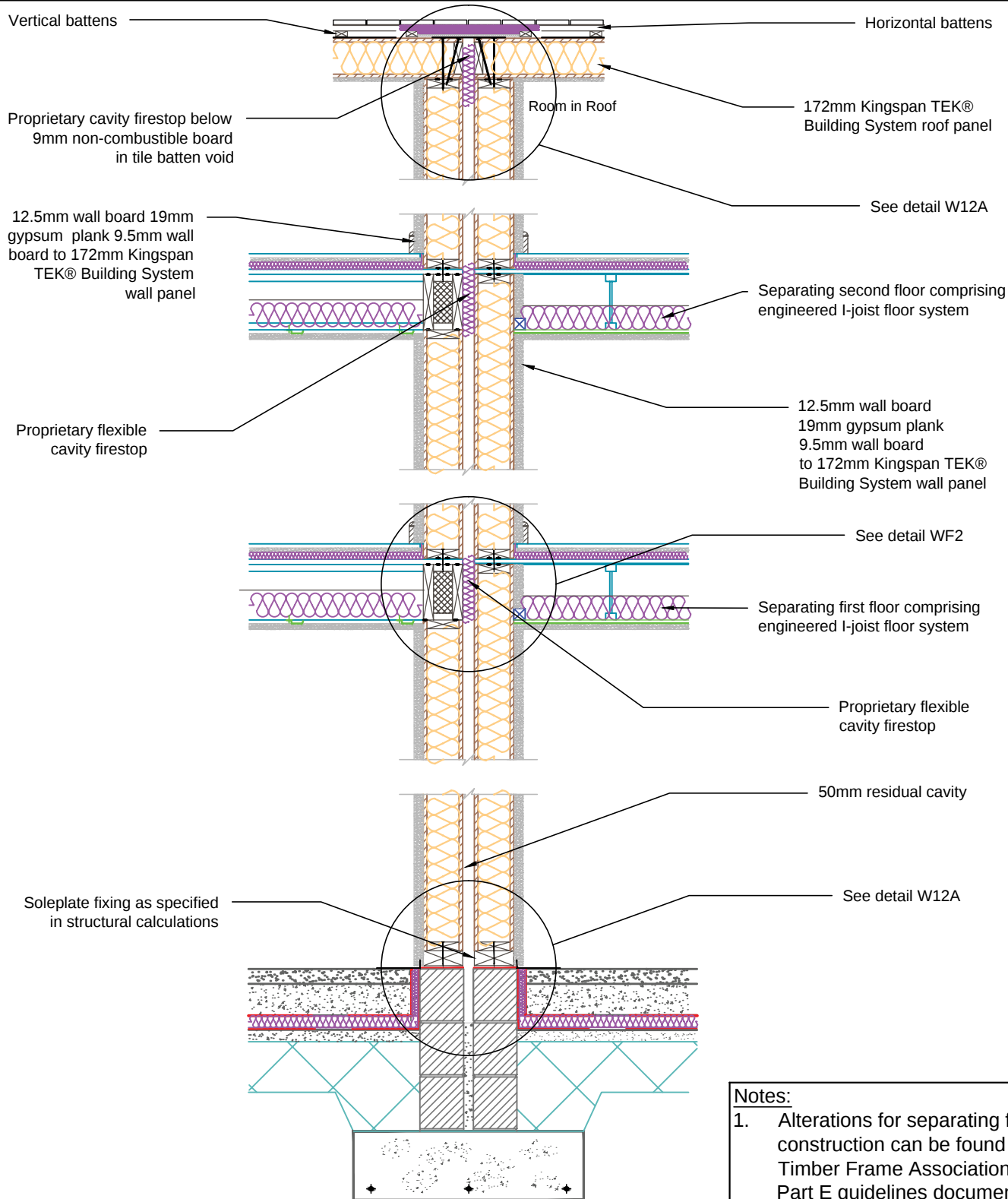
Date:

16/10/14

Drawn by:
H.E.

Scale:
1:10





Notes:

1. Alterations for separating floor construction can be found in UK Timber Frame Association (UKTFA) Part E guidelines document



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Typical separating wall section incorporating room in roof

TEK 172

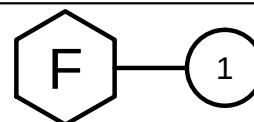
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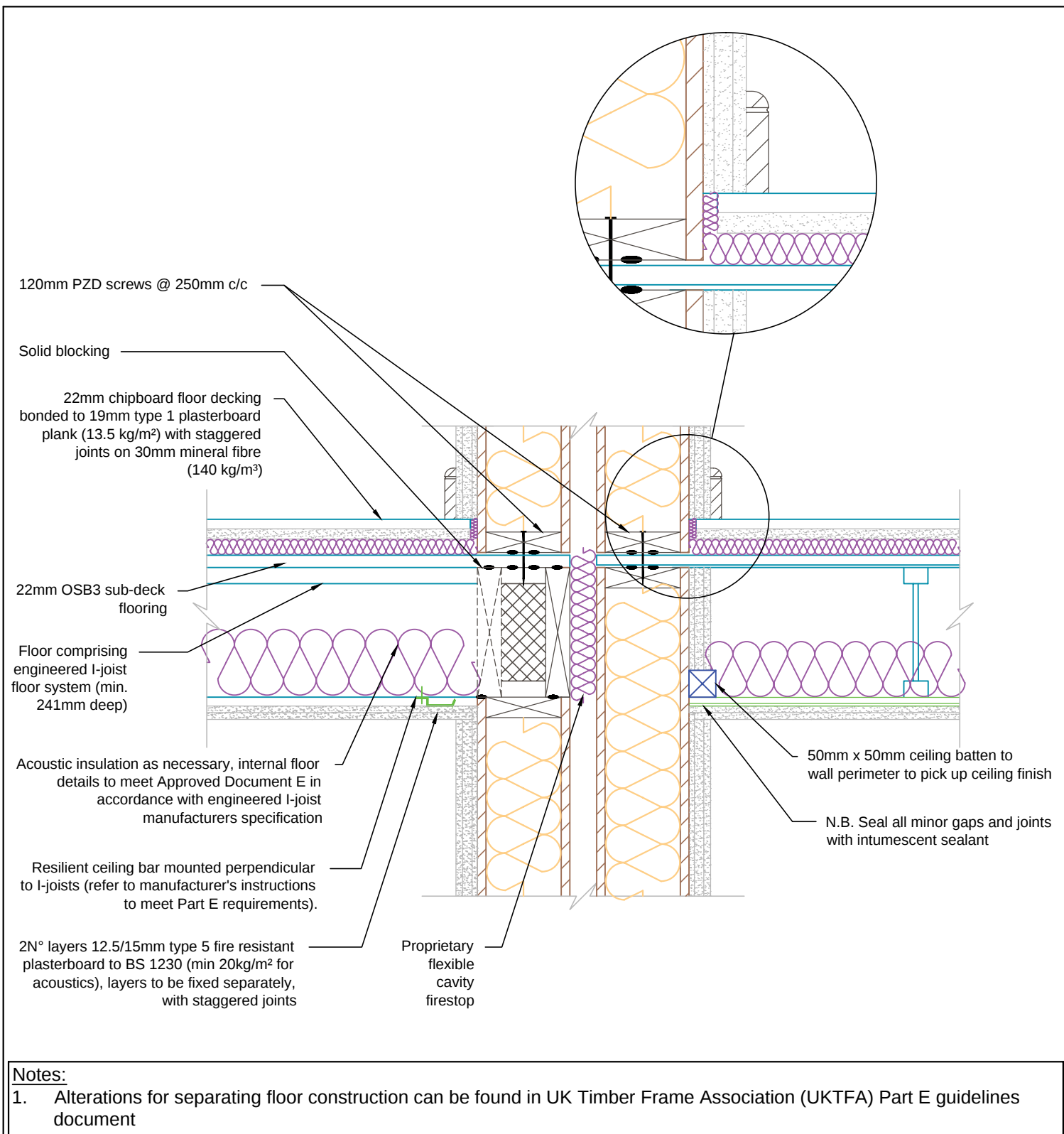
Date:

17/10/14

Drawn by:
H.E.

Scale:
1:25





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Typical separating wall & floor assemblies

TEK 172

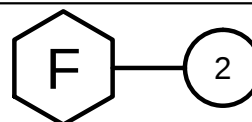
KIL-F2-TEK-172

Date:

20/10/14

Drawn by:
H.E.

Scale:
1:10



22mm OSB3 or P5 particle board flooring
glued and nailed to engineered I-joist
floor system in accordance with
manufacturer's instructions

3.75mm x 65mm nails @ 200 ctrs

BMF or Simpson Strong-Tie hanger
with top flange (see fixing details on
page 4 for details)

Beads of silicone sealant

38mm x 140mm headplate

Engineered I-joist floor joist as per
structural calculations

172mm Kingspan TEK®
Building system wall panel



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www.kingspantek.co.uk

Typical connection detail for engineered
I-joist floor system.

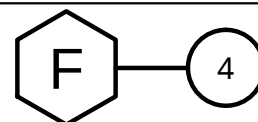
TEK 172

KIL-F4-TEK-172

Date:
21/10/14

Drawn by:
H.E.

Scale:
NTS



22mm OSB3 or P5 particle board
flooring grade board nailed to rim
board & engineered I-joist

3.35mm x 65mm nails @ 200 ctrs

Kingspan Thermwall® TW55
/ Kingspan Kooltherm® K12
Framing Board

Rimboard nailed to frame in
accordance to manufacturers
instructions

Beads of silicone sealant

38mm x 140mm headplate

172mm Kingspan TEK®
Building system wall panel

Engineered I-joist
floor joist as per
structural calculations



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Alternative I-joist / wall panel connection
detail fixed to rimboard

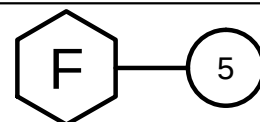
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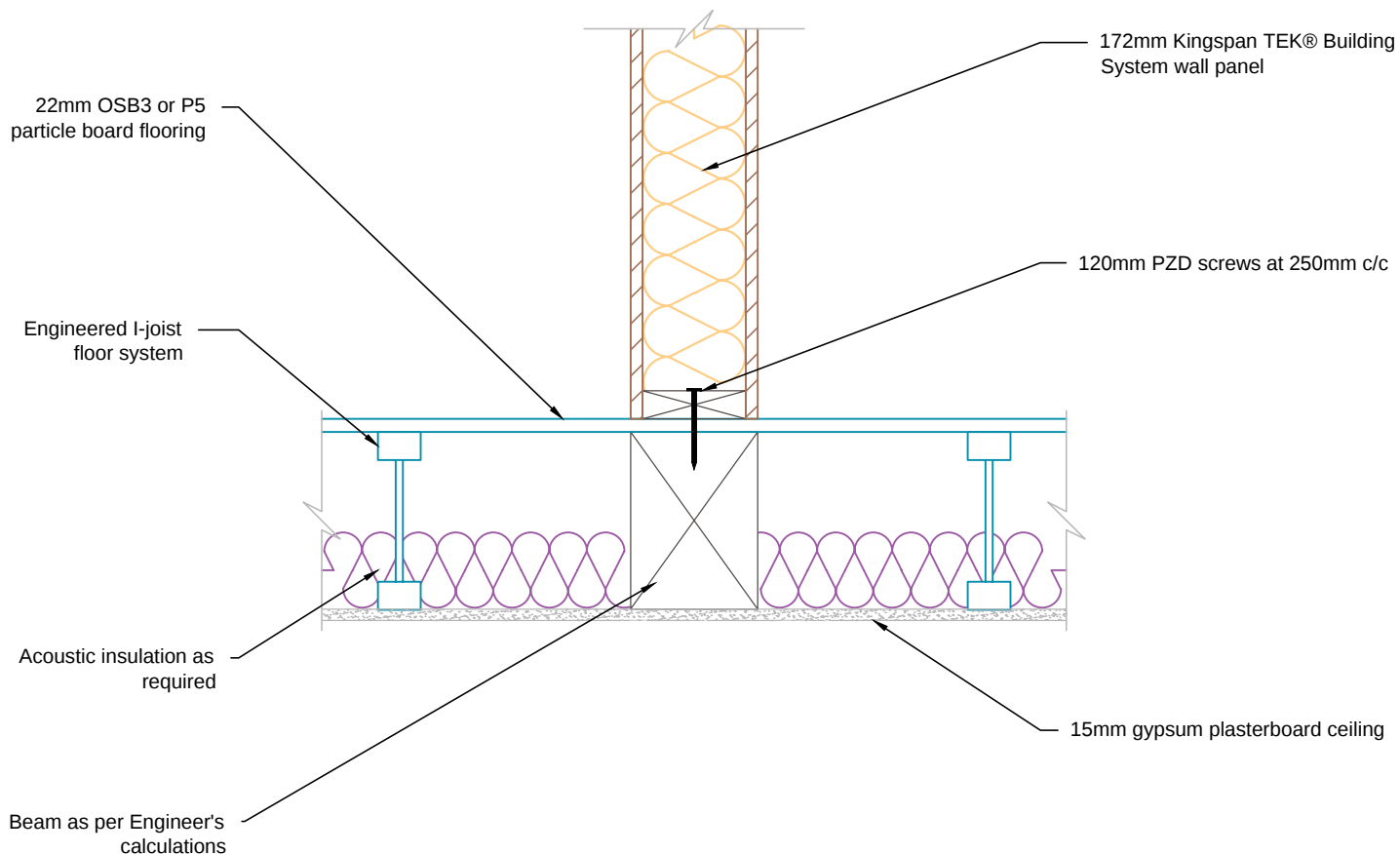
KIL-F5-TEK-172

Date:
21/10/14

Drawn by:
H.E.

Scale:
NTS





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Internal load bearing floor detail.

