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Agrément Certificate

02/S029

Product Sheet 1 Issue 8

KINGSPAN STRUCTURAL INSULATED PANEL (SIP) SYSTEMS

KINGSPAN TEK BUILDING SYSTEM

This Agrément Certificate Product Sheet⁽¹⁾ relates to the Kingspan TEK Building System, loadbearing wall and roof panels comprising structural insulated panels (SIPs), for use above the damp-proof course (DPC) in domestic applications up to and including four storeys high (subject to national height restrictions) as the loadbearing inner leaf of an external cavity wall, or as part of separating walls, internal loadbearing walls or flat and pitched roofs.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review



KEY FACTORS ASSESSED

- Section 1. Mechanical resistance and stability
- Section 2. Safety in case of fire
- Section 3. Hygiene, health and the environment
- Section 4. Safety and accessibility in use
- Section 5. Protection against noise
- Section 6. Energy economy and heat retention
- Section 7. Sustainable use of natural resources
- Section 8. Durability

The BBA has awarded this Certificate to the company named above for the system described herein. This system has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Eighth issue: 23 January 2026

Originally certified on 17 December 2002

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

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SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that the Kingspan TEK Building System, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	A1	Loading
Comment:		The system can contribute to satisfying this Requirement. See section 1 of this Certificate.
Requirement:	A3	Disproportionate collapse
Comment:		The system can contribute satisfying this Requirement. See section 1 of this Certificate.
Requirement:	B3(1)(2)	Internal fire spread (structure)
Comment:	(3)(a)	The system can contribute to satisfying this Requirement. See section 2 of this Certificate.
Requirement:	B3(4)	Internal fire spread (structure)
Comment:		The system is restricted by this Requirement. See section 2 of this Certificate.
Requirement:	B4(1)	External fire spread
Comment:		The system is restricted by this Requirement. See section 2 of this Certificate.
Requirement:	C2(c)	Resistance to moisture
Comment:		The system can adequately limit the risk of surface condensation and contribute to minimising the risk of interstitial condensation. See section 3 of this Certificate.
Requirement:	E1	Protection against sound from other parts of the building and adjoining buildings
Comment:		When installed with suitable linings and flanking elements, separating walls incorporating the system can satisfy this Requirement. See section 5 of this Certificate.
Regulation:	E2(a)	Protection against sound within a dwelling-house etc
Comment:		When installed with suitable linings and flanking elements, separating walls incorporating the system can satisfy this Requirement. See section 5 of this Certificate.
Requirement:	L1(a)(i)	Conservation of fuel and power
Comment:		The system can contribute to satisfying this Requirement, although compensating measures may be required in Wales. See section 6 of this Certificate.
Regulation:	7(1)	Materials and workmanship
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	7(2)	Materials and workmanship
Comment:		The system is restricted by this regulation. See section 2 of this Certificate.

