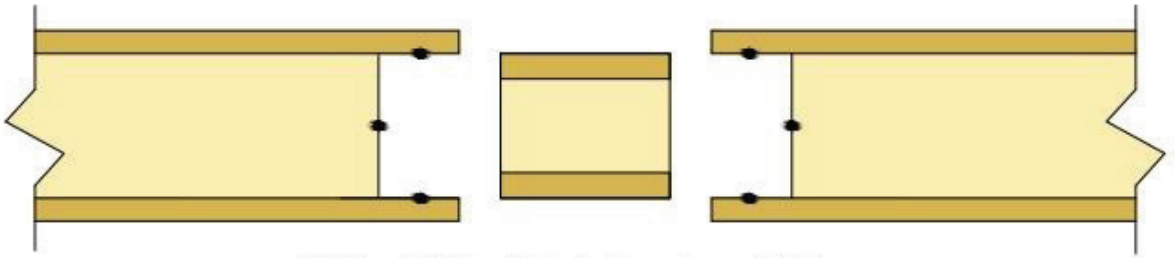
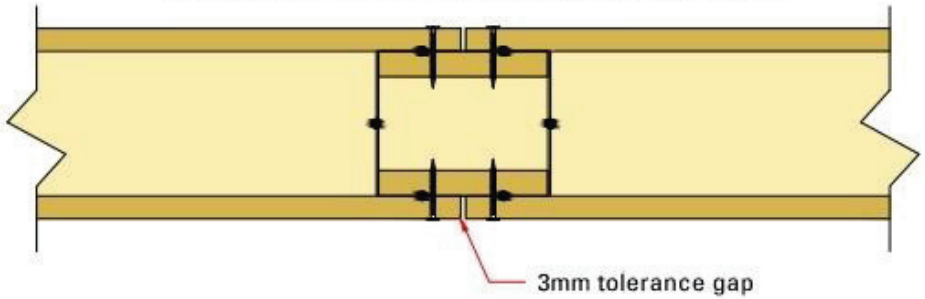
L O W e
S I P S

SIP Panel Spline Joint Detail
Plan View



SIP Panel Spline Joint sized to suit panel thickness
Fitted into 50mm deep rebate in panel core

Joint fixed with min 40mm GRS nails @ 100mm Ctrs
both sides of joint. MCPU adhesive applied to
inner faces of OSB and rebated core, full height of joint

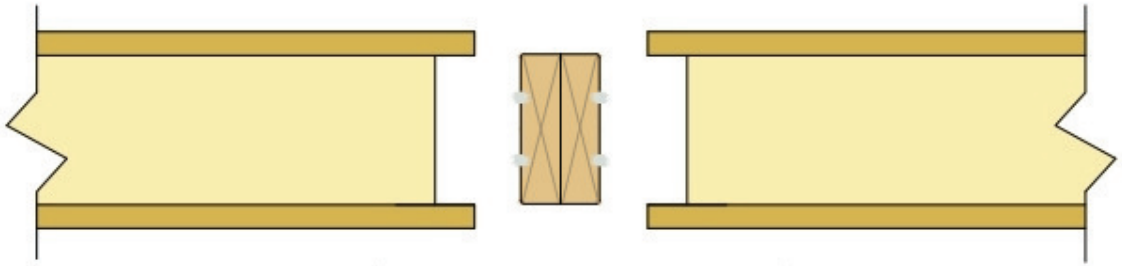


The adhesive should be applied in a small but continuous bead
along each face of inner OSB, the full length of the joint.
The joint should be immediately assembled as the adhesive is moisture curing
and so will begin to expand and cure once applied.
Once the joint is fixed, the adhesive will
cure to form a vapour tight joint.

Drawings should be considered indicative only. If in doubt please ask.

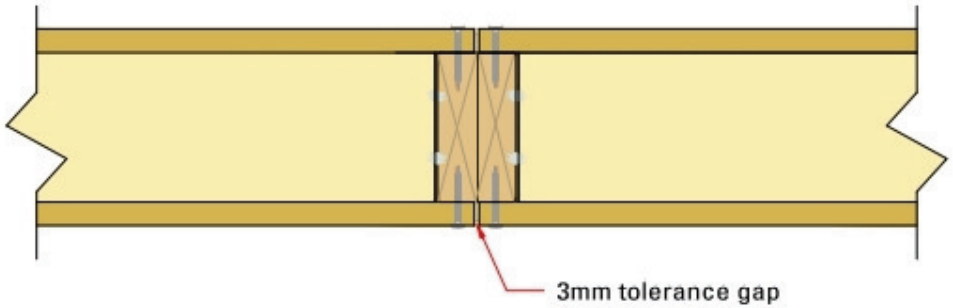
LOWe SIPS

50mm Stud Joint Detail
Plan View



2x47mm thick C24 graded timber sized to suit panel thickness
Fitted into 50mm deep rebate in panel core

Joint fixed with min 40mm Galvanized Ringshank Nails @ 100mm Centres both sides of joint.
Moisture Cured Polyurethane Adhesive applied to faces of stud, full height of joint.



The adhesive should be applied in a small but continuous bead along each face of the timber, the full lenght of the joint.
The joint should be immediately assembled as the adhesive is moisture curing and so will begin to expand and cure once applied.
Once the joint is fixed, the adhesive will cure to form a vapour tight joint.

Drawings should be considered indicative only. If in doubt please ask.