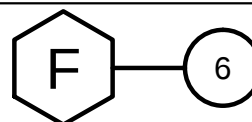
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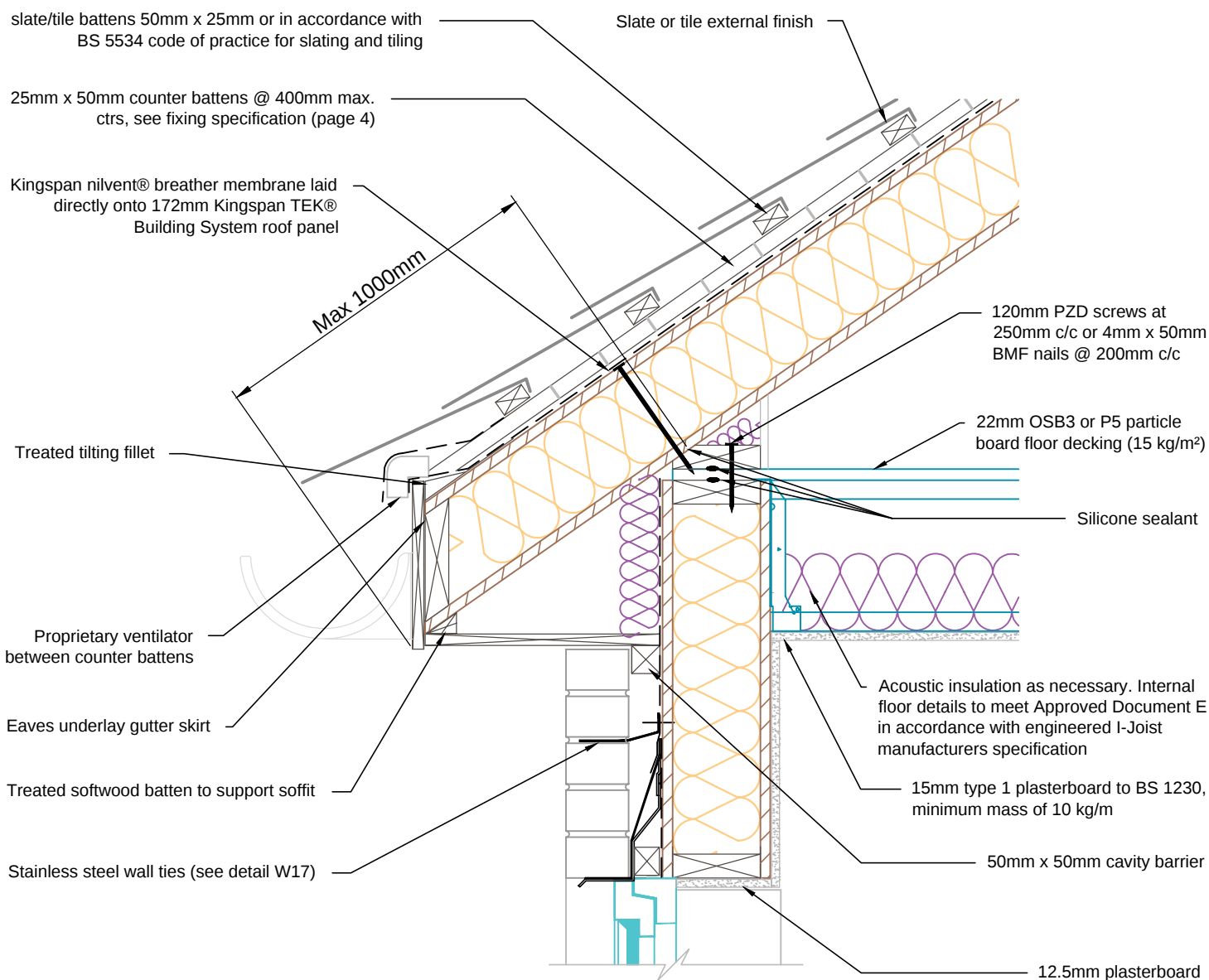
KIL-F6-TEK-172

Date:
21/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical eaves detail vertical section with
Kingspan TEK® Building System pitched roof panel
TEK 172

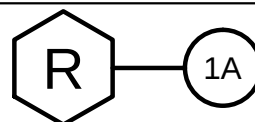
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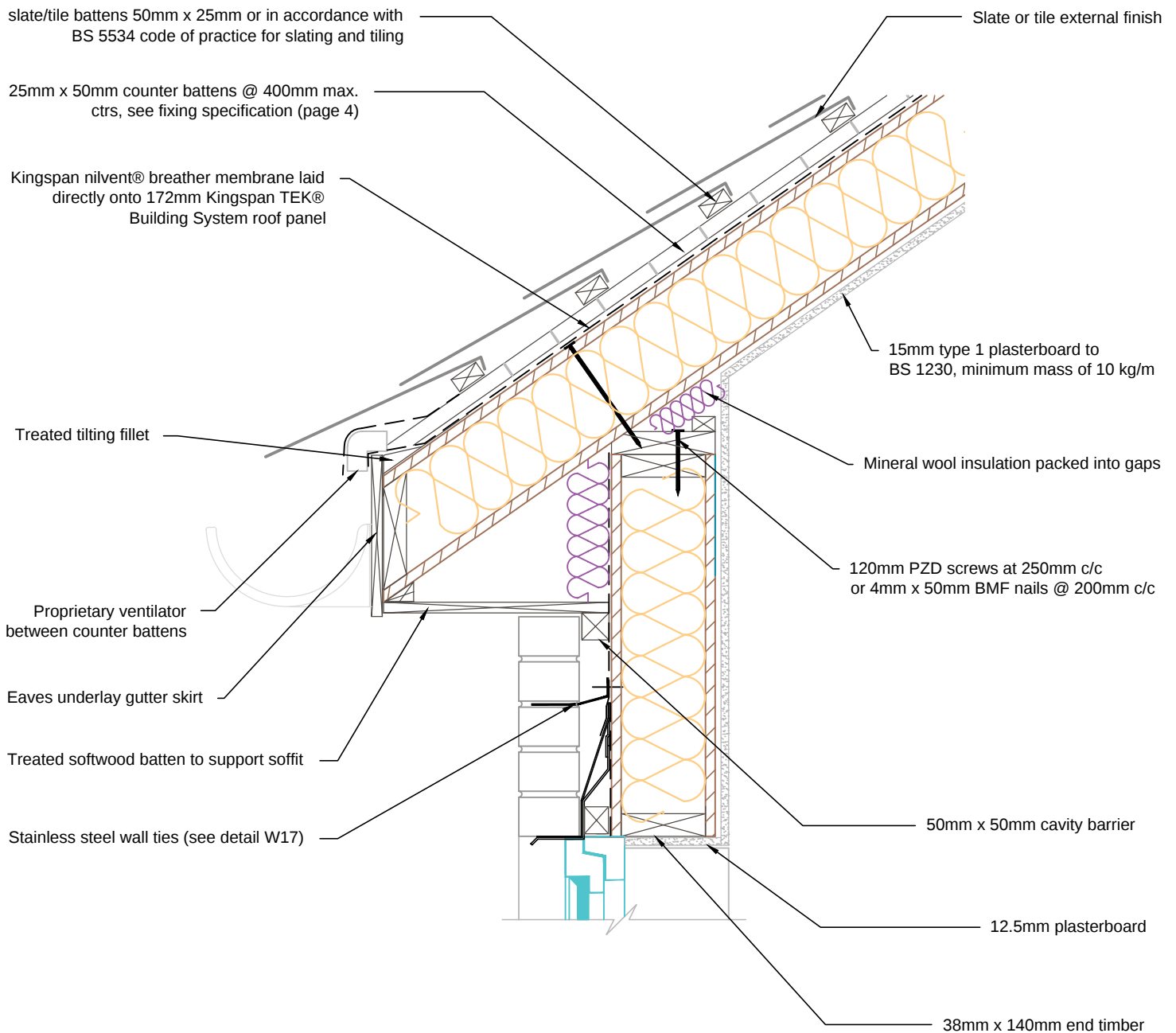
Date:

31/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical eaves detail vertical section with
Kingspan TEK® Building System pitched roof panel
(insulation at rafter level only)

TEK 172

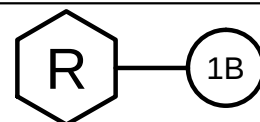
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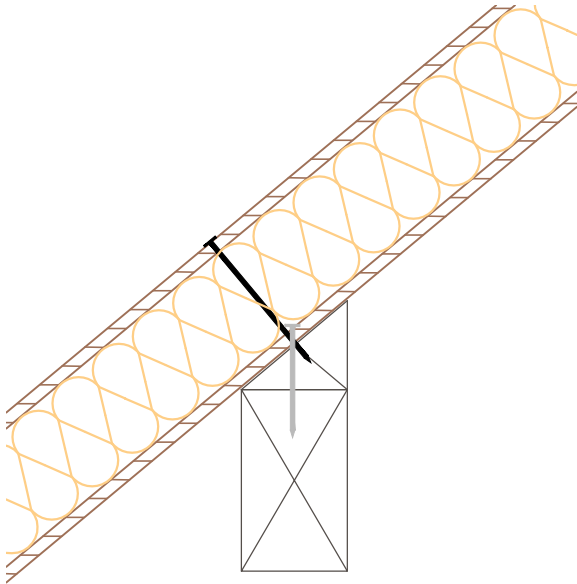
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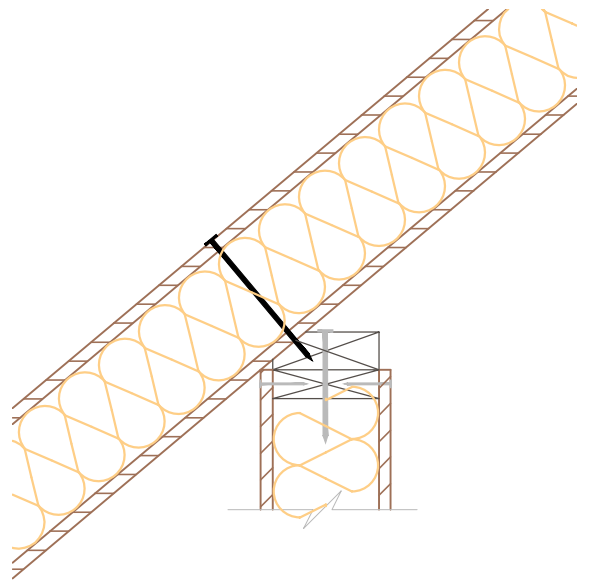
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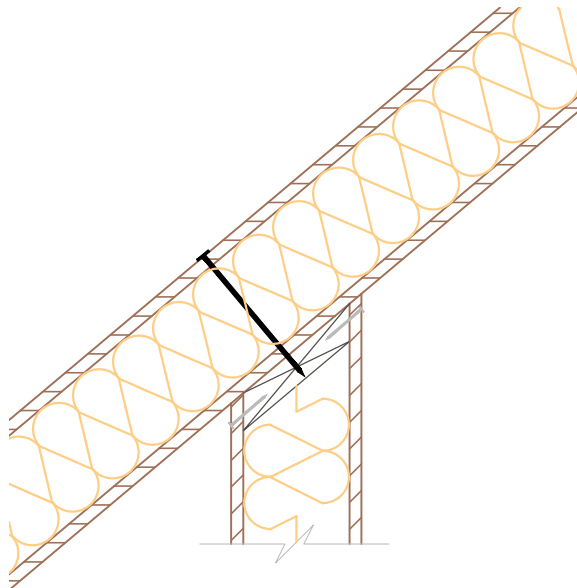




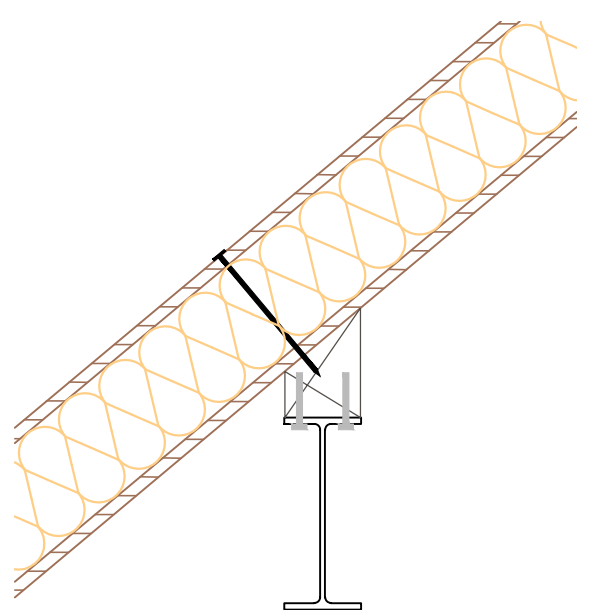
Purlin connection



Dwarf wall connection



Internal wall connection



Steel purlin connection



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Internal roof support details

TEK 172

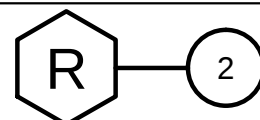
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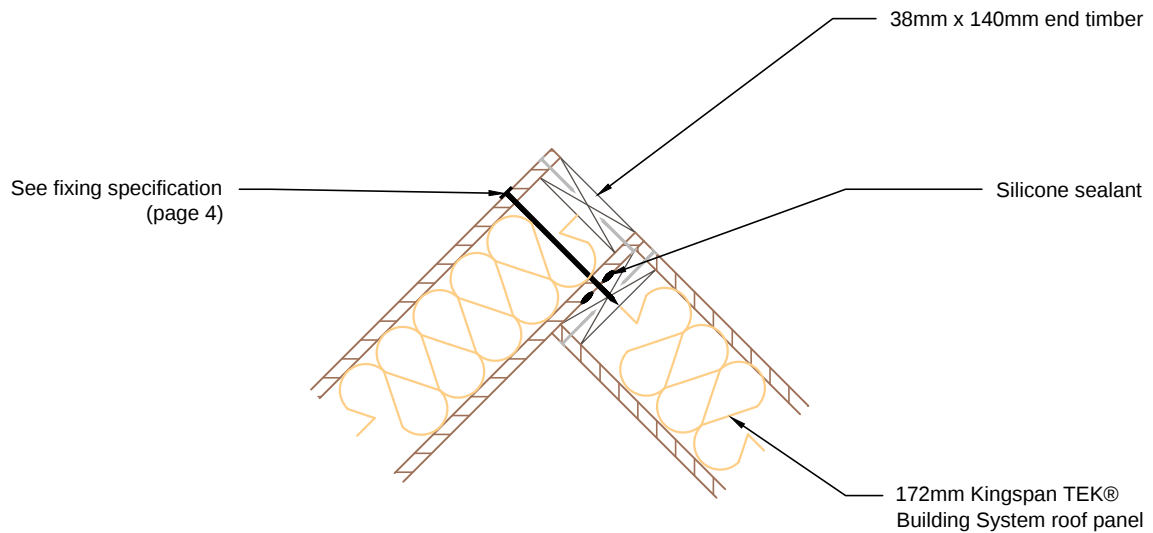
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29/10/14

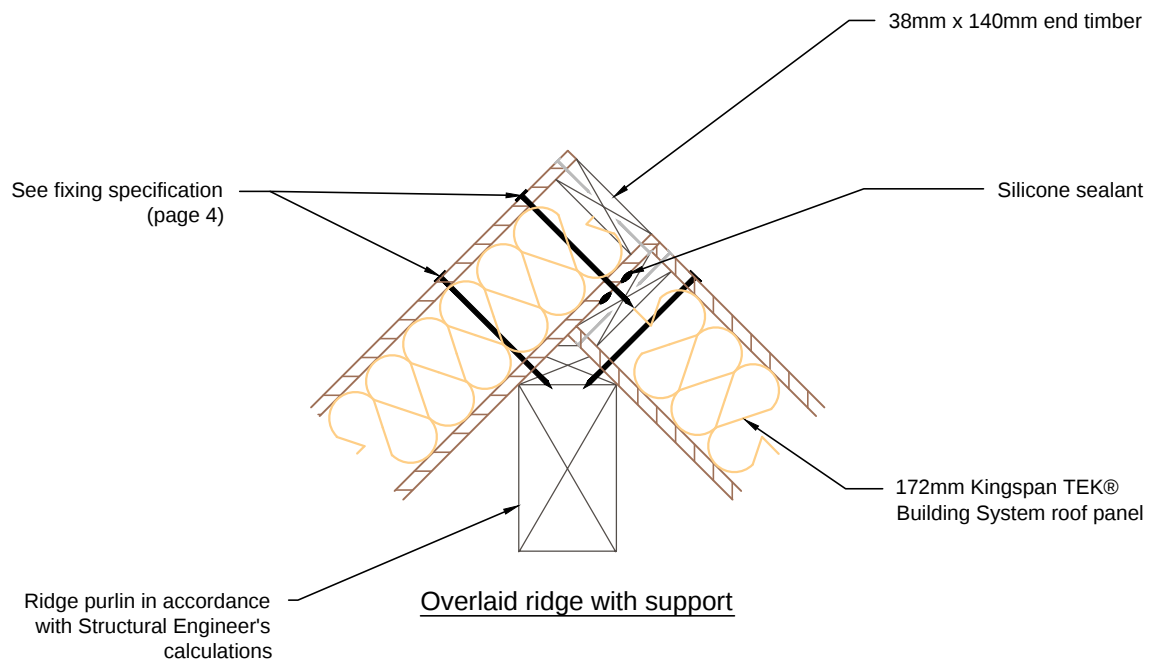
Drawn by:
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Scale:
1:10





Overlaid ridge without support



Overlaid ridge with support



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Typical roof panel overlaid ridge with and without support.