Regulation:	25B	Nearly zero-energy requirements for new buildings
Regulation:	26	CO₂ emission rates for new buildings
Regulation:	26A	Fabric energy efficiency rates (applicable to England only)
Regulation:	26A	Primary energy rates for new buildings (applicable to Wales only)
Regulation:	26B	Fabric performance values for new dwellings (applicable to Wales only)
Regulation:	26C	Target primary energy rates for new buildings (applicable to England only)
Regulation:	26C	Minimum energy efficiency rating (applicable to Wales only)
Comment:		The system can contribute to satisfying these Regulations, although compensating fabric and/or service measures may be required. See sections 6 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)	Fitness and durability of materials and workmanship
Comment:		The system can contribute to a construction satisfying this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	9	Building standards – construction
Standard:	1.1(a)	Structure
Comment:		The system can contribute to satisfying this Regulation, with reference to clauses 1.1.1 ⁽¹⁾ and 1.1.2 ⁽¹⁾ . See section 1 of this Certificate.
Standard:	1.2	Disproportionate collapse
Comment:		The system can contribute to satisfying this Standard, with reference to clause 1.2.1 ⁽¹⁾ . See section 1 of this Certificate.
Standard:	2.2	Separation
Comment:		Walls incorporating the system can contribute to satisfying this Standard, with reference to clauses 2.2.1 ⁽¹⁾ , 2.2.2 ⁽¹⁾ , 2.2.4 ⁽¹⁾ , 2.2.5 ⁽¹⁾ and 2.2.6 ⁽¹⁾ . See section 2 of this Certificate.
Standard:	2.3	Structural protection
Comment:		Walls incorporating the system can contribute to satisfying this Standard, with reference to clauses 2.3.1 ⁽¹⁾ , 2.3.2 ⁽¹⁾ , 2.3.3 ⁽¹⁾ and 2.3.5 ⁽¹⁾ . See section 2 of this Certificate.
Standard:	2.4	Cavities
Comment:		Walls incorporating the system are restricted by this Standard, with reference to clause 2.4.2 ⁽¹⁾ . See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		Walls incorporating the system can contribute to satisfying this Standard, with reference to clauses 2.6.1 ⁽¹⁾ and 2.6.6 ⁽¹⁾ and are restricted in some cases with reference to clauses 2.6.4 ⁽¹⁾ and 2.6.5 ⁽¹⁾ . See section 2 of this Certificate.
Standard:	2.7	External wall cladding
Comment:		The panels used as infill panels are restricted by this Standard in some cases, with reference to clause 2.7.1 ⁽¹⁾ . See section 2 of this Certificate.
Standard:	3.15	Condensation
Comment:		The system can adequately limit the risk of surface and interstitial condensation, with reference to clauses 3.15.1 ⁽¹⁾ to 3.15.4 ⁽¹⁾ of this Standard. See section 3 of this Certificate.
Standard:	5.1	Noise separation
Comment:		Separating walls with suitable linings and flanking elements can satisfy this Standard, with reference to clauses 5.1.1 ⁽¹⁾ , 5.1.2 ⁽¹⁾ and 5.1.4 ⁽¹⁾ . See section 5 of this Certificate.
Standard:	6.1(b)	Carbon dioxide emissions
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 6.1.2 ⁽¹⁾ and 6.1.6 ⁽¹⁾ . Compensating fabric and/or service measures may be required. See section 6 of this Certificate.

Standard:	6.2	Building insulation envelope
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 6.2.1 ⁽¹⁾ , 6.2.3 ⁽¹⁾ and 6.2.4 ⁽¹⁾ , although compensating fabric measures may be required. See section 6 of this Certificate.
Standard:	7.1(a)(b)	Statement of sustainability
Comment:		The system can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard. See section 6 of this Certificate.
Regulation:	12	Building standards - conversion
Comment:		All comments given for the system under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 ⁽¹⁾ and Schedule 6 ⁽¹⁾ .

(1) Technical Handbook (Domestic).



The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	23(a)(i)	Fitness of materials and workmanship
Comment:	(iii)(b)(i)	The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	29	Condensation
Comment:		The system can contribute to minimising the risk of interstitial condensation. See section 3 of this Certificate.
Regulation:	30	Stability
Comment:		The system can contribute to satisfying this Regulation. See section 1 of this Certificate.
Regulation:	31	Disproportionate collapse
Comment:		Wall panels can contribute to a construction satisfying this Regulation. See section 1 of this Certificate.
Regulation:	35(1)(2)	Internal fire spread - Structure
Comment:	(3)	The system can contribute to satisfying this Regulation. See section 2 of this Certificate.
Regulation:	35(4)	Internal fire spread - Structure
Comment:		The system is restricted by this Regulation. See section 2 of this Certificate.
Regulation:	36(a)	External fire spread
Comment:		The system is restricted by this Regulation. See section 2 of this Certificate.
Regulation:	39(a)(i)	Conservation measures
Comment:		The system can contribute to satisfying this Regulation. See section 6 of this Certificate.
Regulation:	40(2)	Target carbon dioxide emission rate
Comment:		The system can contribute to satisfying this Regulation. See section 6 of this Certificate.
Regulation:	49	Protection against sound from other parts of the building and from adjoining buildings
Comment:		When installed with suitable flanking elements, separating walls incorporating the system can satisfy this Regulation. See section 5 of this Certificate.
Regulation:	50(a)	Protection against sound within a dwelling or room for residential purposes
Comment:		A single-leaf, non-loadbearing partition incorporating the system, with suitable plasterboard linings, can satisfy this Regulation. See section 5 of this Certificate.