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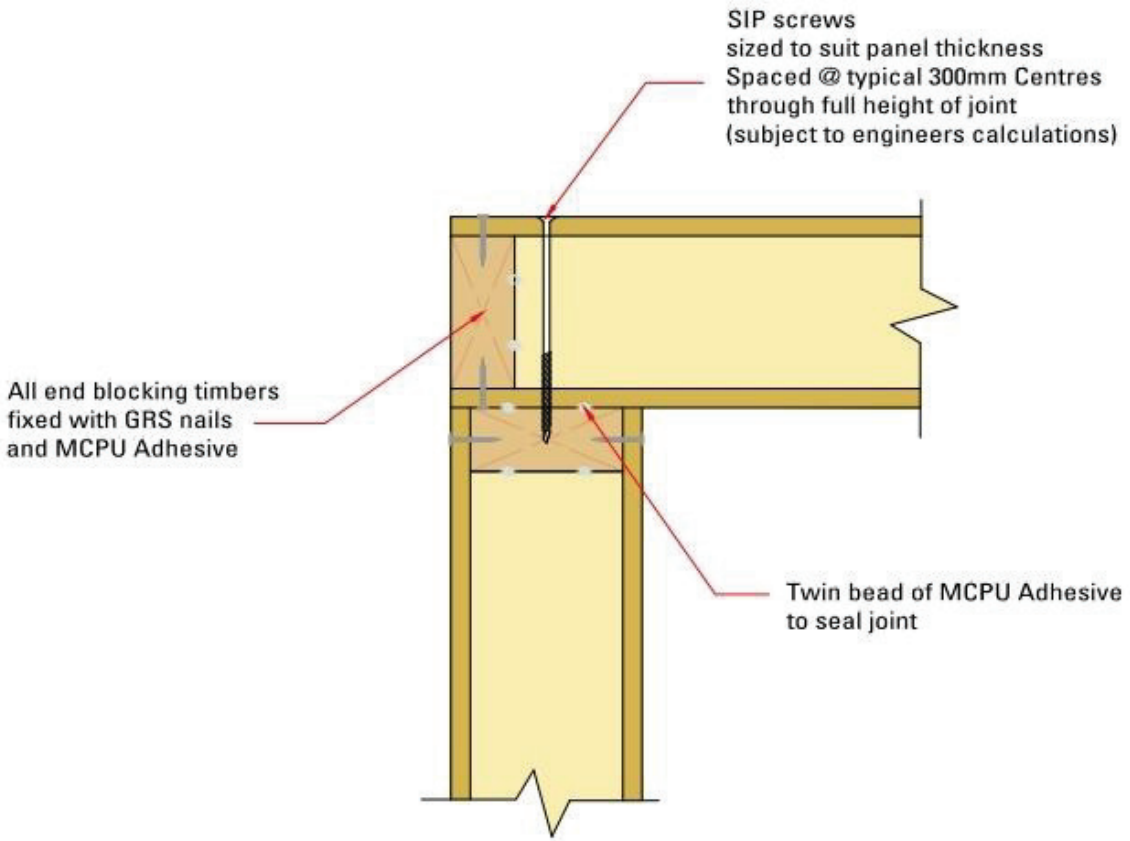
SIP Corner Junction Detail
Plan View



Drawings should be considered indicative only. If in doubt please ask.

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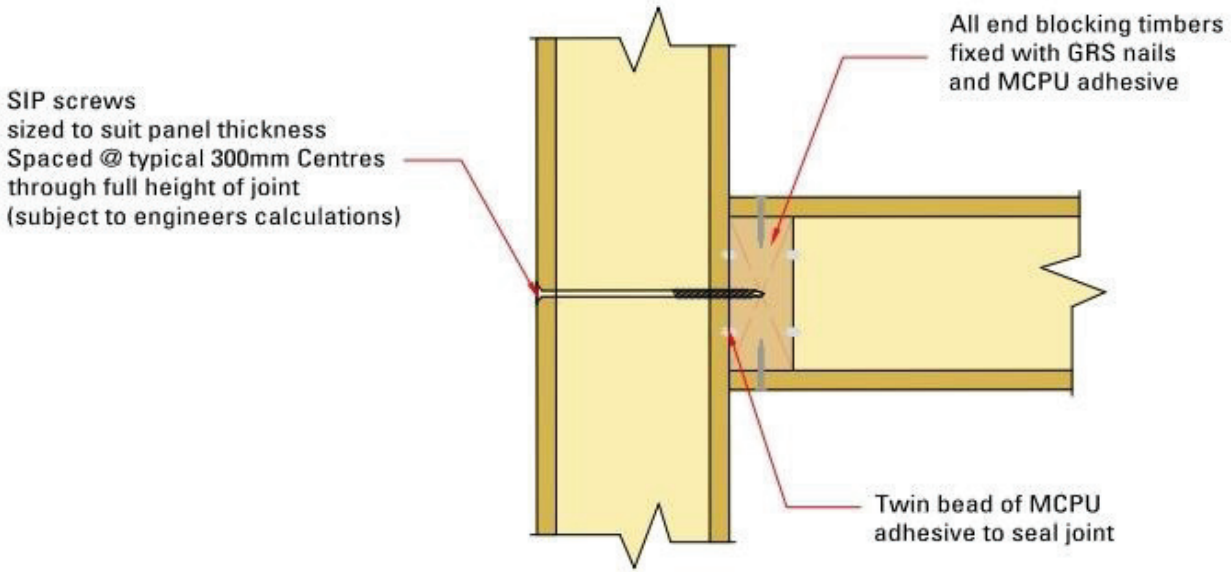
Stuctural Wall T-Junction Detail
Plan View