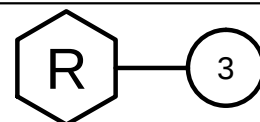
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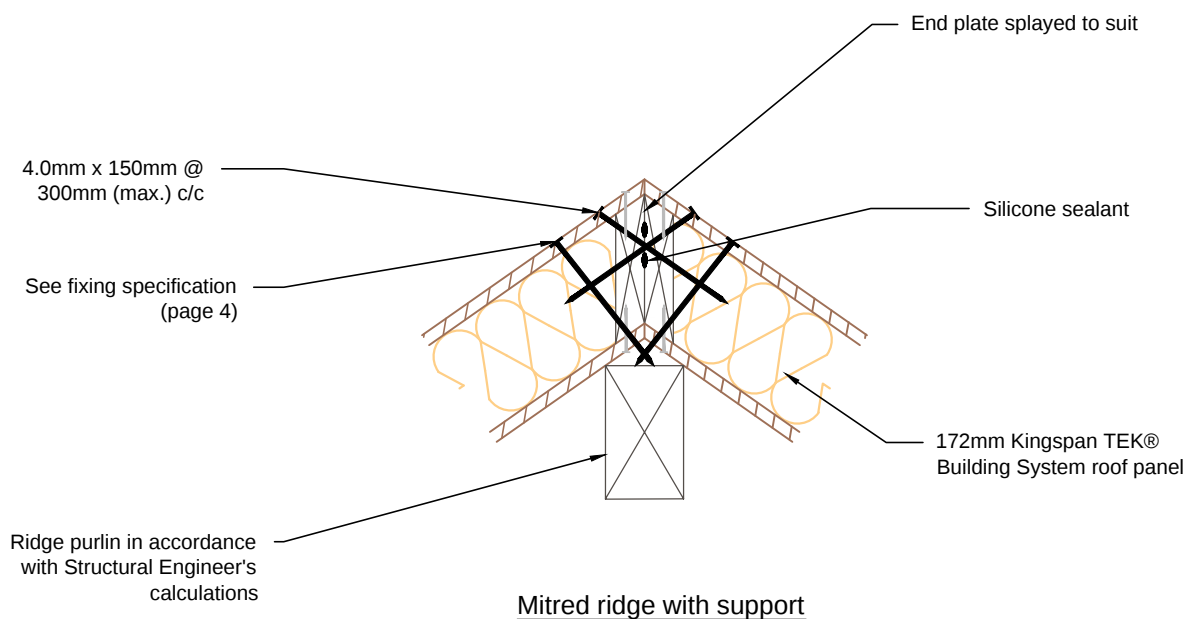
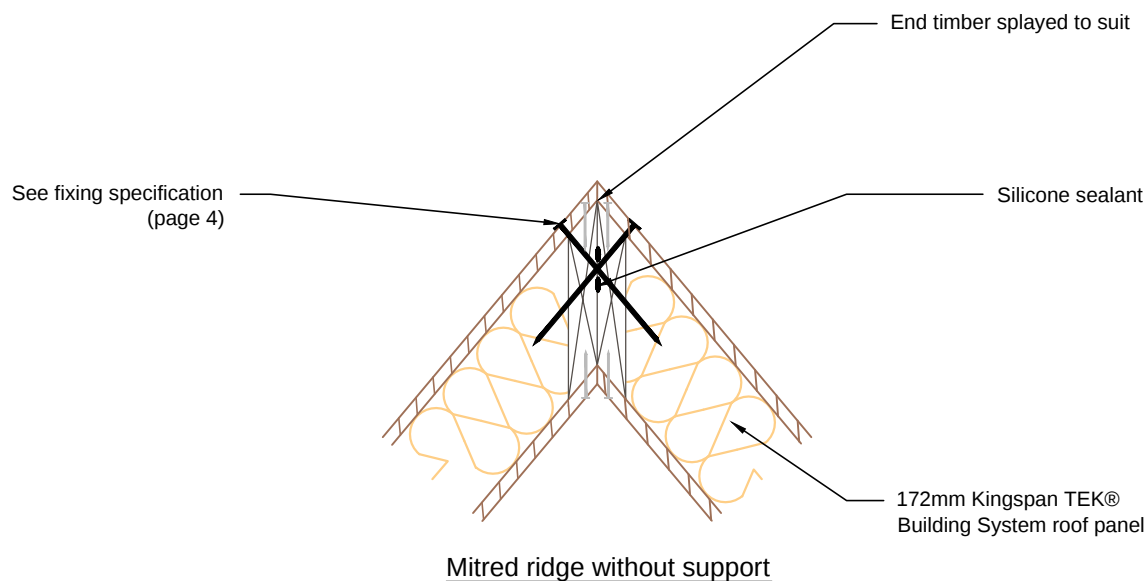
KIL-R3-TEK-172

Date:
29/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical ridge connection details

TEK 172

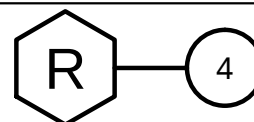
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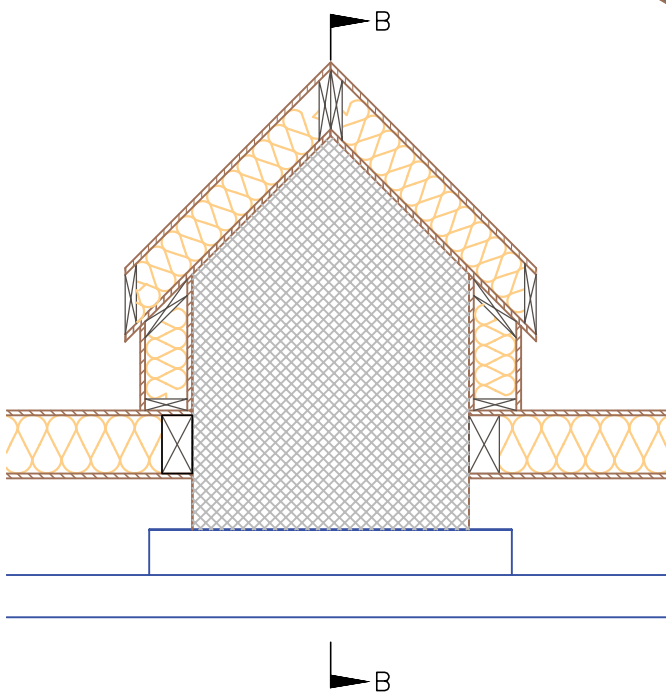
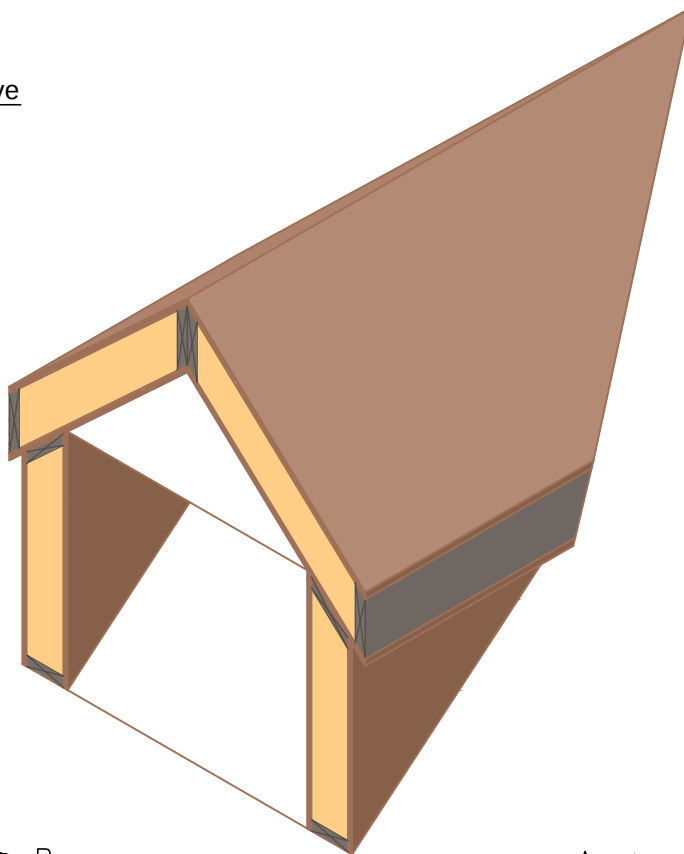
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H.E.

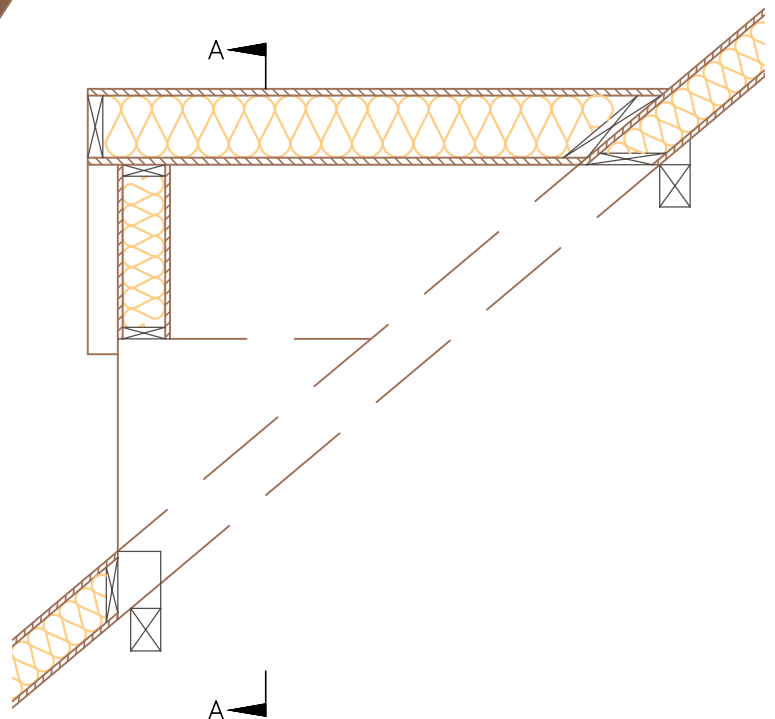
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1:10



Dormer Perspective



Section AA



Section BB



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Room in Roof - dormer perspective &
section detail

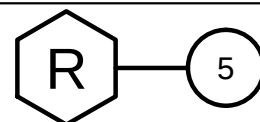
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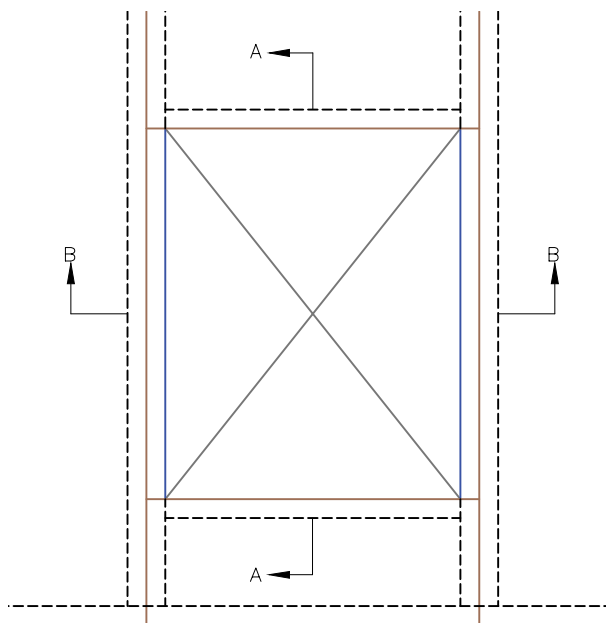
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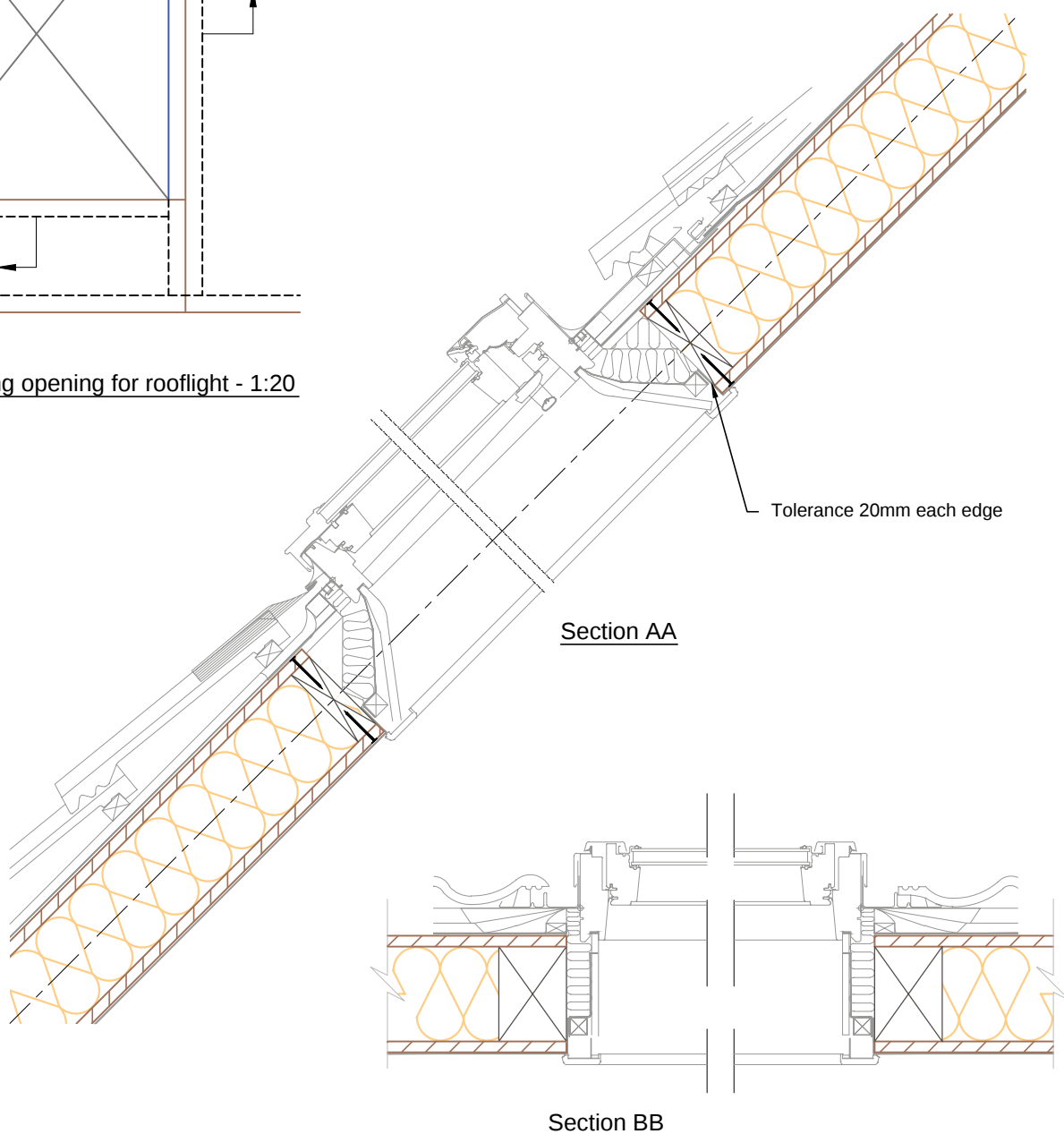
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Scale:
1:25





Panel elevation showing opening for rooflight - 1:20



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www.kingspantek.co.uk

Typical Rooflight detail.