Additional Information

NHBC Standards 2026

In the opinion of the BBA, the Kingspan TEK Building System, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Part 6 *Superstructure (excluding roofs)*, Chapter 6.2 *External timber framed walls*, and Part 7 *Roofs*, Chapters 7.1 *Flat Roofs, Terraces and Balconies* and 7.2 *Pitched roofs*.

The opinion of the BBA does not amount to any endorsement or approval by NHBC and does not in any way guarantee that NHBC will approve such product / system as compliant with the NHBC Technical Requirements and Standards.

Fulfilment of Requirements

The BBA has judged the Kingspan TEK Building System to be satisfactory for use as described in this Certificate. The system has been assessed for use above the DPC in domestic applications up to and including four storeys high (subject to national height restrictions) as the load-bearing inner leaf of an external cavity wall, or as part of separating walls, internal loadbearing walls or flat and pitched roofs.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. The Kingspan TEK Building System consists of:

Nominally 142 ('Tek 142') or 172 mm ('Tek 172') thick overall:

- with two outer skins of 15 mm thick OSB/3 (oriented strand board type 3),
- separated by a core of 112 or 142 mm thick zero-rated ozone-depleting potential (ODP) rigid urethane insulation (PUR).

The panel mass is approximately 25 kg·m⁻² for both panel thicknesses. The panels are available in 200 to 1220 mm widths and up to 750 mm lengths, in the appropriate shapes and sizes for each project.

For each project, an inventory of components is manufactured from working drawings generated by the Certificate holder (or one of their appointed agents) in accordance with the client's approved design.

The system has the nominal characteristics given in Tables 1 and 2.

Table 1 Nominal characteristics of 142mm thick system components

Characteristic (unit)	Component		
	Edge timbers	Structural timber posts	Insulated splines
Geometry (mm)	Minimum 50 x 110	Minimum 100 x 110	—
Grade	C16	C24	—
Make up	—	—	See below ⁽¹⁾

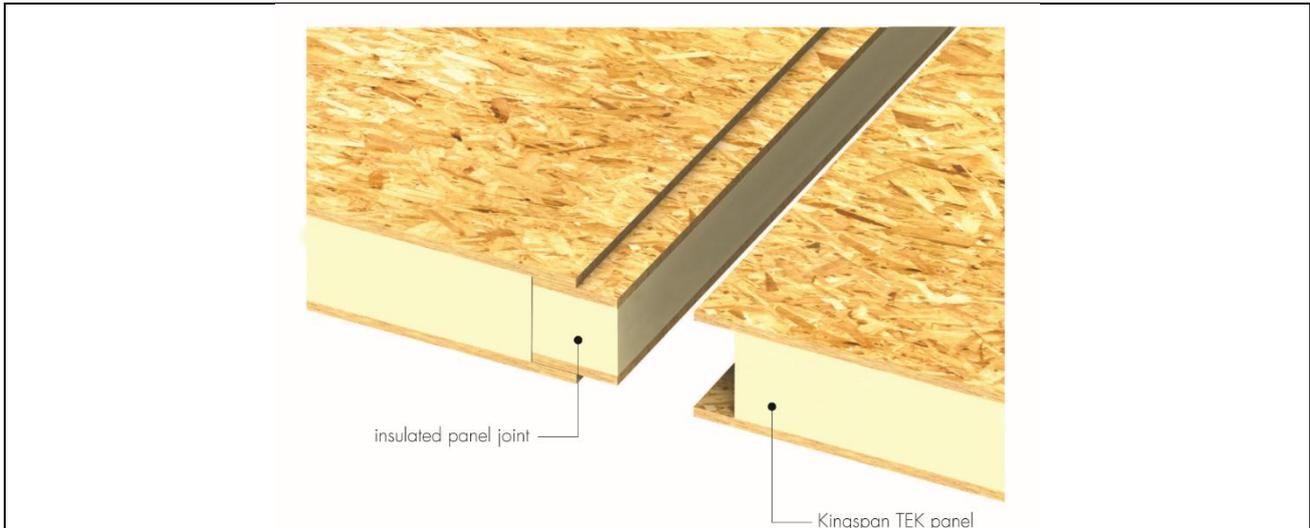
(1) The geometric build-up of the insulated splines is as follows: 100 mm (w) by 110 mm (d), comprising two OSB/3, 15 by 100 mm skins and rigid urethane insulation core (see Figure 1).