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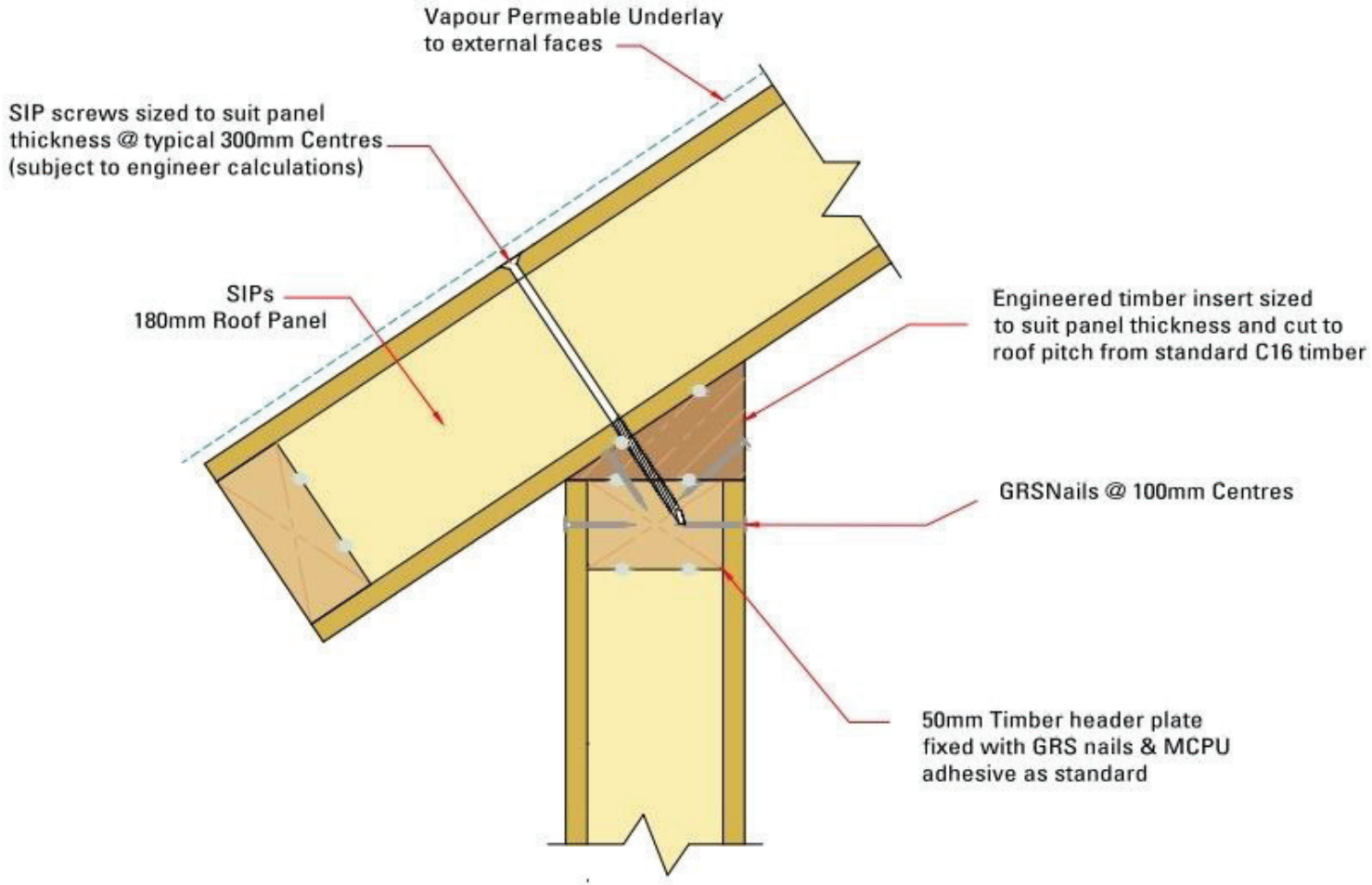
SIPs Eaves Junction Alternative
Section View



Drawings should be considered indicative only. If in doubt please ask.