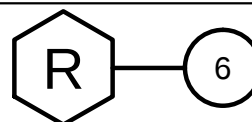
TEK 172

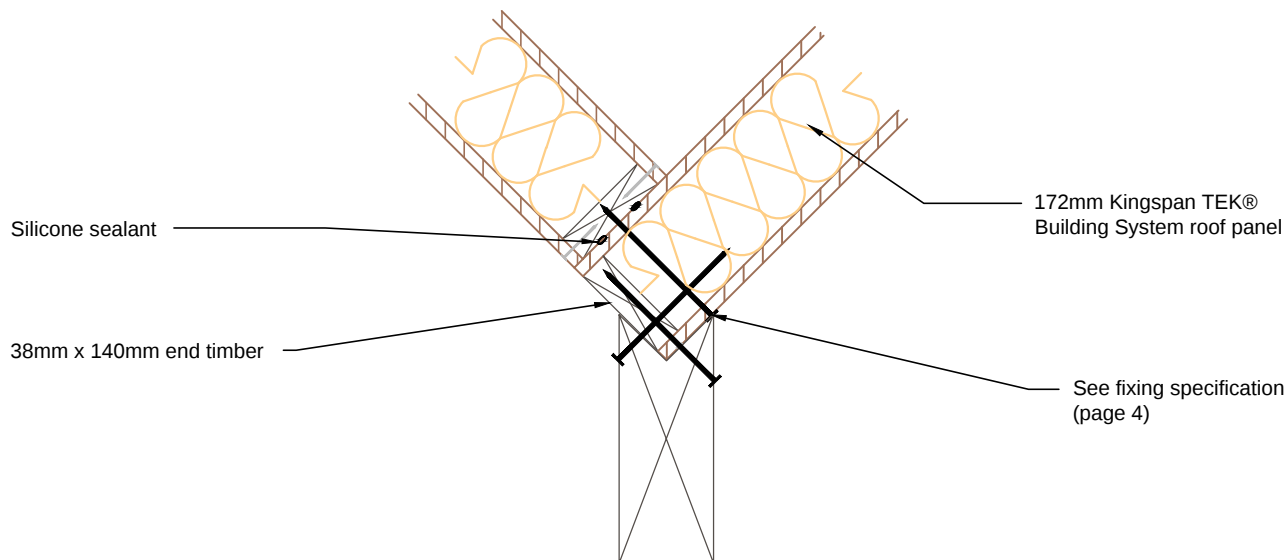
KIL-R6-TEK-172

Date:
29/10/14

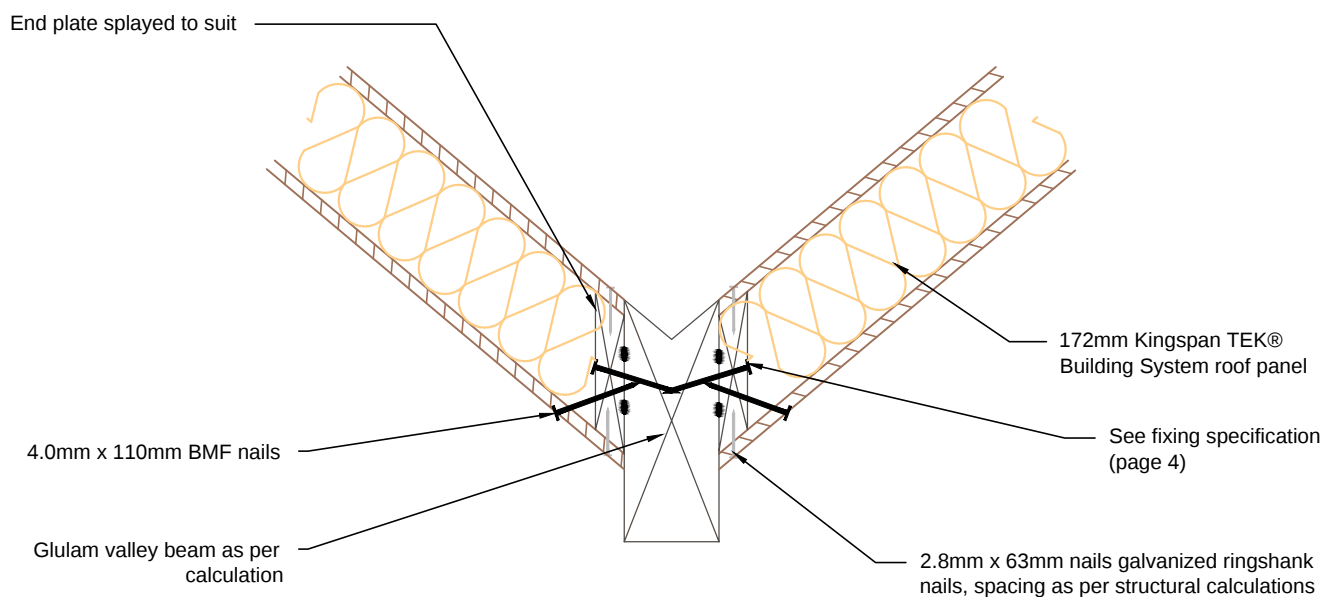
Drawn by:
H.E.

Scale:
1:10





Roof panels connected over valley rafter with support



Roof panels connected to valley rafter



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Typical valley detail.

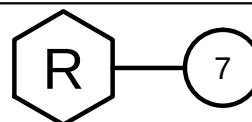
TEK 172

KIL-R7-TEK-172

Date:
29/10/14

Drawn by:
H.E.

Scale:
1:10



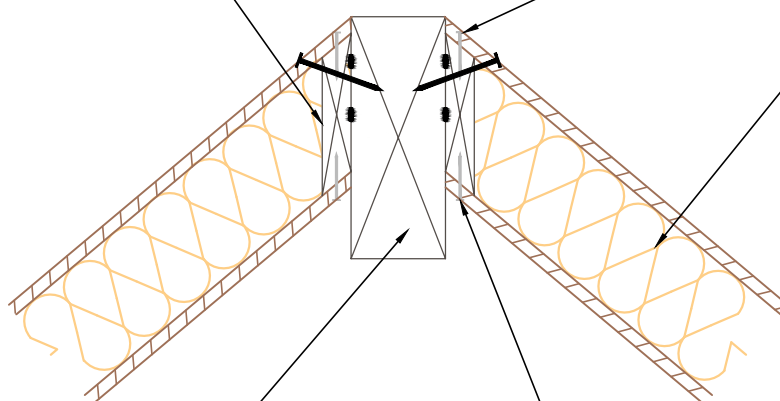
End plate splayed to suit

See fixing specification
(page 4)

172mm Kingspan TEK®
Building System roof panel

Glulam ridge beam as per calculation

2.8mm x 63mm nails galvanized ringshank
nails, spacing as per structural calculations



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Typical hip detail showing roof panels
connected to hip rafter

TEK 172

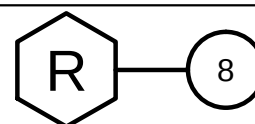
KIL-R8-TEK-172

Date:

29/10/14

Drawn by:
H.E.

Scale:
1:10



25mm x 50mm counter battens @
400 max. ctrs. See fixing
specification (page 4)

Slate/tile battens 50mm x 25mm or in
accordance with BS 5534 code of
practice for slating and tiling

Slate or tile external finish

See fixing specification (page 4)

External wall finish

Lead flashing min. code 4 lead

Kingspan nilvent® breather
membrane

Slate or tile external finish

Proprietary flexible cavity firestop

25mm deep x 50mm wide vertical
counter battens @ 400mm max. ctrs
providing drained & vented cavity
see fixing specification (page 4)

Proprietary flexible cavity firestop

See fixing specification (page 4)



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Roof to roof - change in level detail

TEK 172

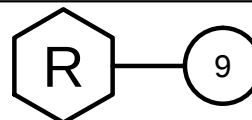
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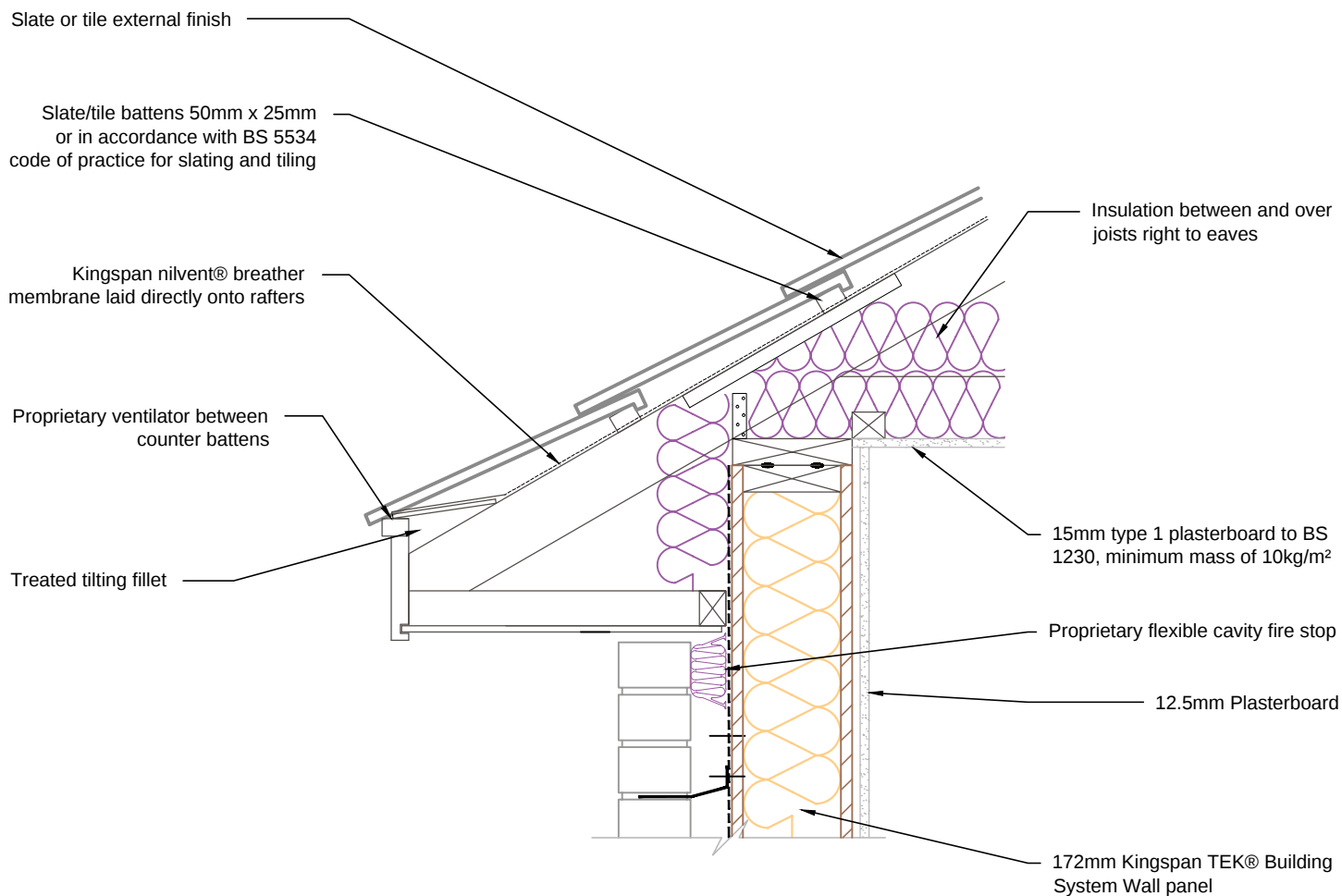
Date:

29/10/14

Drawn by:
H.E.