Table 2 Nominal characteristics of 172 mm thick system components

Characteristic (unit)	Component		
	Edge timbers	Structural timber posts	Insulated splines
Geometry (mm)	Minimum 38 x 140	Minimum 80 x 140	—
Grade	C16	C24	—
Make up	—	—	See below ⁽¹⁾

(1) The geometric build-up of the insulated splines is as follows: 80 mm (w) by 140 mm (d), comprising two OSB/3, 15 by 80 mm skins and rigid urethane insulation core (see Figure 1).

Figure 1 The cassette joint system



Ancillary Items

The Certificate holder recommends the following ancillary items for use with the system, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- other structural components such as engineered timber TJI joists, beams, structural steel — detailed and specified as necessary
- DPC — installed in accordance with BS EN 1996-2 : 2006, PD 6697 : 2019, BS 8000-3 : 2001 and BS 8215 : 1991, with a minimum 1.2 mm thickness and 1.5 kg·m⁻² weight
- levelling shims — high-density polyethylene (HDPE) (> 99% of density > 962 kg·m⁻³, available in 2 to 6 mm thicknesses
- sole plate grout — proprietary, injectable mortar grouting, to exceed the properties of a Class 1 mortar as defined in BS EN 1996-2 : 2006 and PD 6697 : 2019
- silicone — one-part transparent silicone of density > 1020 kg·m⁻³, permissible deformation > 25%, UV curing, used as a fungal-resistant and water-repellent coating (see Section 9 of this Certificate for silicone application)
- tape — used for joints 150 m x 48 mm in accordance with BS EN 13963 : 2014
- Gyproc Acoustic Sealant Caulk or similar — an acrylic sealant and adhesive used for sealing air gaps and joints to maintain acoustic performance in separating walls to BS EN 15651-1 : 2017. See Figure 6 of this Certificate
- expanding urethane — gun-grade polyurethane-based expanding one-part foam
- Compressible sealing foam
- FastenMaster Headlok Screws or equivalent — epoxy-coated carbon steel screws, 4.8 mm diameter by 73 to 254 mm long
- machine nails — galvanized/sherardized ring shank machine nails (in coils or strips) in accordance with BS EN 1995-1-1 : 2004, sizes 2.8 by 63 mm and 3.1 by 90 mm
- standard nails — as per BS EN 1995-1-1 : 2004
- joist hangers — as specified for the project. All fixings to be in accordance with the manufacturer's instructions
- dry lining battens — minimum 50 mm wide by 10 mm deep softwood battens, or vertical metal rails
- floor decking — 22 mm TG4 OSB/3 or 22 mm P5 TG4 particle board (protected). Size of boards to suit joist centres
- sole plates — treated C24 to BS EN 338 : 2016, 140 by 38 mm (minimum, nominal UK size 145 by 47 mm) for 142 mm thick panels and 172 by 40 mm (minimum) for 172 mm thick panels
- wall ties — Simpson Strong-Tie SWT-50 TEK wall-tie kits to BS EN 845-1 : 2013, using flange-head 4 by 30 mm stainless steel screws
- counter battens — treated softwood counter battens, minimum 50 mm wide by 25 mm deep
- tiling/slate battens — sizing as per BS 5534 : 2014
- vapour permeable underlay for roofs, breather membrane for walls — Kingspan Roof Tile Underlays (BBA Certificate 11/4870).

The system is intended for use on the following substrates:

- treated softwood(C24) sole plate with a 40 mm deep bottom plate
- structural supporting timber members
- concrete posts.