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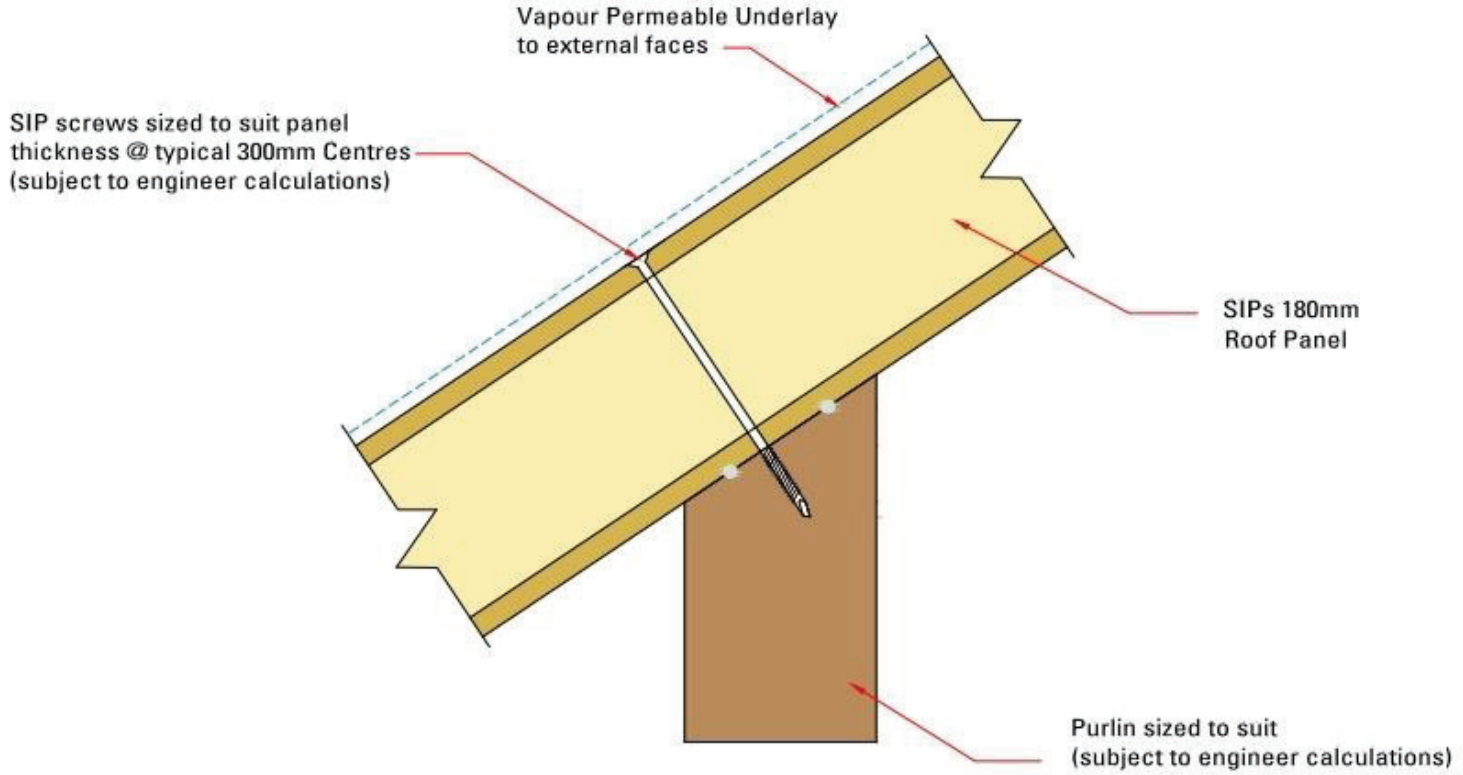
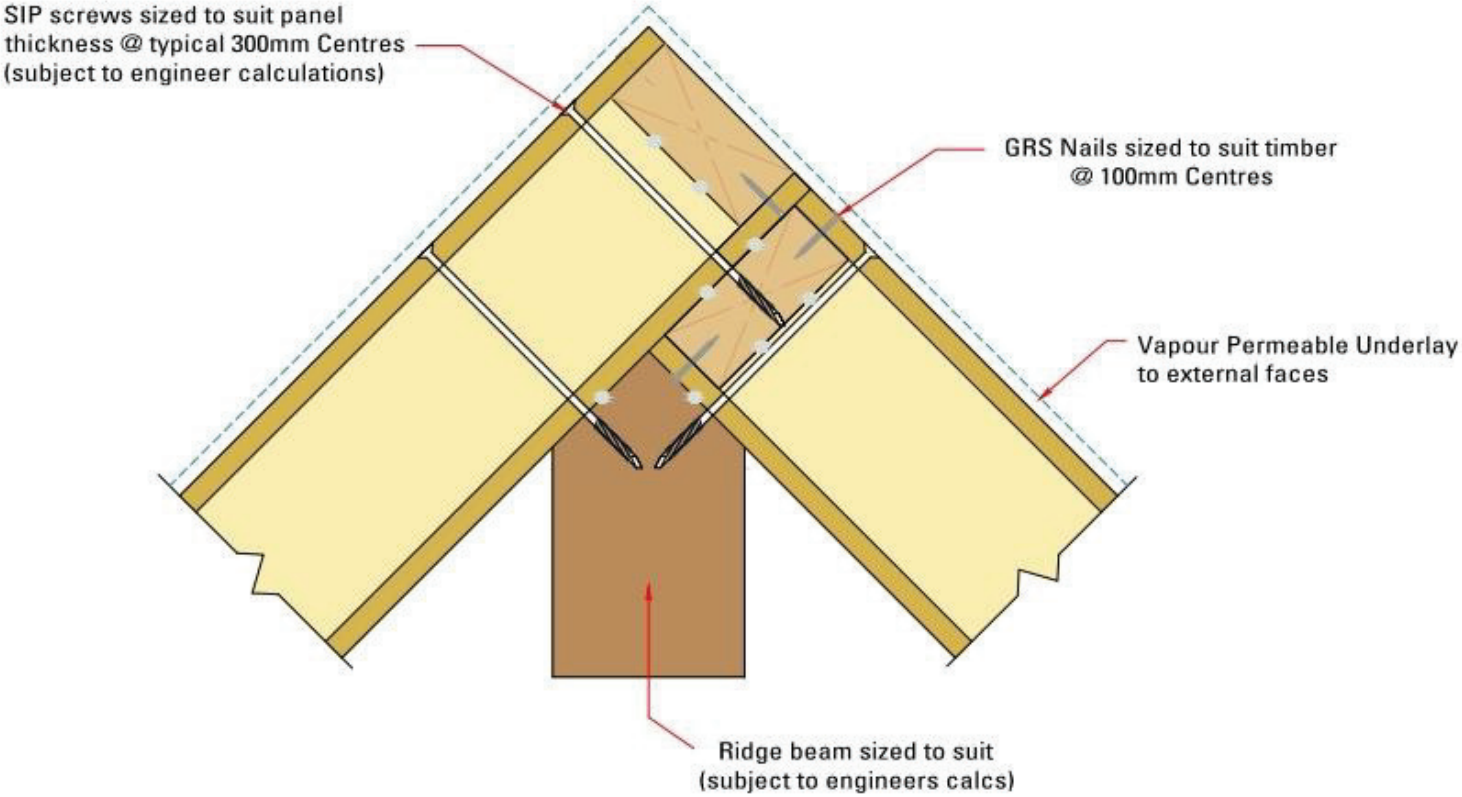
Internal Roof Support Showing Purlin
Section View



Drawings should be considered indicative only. If in doubt please ask.