Scale:
1:10





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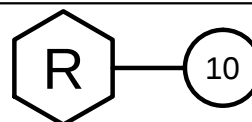
Typical eaves detail vertical section with
truss rafter pitched roof
TEK 172

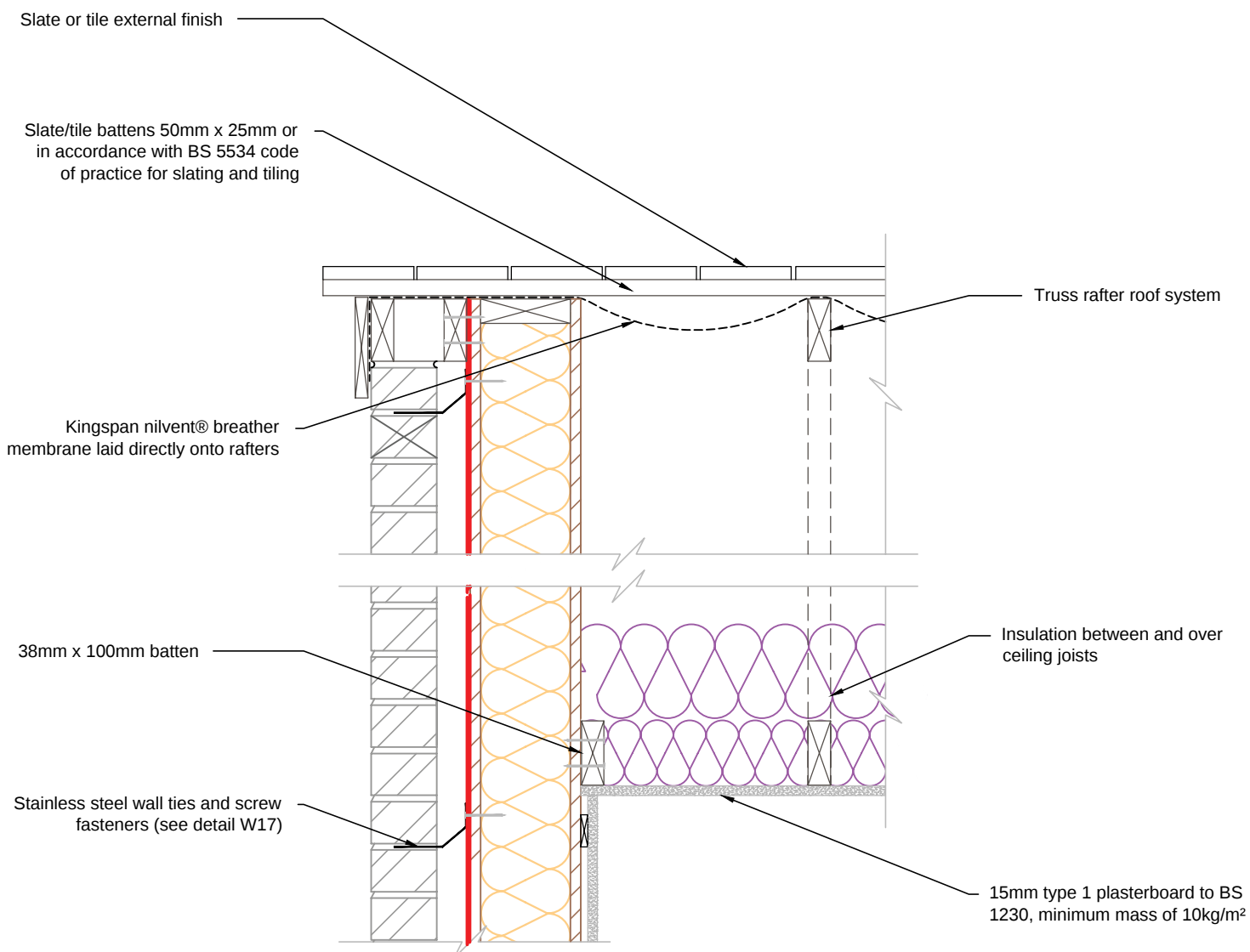
KIL-R10-TEK-172

Date:
29/10/14

Drawn by:
H.E.

Scale:
1:10





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Kingspan TEK® Building System gable junction - truss rafter roof with insulation at ceiling level

TEK 172

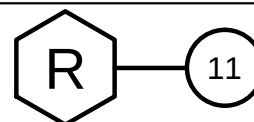
KIL-R11-TEK-172

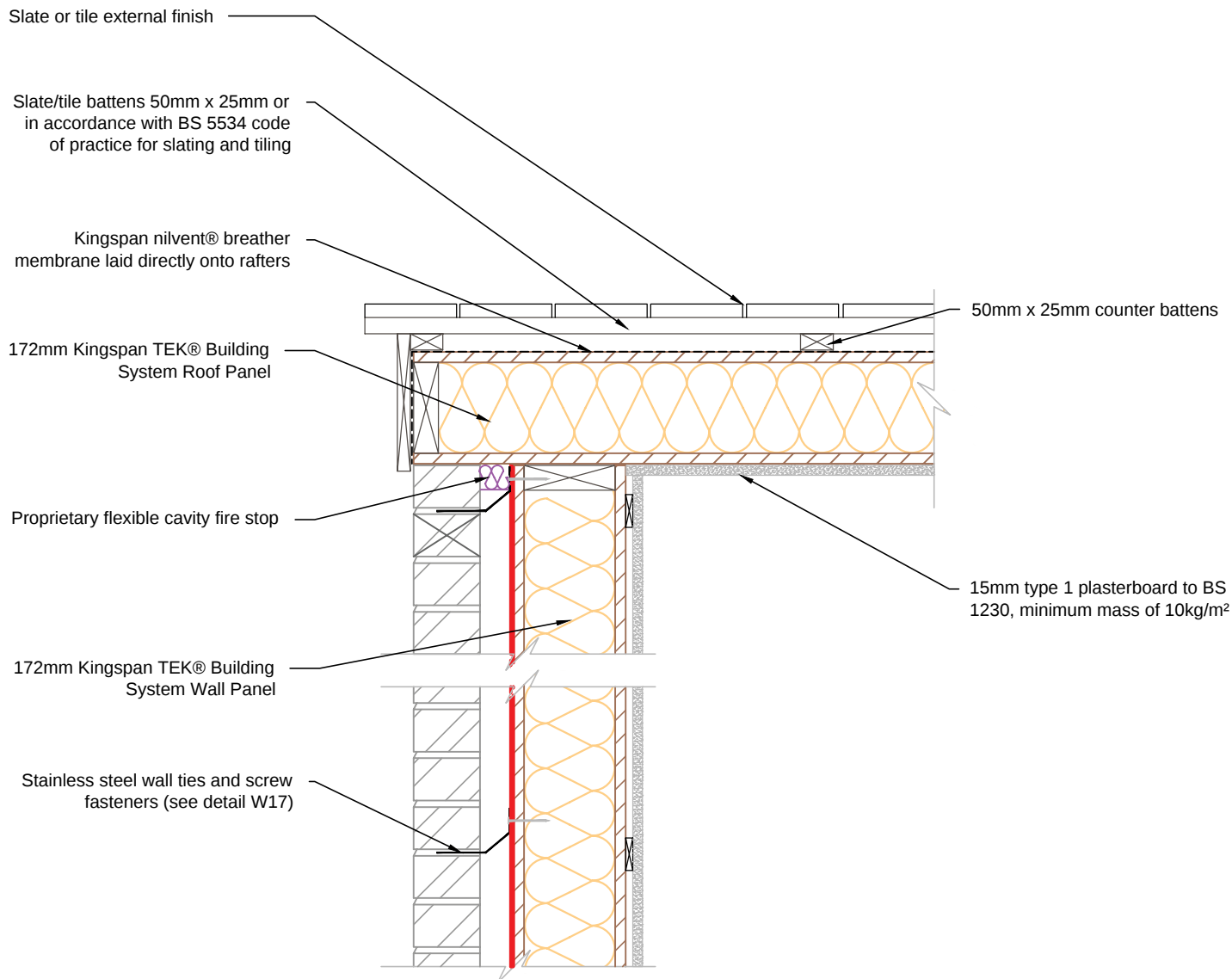
Date:

29/10/14

Drawn by:
H.E.

Scale:
1:10





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Kingspan TEK® Building System gable junction - Kingspan TEK® Building System Roof Panel

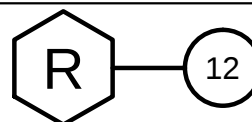
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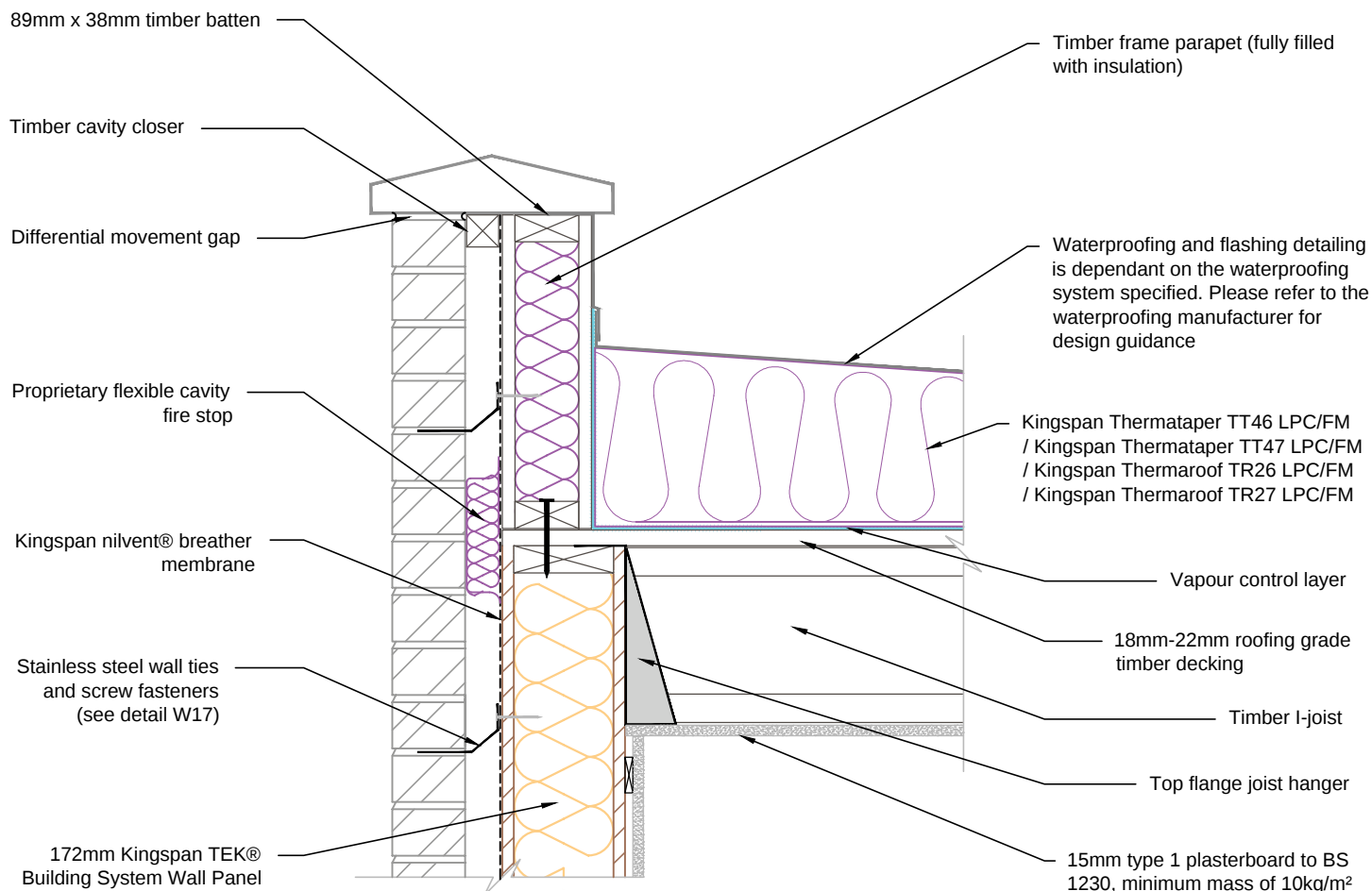
KIL-R12-TEK-172

Date:
29/10/14

Drawn by:
H.E.

Scale:
1:10





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**Kingspan TEK® Building System external
wall junction with warm deck flat roof - timber frame
parapet wall**

TEK 172

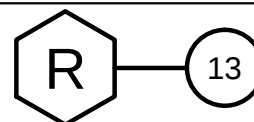
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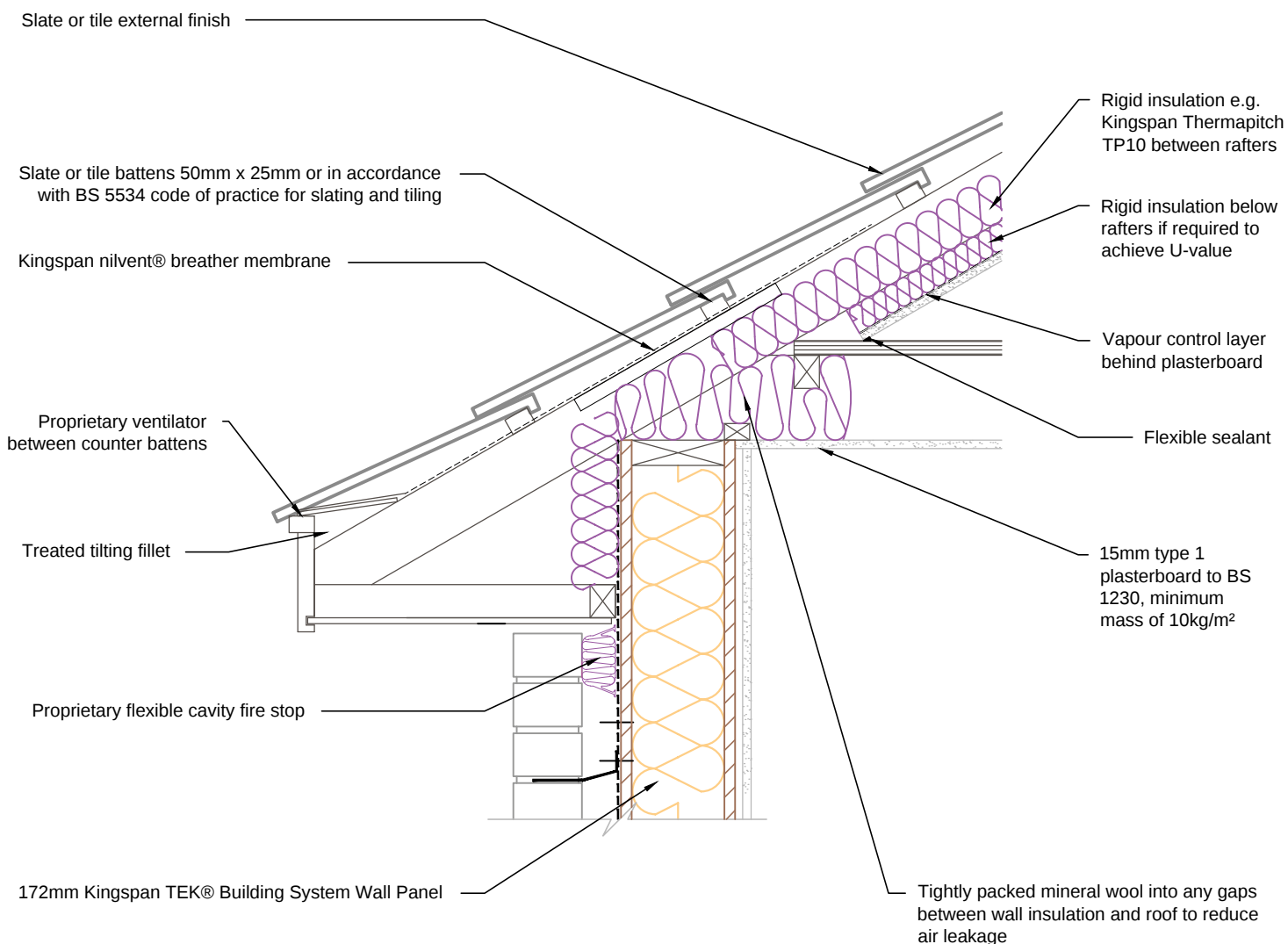
Date:

29/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical eaves detail Kingspan TEK® Building System external wall junction with pitched roof & internal floor - insulated at line of pitch