Figure 2 Wall and roof construction

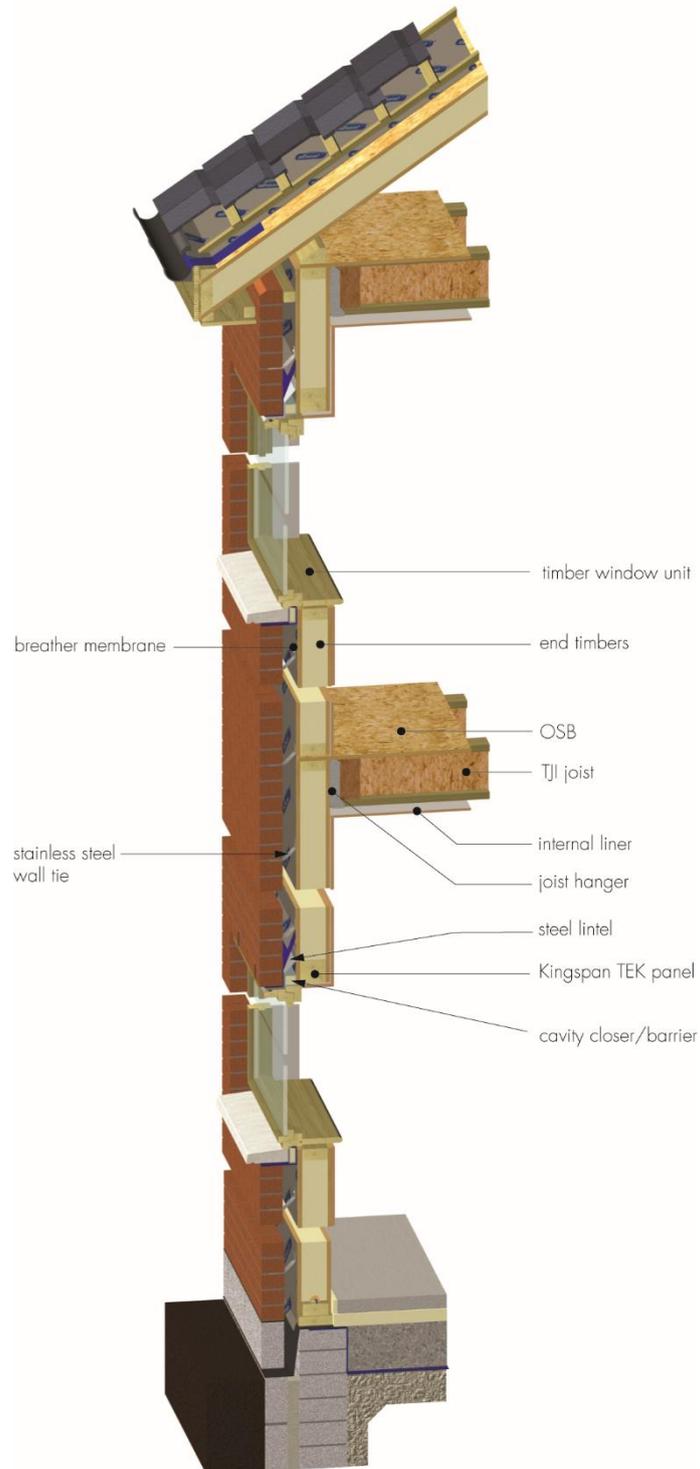