Overlaid Panel Ridge Detail
Section View



Drawings should be considered indicative only. If in doubt please ask.

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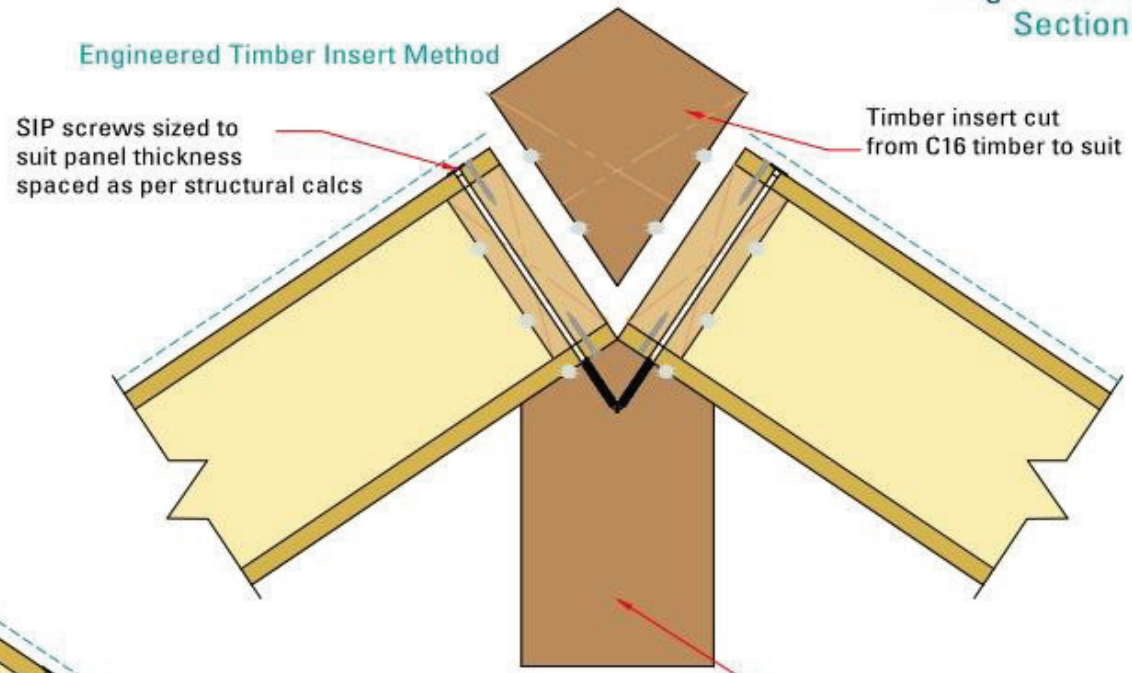
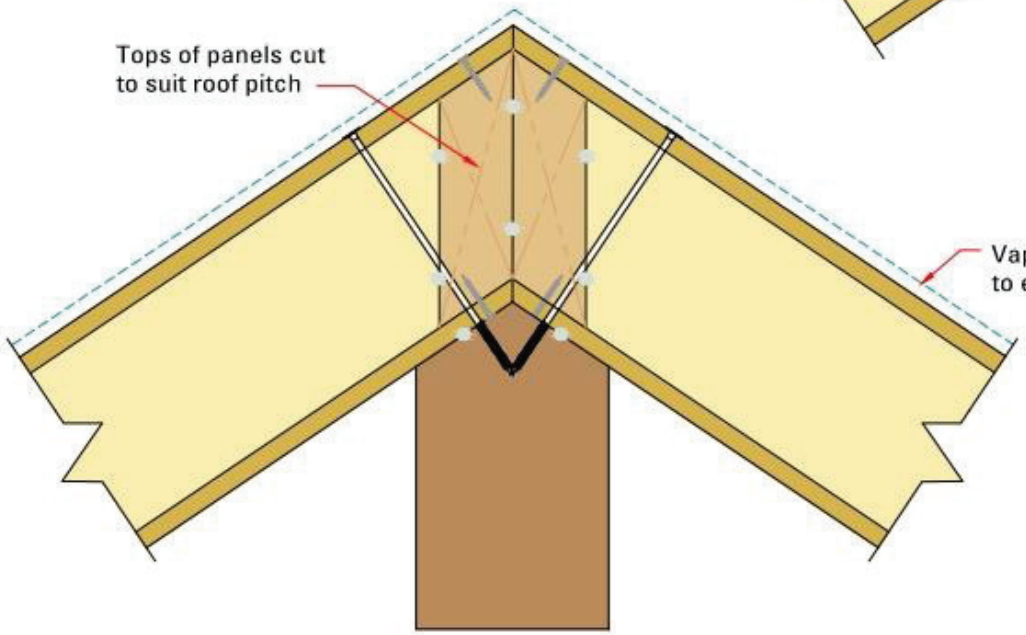
Ridge Alternatives
Section View

Engineered Timber Insert Method





Engineered Panel Tops Method

Drawings should be considered indicative only. If in doubt please ask.