TEK 172

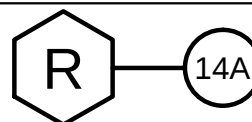
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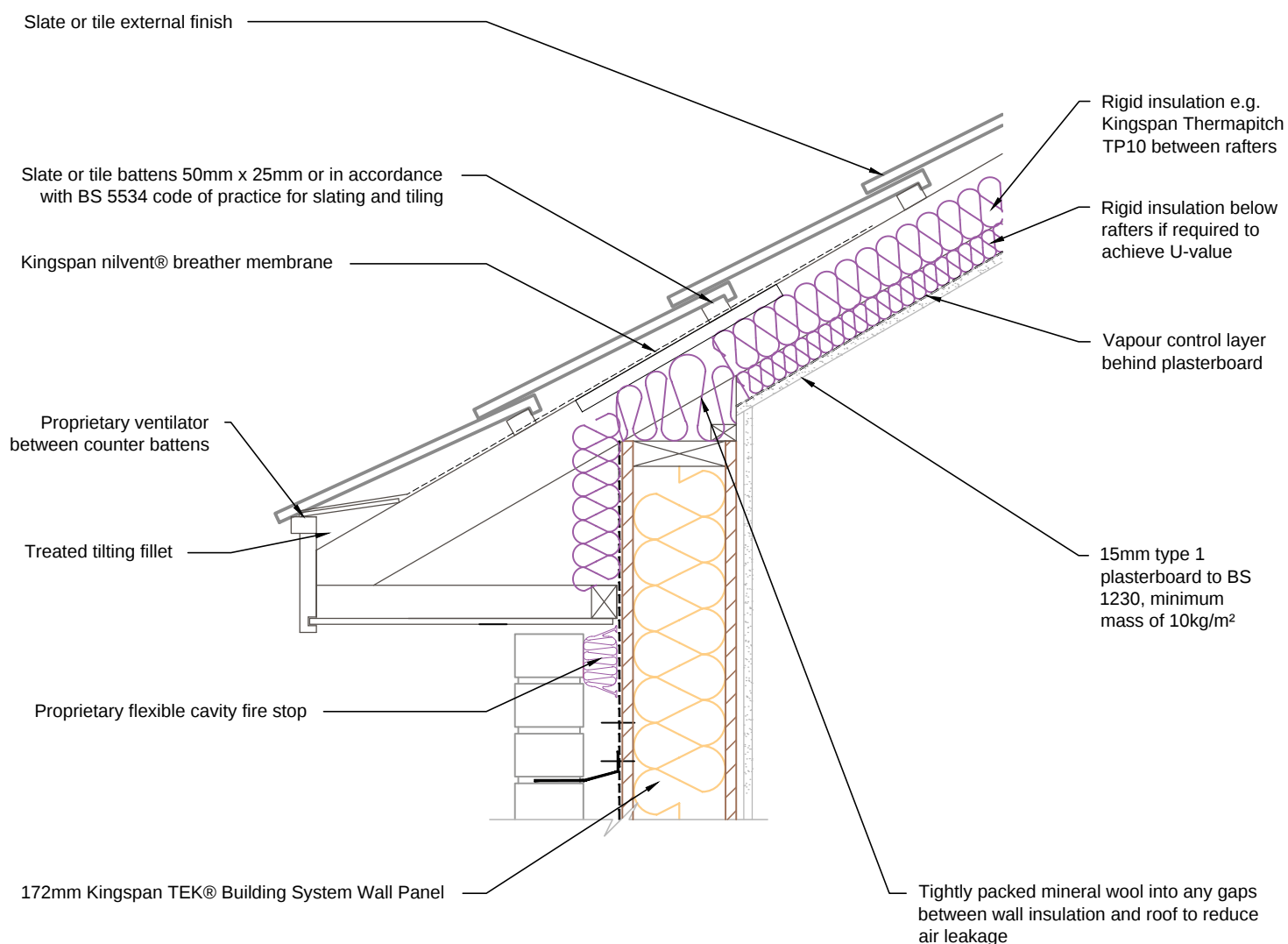
Date:

30/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical eaves detail Kingspan TEK® Building System external wall junction with pitched roof - insulated at line of pitch

TEK 172

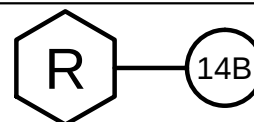
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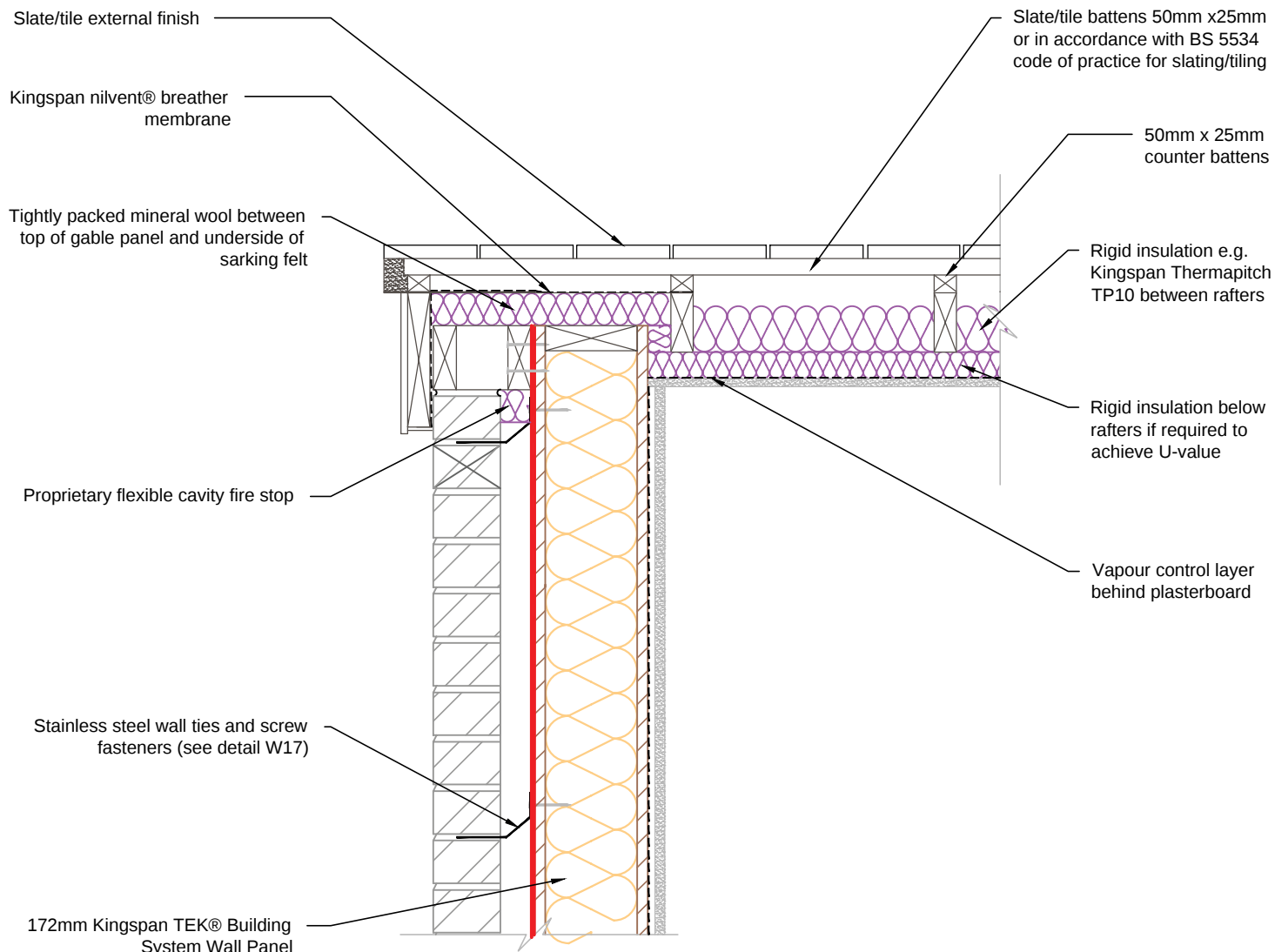
Date:

03/11/14

Drawn by:
H.E.

Scale:
1:10





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Kingspan TEK® Building System external wall junction with pitched roof insulated at line of pitch - gable

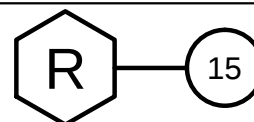
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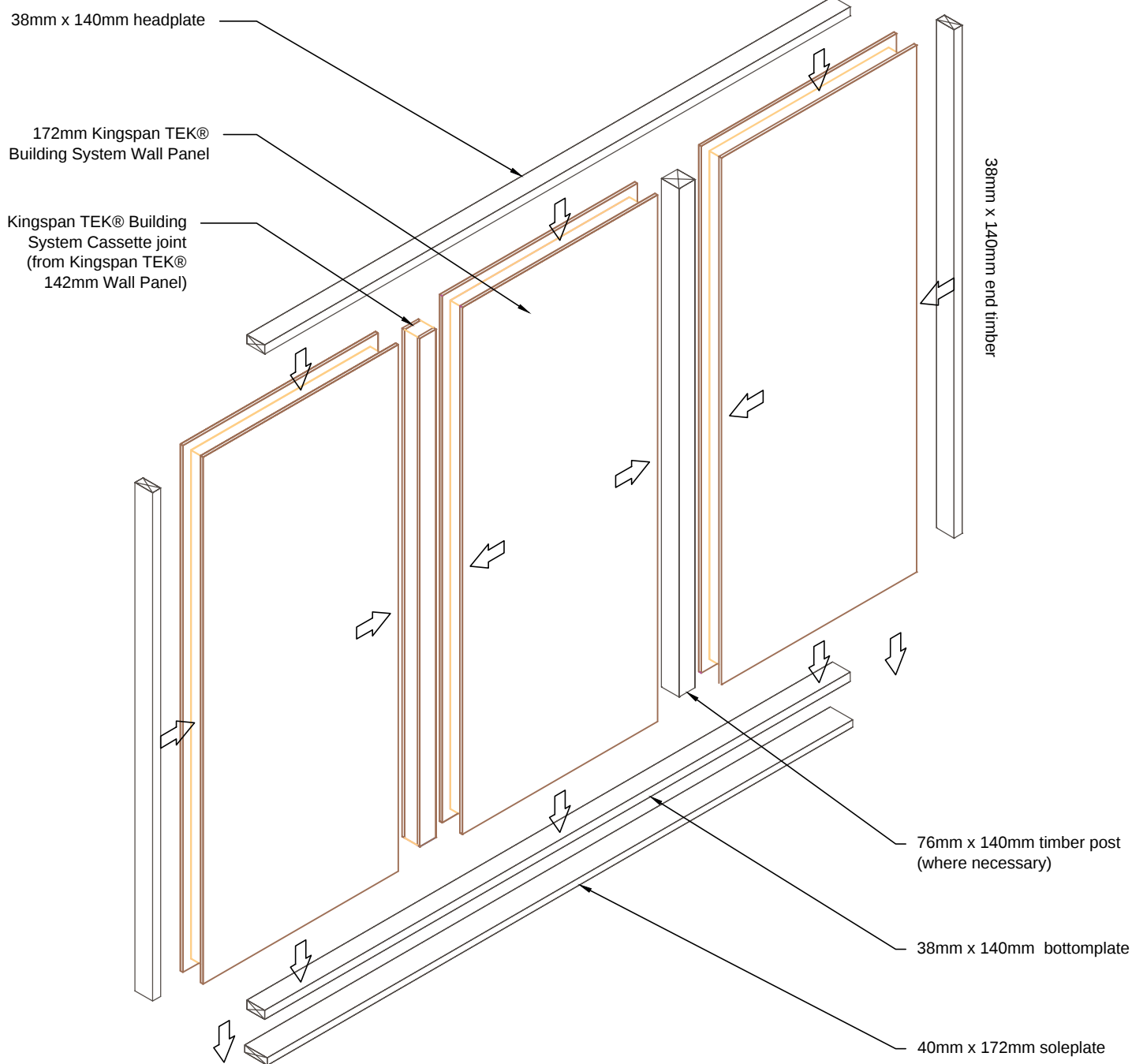
KIL-R15-TEK-172

Date:
30/10/14

Drawn by:
H.E.

Scale:
1:10





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Typical panel joints for Kingspan TEK® Building System wall panels TEK 172

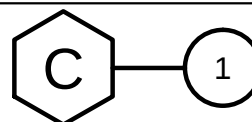
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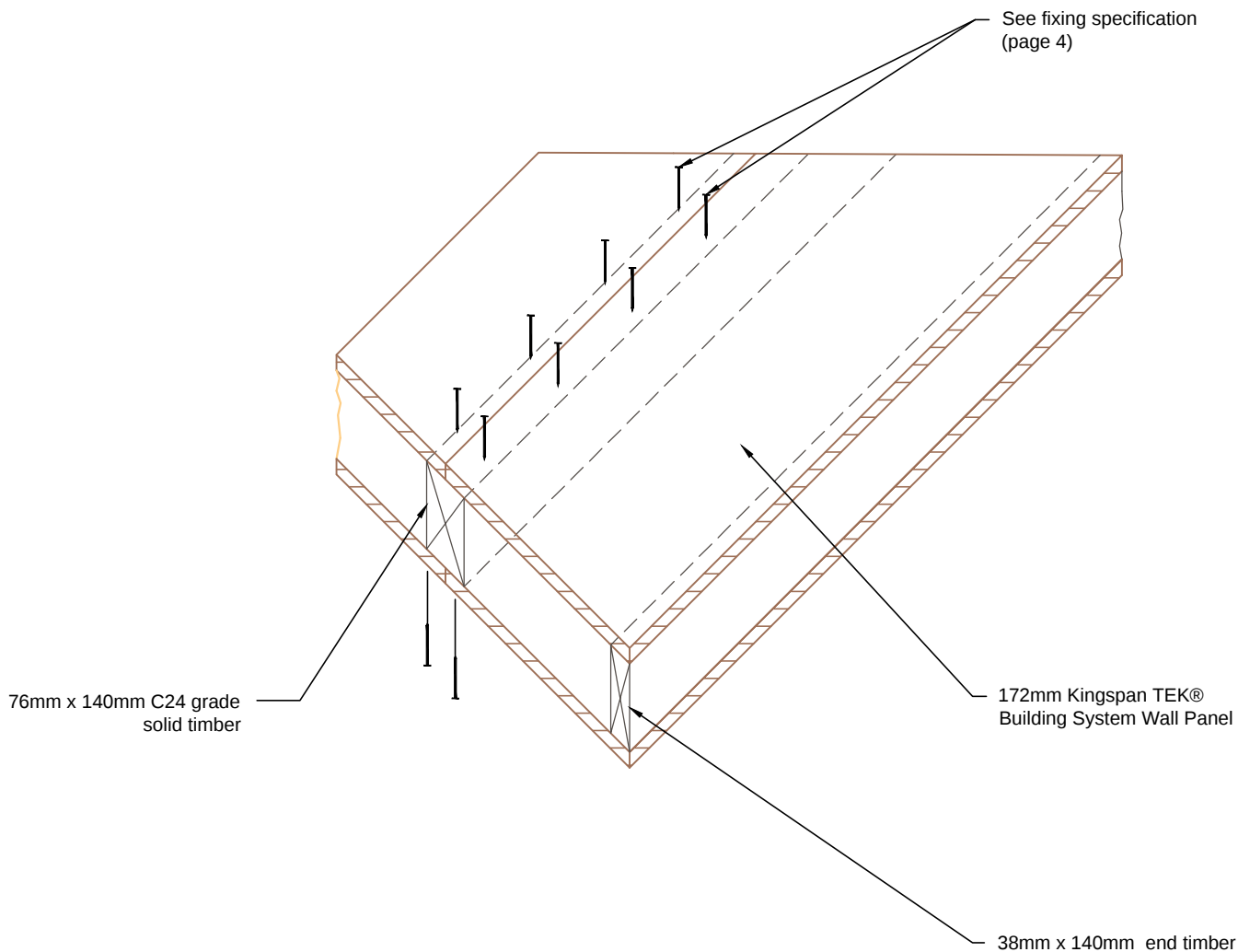
Date:

30/10/14

Drawn by:
 H.E.