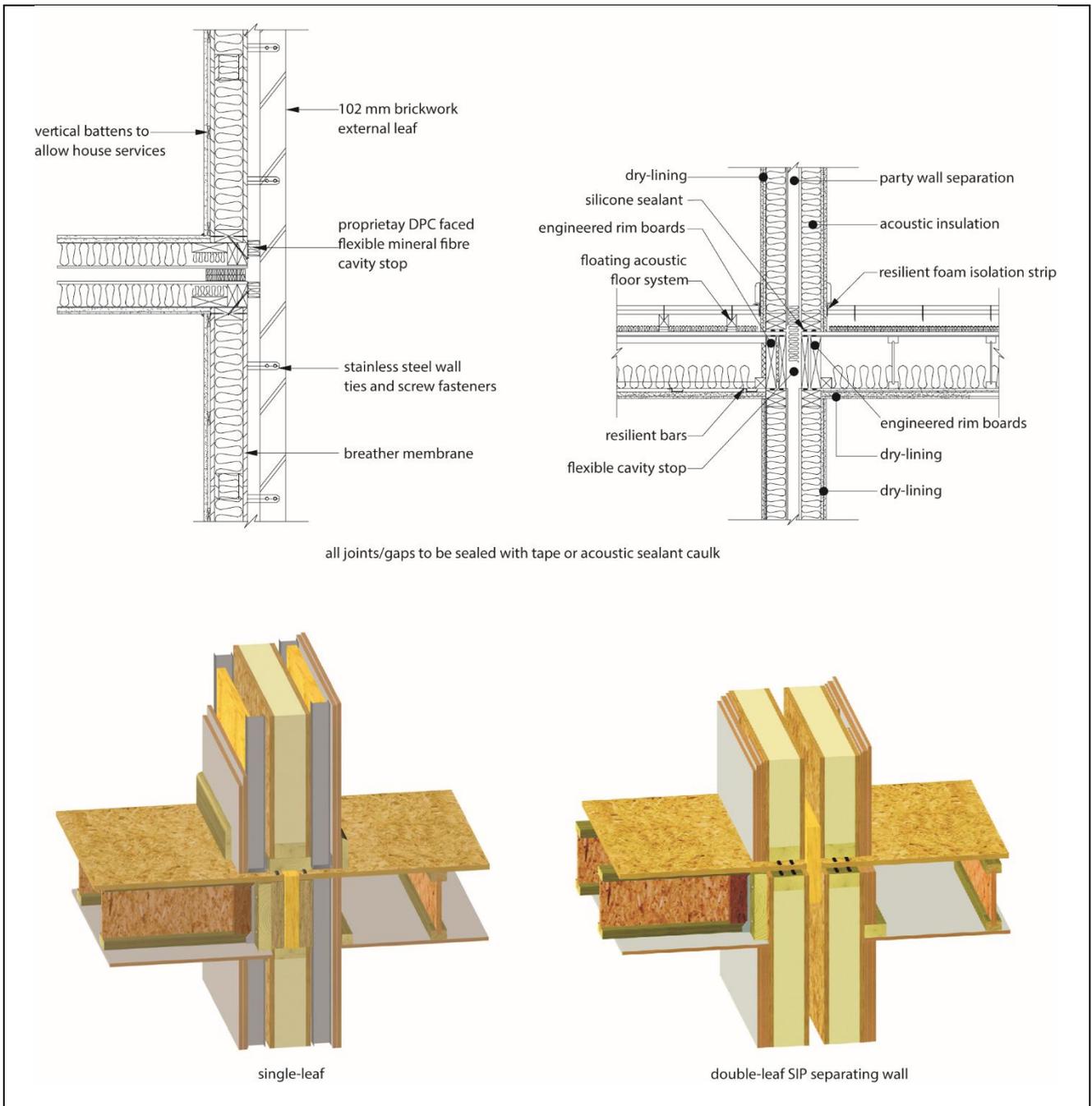