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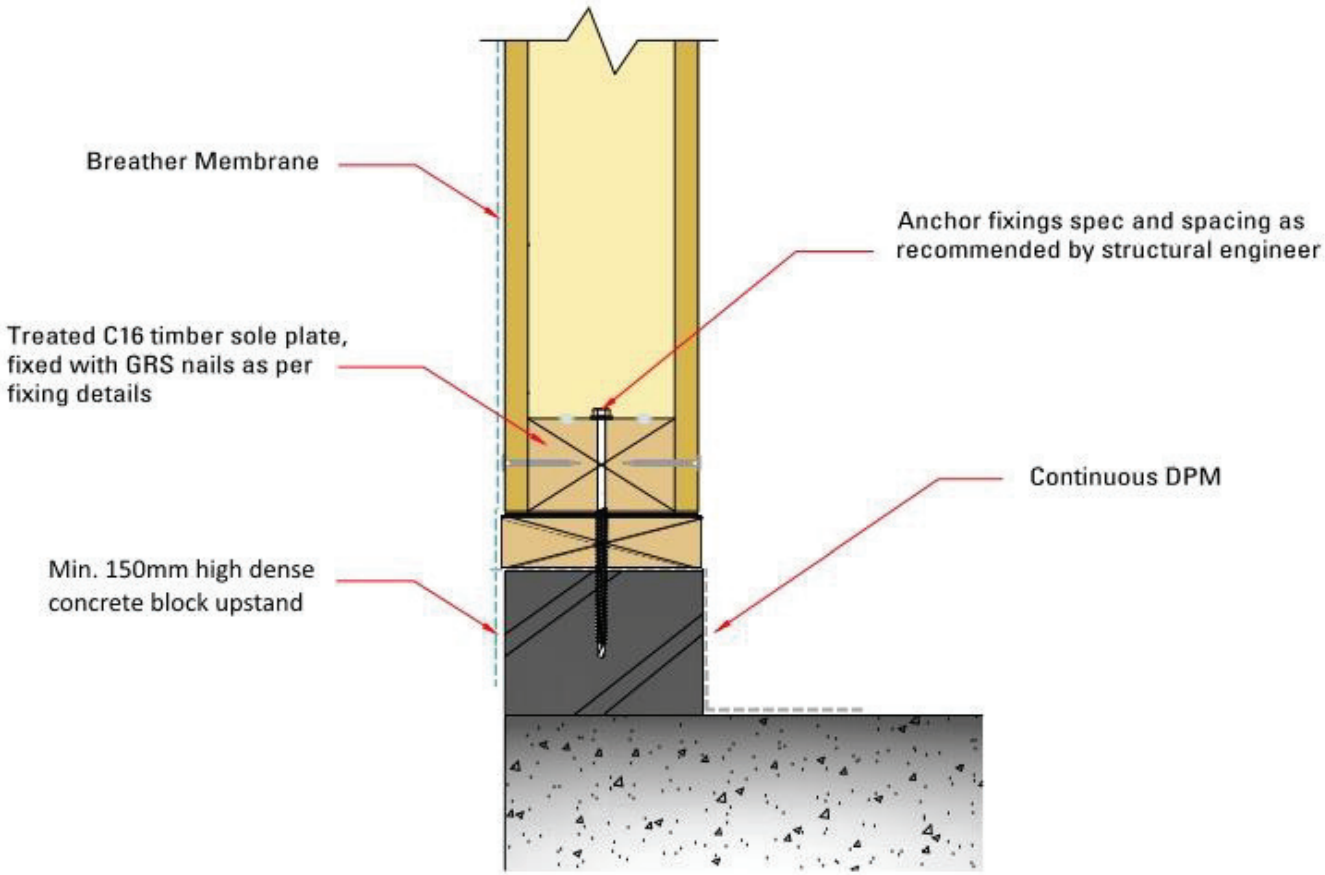
Generic Sole Plate Fixing Detail
Section View



Engineered Panel Tops Method

Drawings should be considered indicative only. If in doubt please ask.

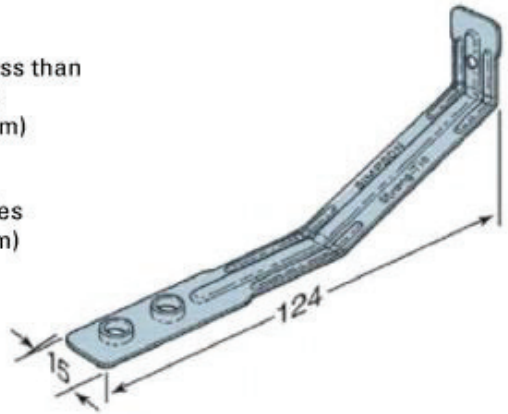
L O W e
S I P S

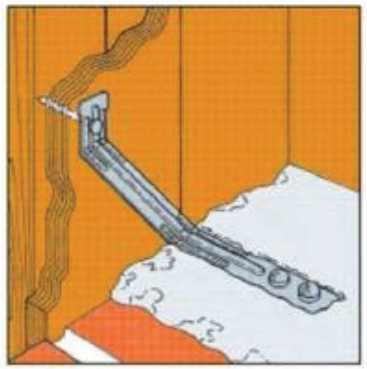
External Brick Tie Detail
Section View

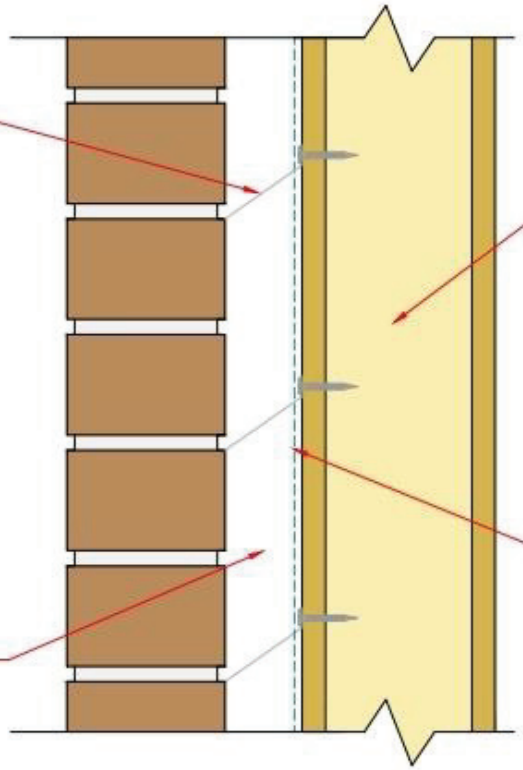
Simpson Strong-tie
BTS50N brick to SIP ties
fixed with SWT50
stainless steel screws

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

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







Drawings should be considered indicative only. If in doubt please ask.