Scale:
 NTS





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Timber post panel joint

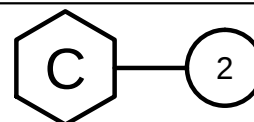
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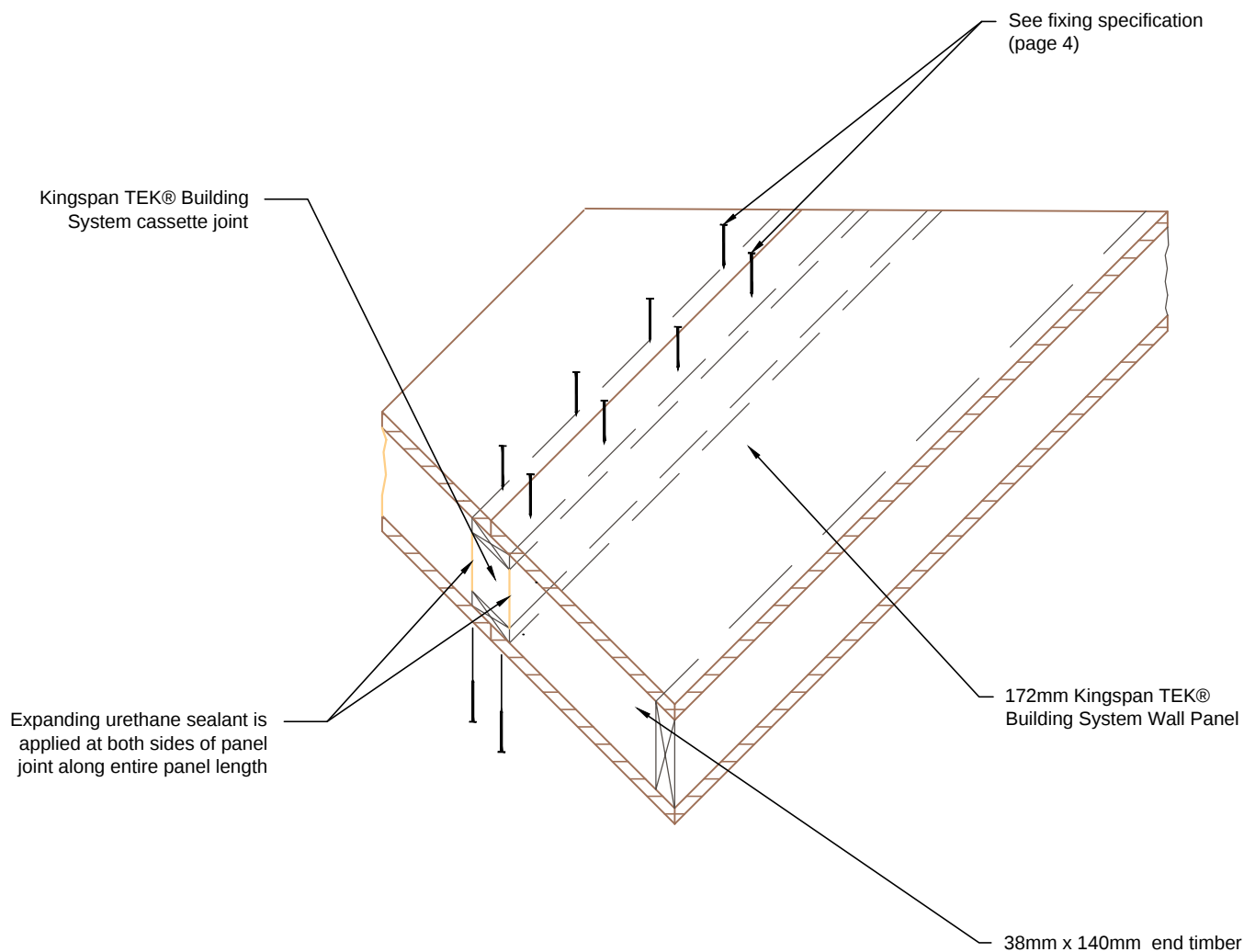
KIL-C2-TEK-172

Date:
30/10/14

Drawn by:
H.E.

Scale:
1:10





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OSB3 cassette panel joint

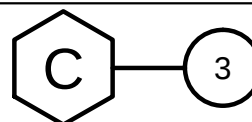
TEK 172

KIL-C3-TEK-172

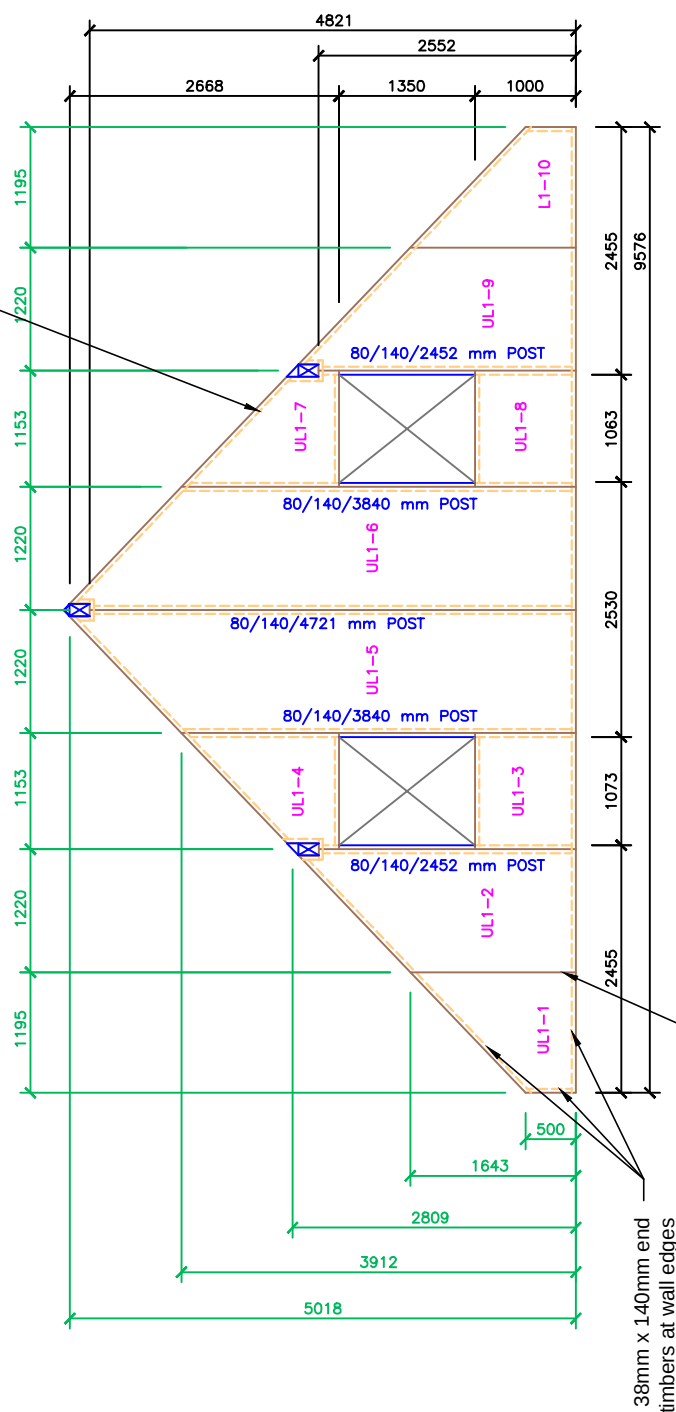
Date:
30/10/14

Drawn by:
H.E.

Scale:
1:10



Broken line indicates a full
rout of 38mm x 140mm



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Typical gable elevation with ridge beam
pocket detail.

TEK 172

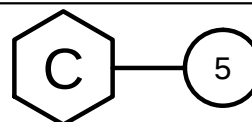
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Date:

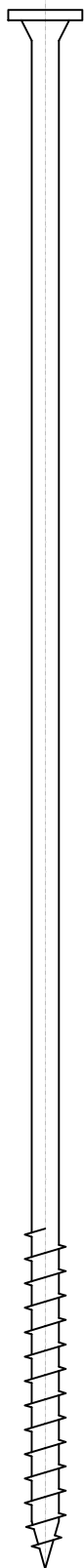
30/10/14

Drawn by:
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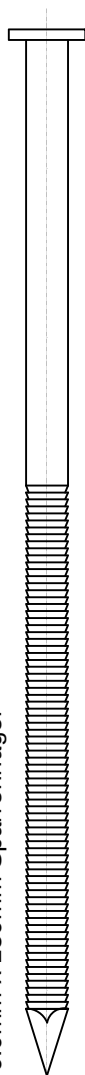
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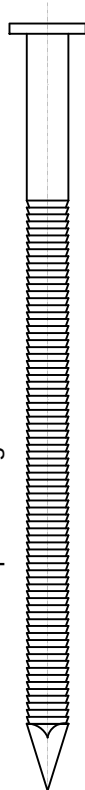
4.8mm x 225mm FastenMaster Headlok



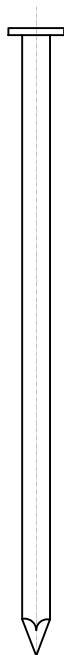
6.0mm x 150mm Sparrennägel



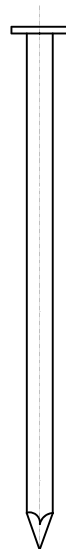
6.0mm x 110mm Sparrennägel



6.0mm x 90mm Smooth shank nail



3.35mm x 75mm smooth shank nail



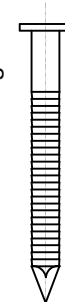
2.8mm x 63mm ringshank nail



4.0mm x 60mm ringshank nail



4.0mm x 40mm ringshank nail



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Standard fixings - sparrennägel, smooth,
ringshanks nails & SIP screw

TEK 172

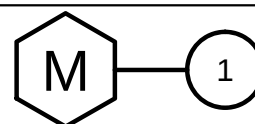
KIL-M1-TEK-172-3

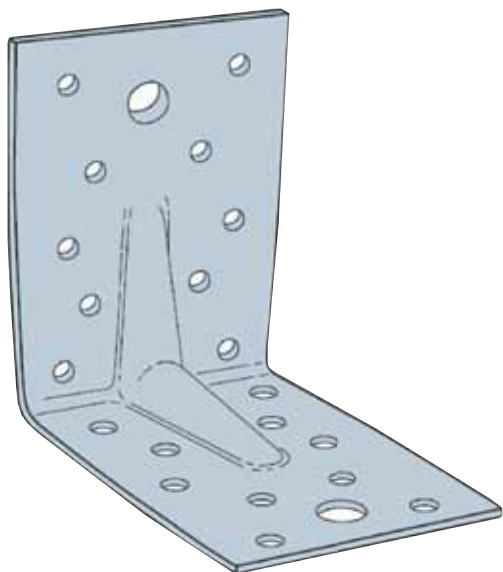
Date:

30/10/14

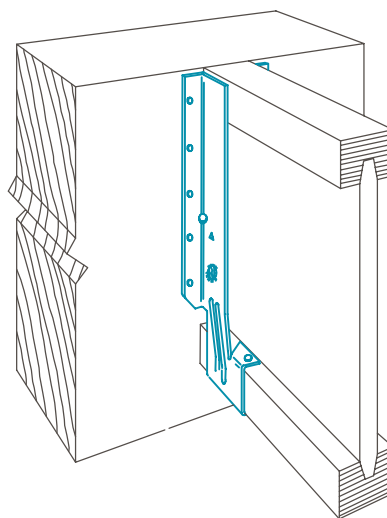
Drawn by:
H.E.

Scale:
NTS

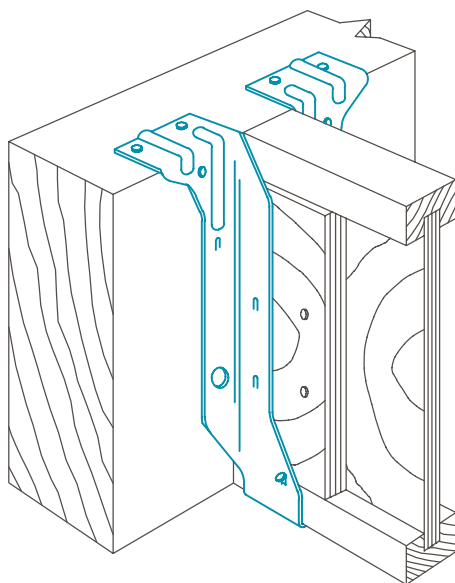




Angle bracket - NTS



Face mounted joist hanger



Top flange joist hanger with optional web-stiffness



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Standard fixings - hangers & brackets

TEK 172

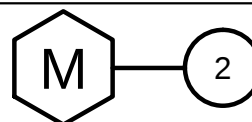
KIL-M2-TEK-172

Date:

30/10/14

Drawn by:
H.E.