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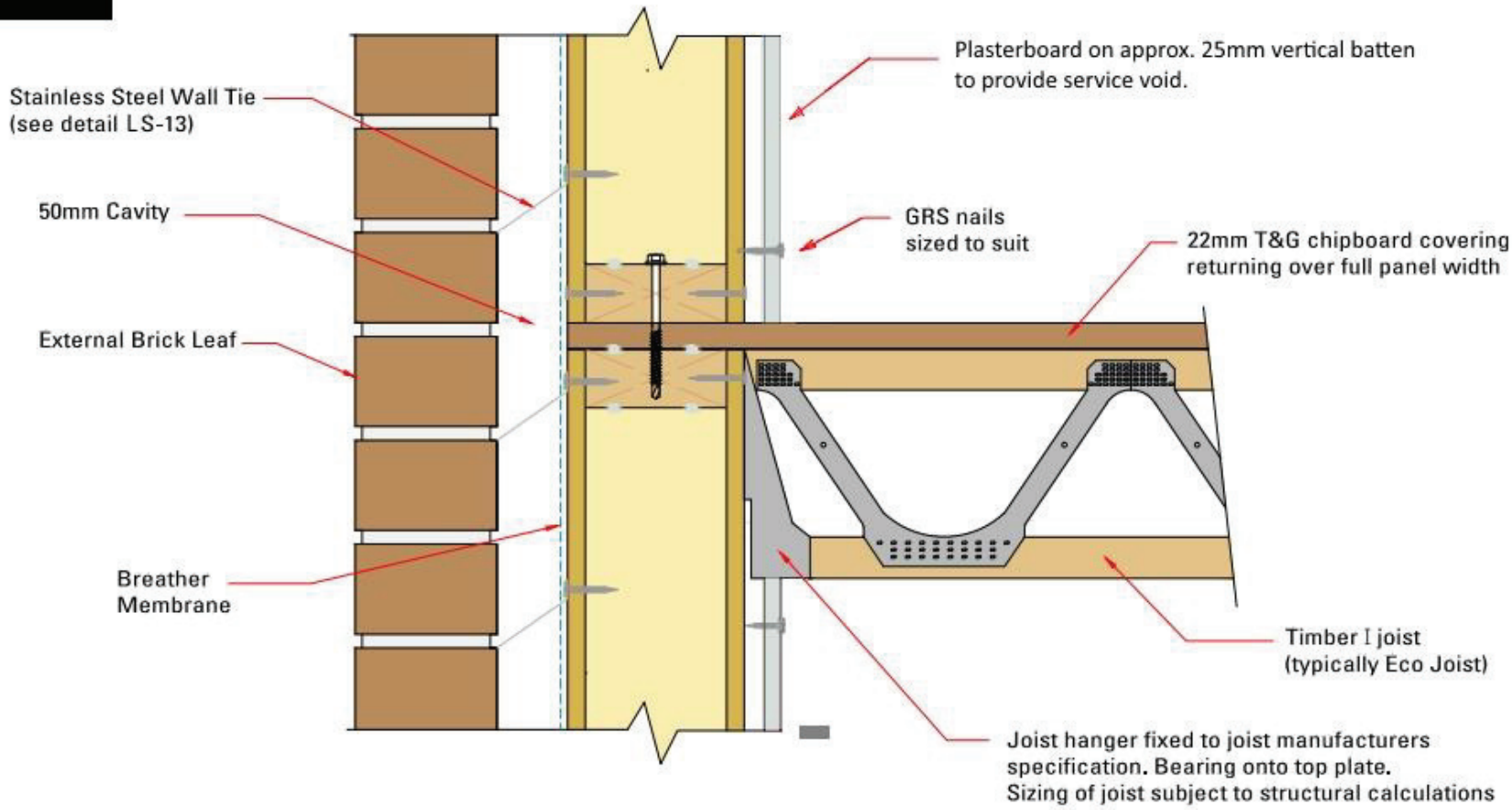
Joist Hanger Detail - Intermediate Floor
Section View



Drawings should be considered indicative only. If in doubt please ask.

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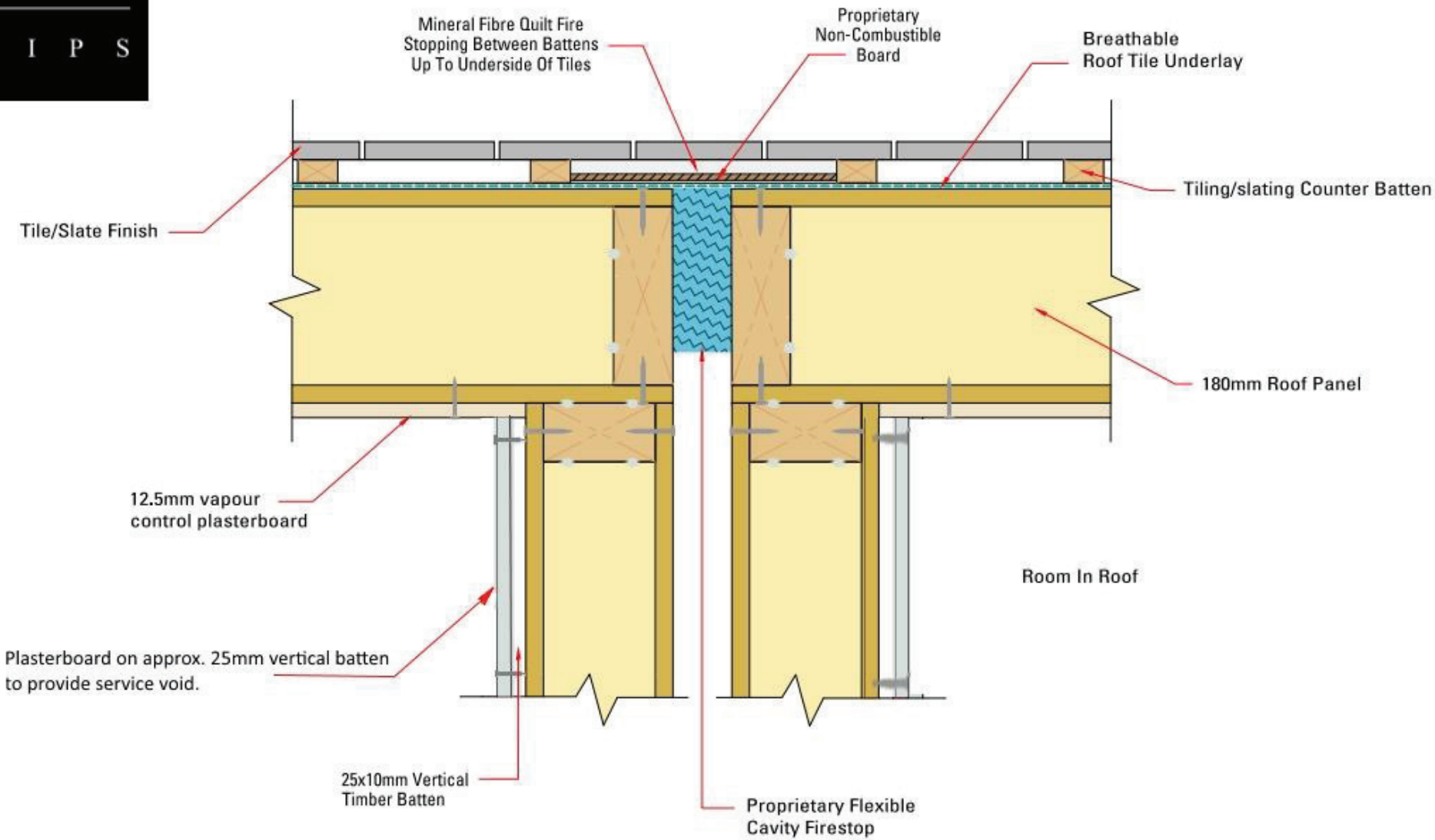
Typical Section Through Roof Detail
Section View



Drawings should be considered indicative only. If in doubt please ask.

DIMENSIONS & WEIGHT

Panel Thickness (mm)	100	125	150	175	200
Internal OSB/3 Thickness (mm)	11	11	11	11	11
Foam Core Thickness (mm)	78	103	128	153	178
External OSB/3 Thickness (mm)	11	11	11	11	11
Weight (kg/m2)	17.42	18.57	19.71	20.85	21.99

PRODUCT TOLERANCES

Length	–3mm	+3mm
Width	–3mm	+3mm
Thickness	–3mm	+3mm
Squareness	maximum 2mm variance	

PANEL CORE

A closed cell Polyurethane rigid foam system with zero Ozone Depletion Potential (ODP) supplied by BASF Polyurethanes Europe.
The PUR core is CFC and HCFC free providing a < 5 value for GWP, as specified by various regulatory bodies.
For further technical information, please contact Hemsec SIPs.

PANEL FACINGS

The Residential SIPs panel comprises of BBA Approved 11mm Internal and External Oriented Strand Board (OSB) grade 3 facings. OSB/3 has a thermal conductivity value λ of 0.13 W/mK.
Manufactured to specification EN 13986 and EN 300:2006, OSB/3 comprises of strands of softwood bonded together using a formaldehyde free synthetic resin.
The OSB boards are responsibly sourced and comply to FSC and PEFC chain of custody requirements.
Further information and Certification can be obtained on request through Hemsec SIPs.

THERMAL PERFORMANCE

Panel Thickness (mm)	100	125	150	175	200
Thermal transmittance (U-Value) W/m^{2}K	0.34	0.26	0.20	0.17	0.15

Calculated using the method required by the Building Regulations Part L2 (England & Wales) and Building Standards Part J (Scotland). Also calculated in accordance with BS EN ISO 6946:1997 and BRE report (BR443:2006)

Foam Core Thickness (mm)	70 to 80	≥80 to <120	≥120
Declared Thermal Conductivity λ_D (W/mK)	0.030	0.029	0.028

FIRE

Panel Internal and External OSB and CPB facings have Class 3 surface spread of flame to BS476: Part 7:: 1987. When our SIPs are used as part of a through-wall build up they pass the requirements of BS476 Part 21 fire resistance of load bearing walls and have achieved up to 75 minutes fire rating. Non-Load bearing walls can achieve up to a 90 minute fire rating (BS476 Part 22:1987).