Scale:
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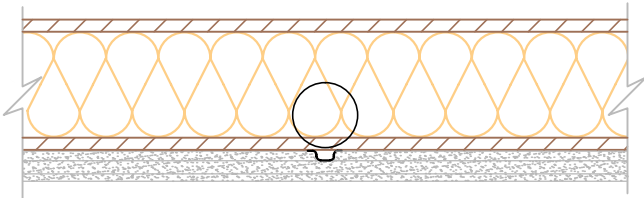
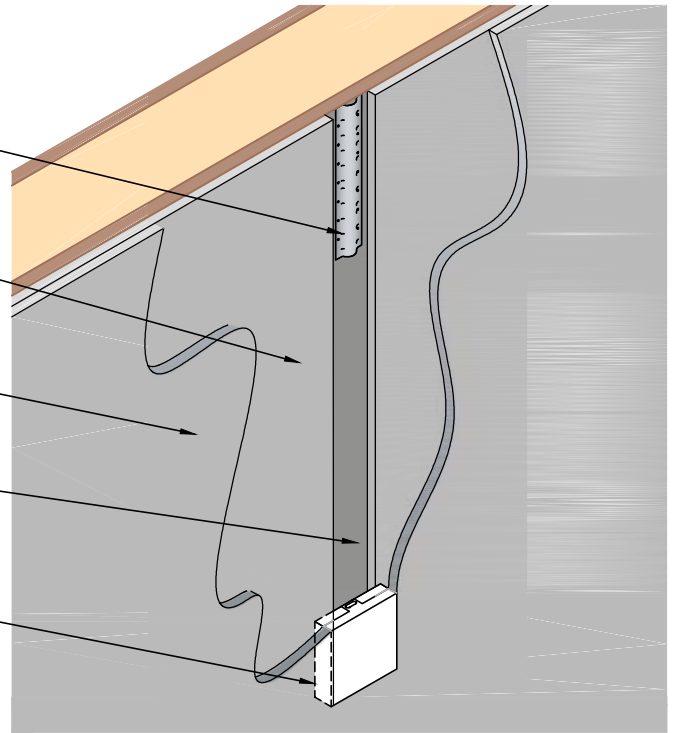
Protective steel conduit

9.5mm plasterboard

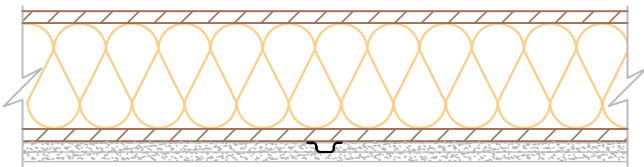
12.5mm plasterboard

Plasterboard fitted up to edges of service runs

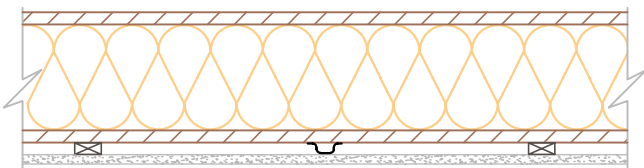
Services wall box



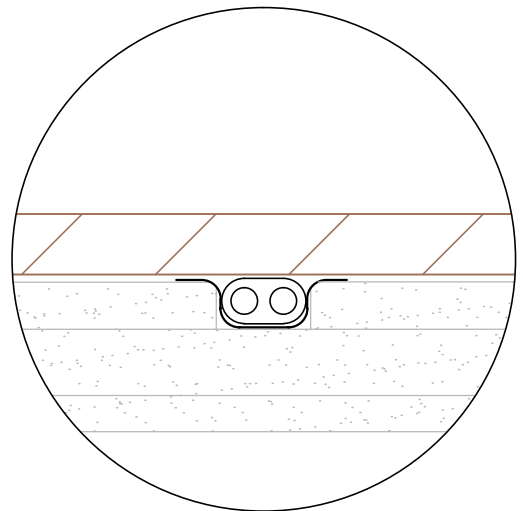
Wall section using triple layer plasterboard to create channel for party wall mounted services.



Wall section using double layer plasterboard to create channel for party wall mounted services.



Alternate method using plasterboard on counter battens to create channel for internal wall mounted services.



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Wall mounted services detail - electrical

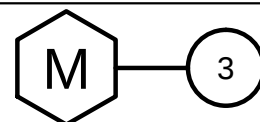
TEK 172

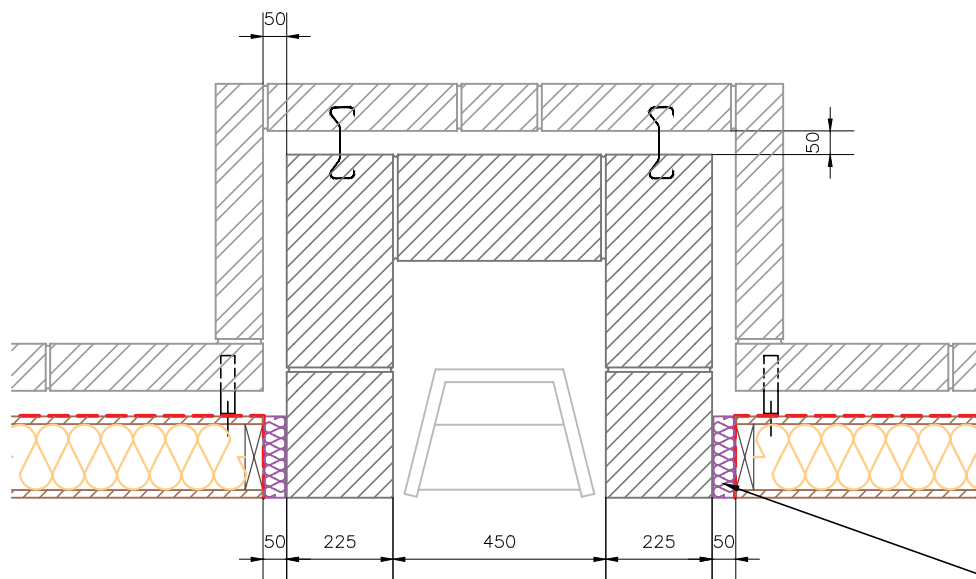
KIL-M3-TEK-172

Date: 30/10/14

Drawn by: H.E.

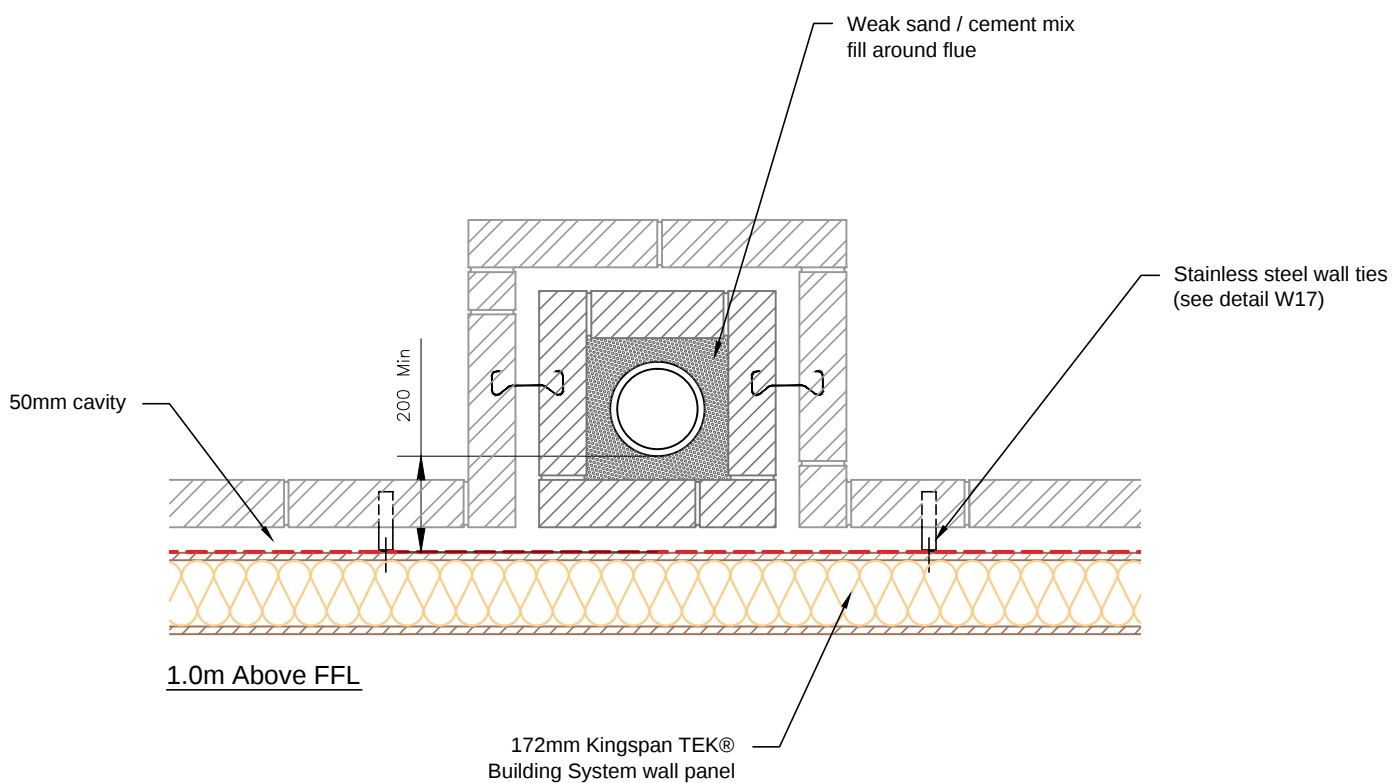
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Ground Floor

40mm min. gap between panel & block filled with non-combustible material



1.0m Above FFL

172mm Kingspan TEK®
Building System wall panel



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External fireplace recess & chimney

TEK 172

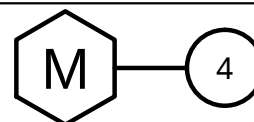
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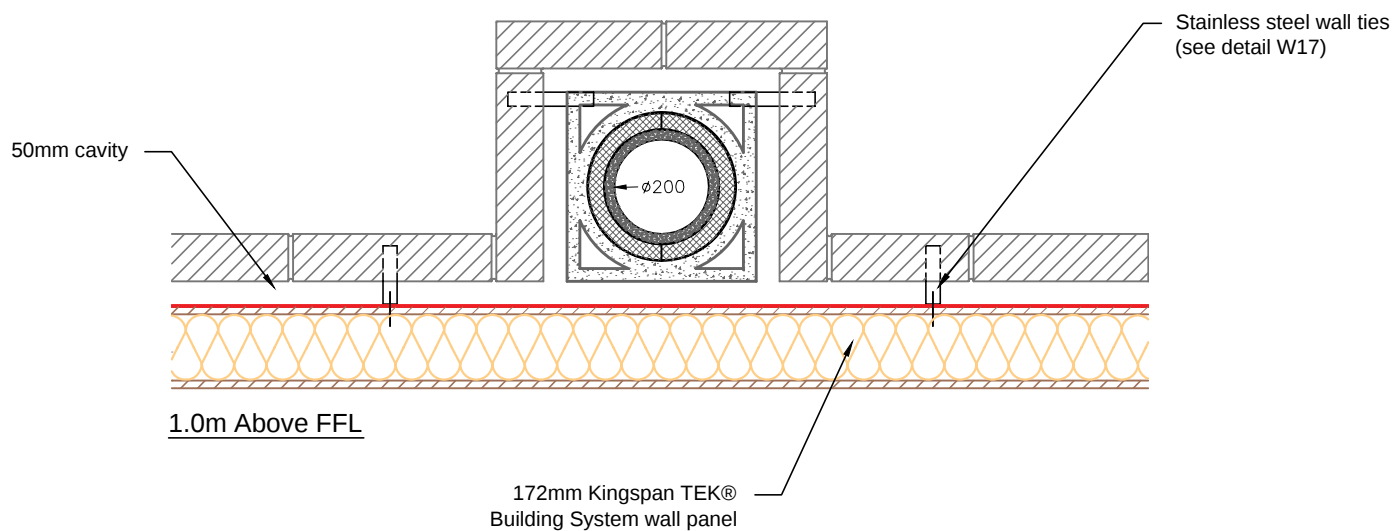
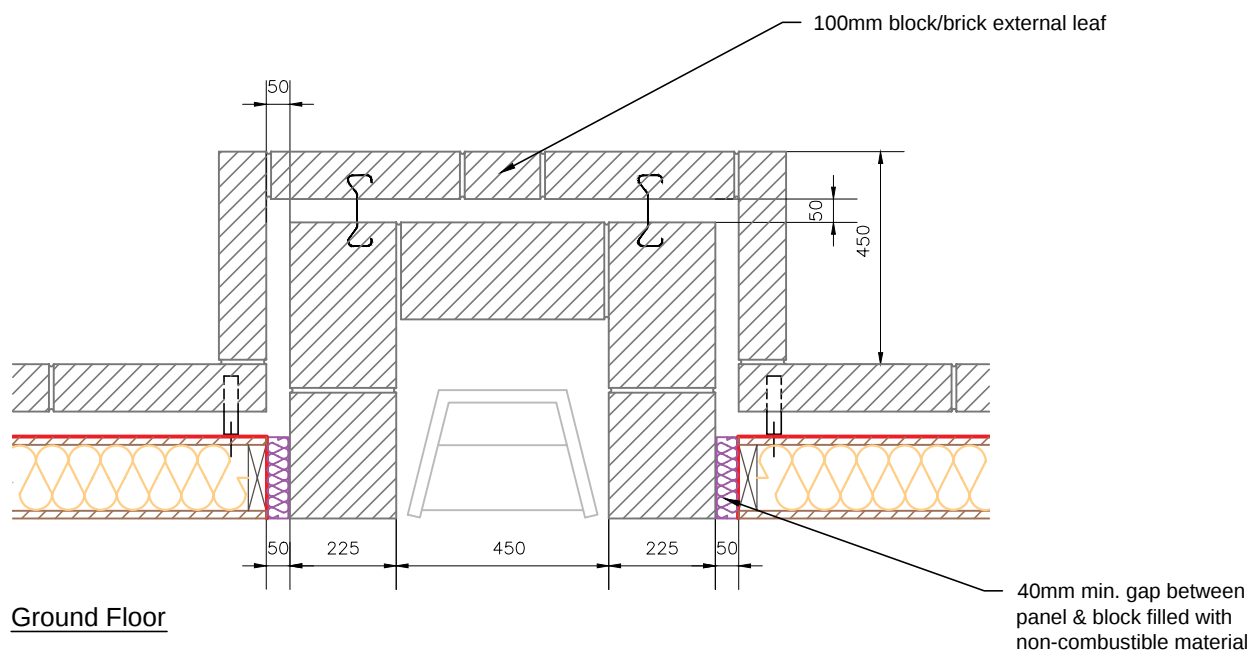
Date:

30/10/14

Drawn by:
H.E.

Scale:
1:10





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Alternate external fireplace recess & chimney

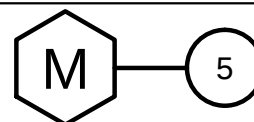
TEK 172

KIL-M5-TEK-172

Date: 30/10/14

Drawn by: H.E.

Scale: 1:16



Contact Details

Customer Service

For quotations, order placement and details of despatches please contact the Kingspan Insulation Customer Service Department on the numbers below:

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Technical Advice

Kingspan Insulation supports all of its products with a comprehensive Technical Advisory Service for specifiers, stockists and contractors.

This includes a computer-aided service designed to give fast, accurate technical advice. Simply phone the Kingspan Insulation Technical Service Department with your project specification. Calculations can be carried out to provide U-values, condensation / dew point risk, required insulation thicknesses etc... Thereafter any number of permutations can be provided to help you achieve your desired targets.

The Kingspan Insulation Technical Service Department can also give general application advice and advice on design detailing and fixing etc... Site surveys are also undertaken as appropriate.

The Kingspan Insulation British Technical Service Department operates under a management system certified to the BBA Scheme for Assessing the Competency of Persons to Undertake U-value and Condensation Risk Calculations.



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Literature & Samples

Kingspan Insulation produces a comprehensive range of technical literature for specifiers, contractors, stockists and end users. The literature contains clear 'user friendly' advice on typical design; design considerations; thermal properties; sitework and product data.

Kingspan TEK® technical literature is an essential specification tool. For copies please contact the Kingspan Insulation Marketing Department or visit the **Kingspan TEK®** website, using the details below:

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Kingspan Insulation Ltd is a member of:
The Structural Timber Association (STA)



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