Figure 3 Separating wall details



Applications

The Kingspan TEK Building System panels are suitable for use as loadbearing partitions, separating walls, the inner leaf of external cavity walls, and pitched and flat roofs (with a minimum of 1.15° design slope), in dwellings up to and including four storeys high including a room in the roof (except where national height restrictions apply), subject to the provision of solid timber spline studs at ground level (see Figures 1 and 2 and Table 1). The panels may also be used as infill panels in multi-storey framed buildings subject to design constraints on height and the method of fixing to the structural frame. All fixings must be designed to allow movement within the structural frame due to expansion/contraction or differential movement. However, the use of the panels as structural flooring is outside the scope of this Certificate.

Product assessment – key factors

The system was assessed for the following key factors, and the outcome of the assessment is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Data were assessed for the following characteristics.

1.1 Strength and stability

The wall and roof panels will have adequate strength and stiffness to sustain the applied loading when used in accordance with the provisions of this Certificate. The limit state design values to be used when evaluating the design resistance of the panels in compliance with Eurocodes are given in Tables 3 and 4 of this Certificate.

Table 3 Structural properties – limit state design⁽¹⁾ – TEK 142

Strength (all values are per metre width of panel)		Duration of load				
		Permanent	Long	Medium	Short	Instantaneous
Bending strength ⁽²⁾ (M_{Rd})	kN·m	4.48	5.97	8.21	10.4	13.4
Shear strength ⁽²⁾ (V_{Rd})	kN·m	3.81	7.62	11.4	15.2	15.2
Bearing strength ⁽³⁾ (B) minimum 45 mm bearing	kN	3.66	7.32	11.0	14.6	14.6
Axial strength (N)						
wall height < 2400 mm	kN	38.5	50.8	57.9	64.7	78.1
wall height 2400 – 2700 mm	kN	33.4	44.4	57.9	64.7	78.1
wall height 2700 – 3000 mm	kN	29.0	38.8	57.9	64.7	78.1
wall height 3000 – 3500 mm	kN	23.3	31.4	47.6	64.7	78.1
wall height 3500 – 4000 mm	kN	18.9	25.7	39.3	64.7	78.1
wall height 4000 – 4800 mm	kN	14.0	19.2	29.6	50.4	62.6
Racking strength ⁽⁴⁾⁽⁵⁾⁽⁶⁾ (R) with $\phi 2.8 \times 63$ mm smooth nails						
75 mm nail centres	kN	—	—	—	8.89	10.9
100 mm nail centres	kN	—	—	—	7.42	9.07
150 mm nail centres	kN	—	—	—	5.58	6.82
Stiffness (all values are per metre width of panel)						
EI_{inst} for wind load checks	N·mm ²	4.60E+11				
EI_{perm} for long-term deflection	N·mm ²	$EI_{inst} / (1 + 1.87)^{(7)}$				
GA_{inst} for wind load checks	N	5.70E+05				
GA_{perm} for long-term deflection	N	$GA_{inst} / (1 + 6.45)^{(7)}$				

(1) The strength values in this Table are design values that should be compared to the worst loading case at the Ultimate Limit State (ULS).

(2) When checking a panel under combined loading (axial + bending), the formula $N_{Ed} / N_{Rd} + M_{Ed} / M_{Rd} < 1.0$ (where N_{Ed} and M_{Ed} are calculated from design loads, and N_{Rd} and M_{Rd} are taken from the values in the above Table). The deflection of the panel should also be checked to ensure it is within appropriate limits.

(3) The bearing strength (B) should be used where a panel spans continuously over a central support. The bearing strength at an end support should be resisted by including an edge timber in the panel at the support.

(4) Racking resistance is influenced by the spacing of fixing nails around the perimeter (minimum 50 mm, maximum 150 mm). The racking resistance for other nail spacing can be calculated, the Certificate holder's advice should be sought.

(5) The fixing spacing factor (k_s) is included in the racking resistance values, but the wall shape factor (k_d) and the load factor ($k_{i,q}$) must be applied to the strength values.

(6) The dimension of nails given for the racking resistance relates to machine-driven nails with a tensile strength of 600 N·mm⁻². The capacity of other fixings can be calculated in accordance with BS EN 1995-1-1 : 2004, Method B.

(7) Where 1.87 and 6.45 are deformation factors (k_{def}) for normal and shear deformations, respectively.

Table 4 Structural properties – limit state design⁽¹⁾ – TEK 172

Strength (all values are per metre width of panel)		Duration of load				
		Permanent	Long	Medium	Short	Instantaneous
Bending strength ⁽²⁾ ($R_{m,o,flat,d}$)	kN·m	5.53	5.97	8.21	10.4	13.4
Shear strength ⁽²⁾ ($R_{v,0,flat,d}$)	kN·m	4.71	9.42	14.1	18.8	18.8
Bearing strength ⁽³⁾ ($R_{c,90,flat,d}$) minimum 45 mm bearing	kN	3.66	7.32	11.0	14.6	14.6
Axial strength ($R_{c,0,flat,d}$)						
wall height <2400 mm	kN	43.4	51.2	57.9	64.7	78.1
wall height 2400 – 2700 mm	kN	43.4	51.2	57.9	64.7	78.1
wall height 2700 – 3000 mm	kN	40.0	51.2	57.9	64.7	78.1
wall height 3000 – 3500 mm	kN	32.7	43.8	57.9	64.7	78.1
wall height 3500 – 4000 mm	kN	27.0	36.4	55.2	64.7	78.1
wall height 4000 – 4800 mm	kN	20.4	27.7	42.4	64.7	78.1
Racking strength ⁽⁴⁾⁽⁵⁾⁽⁶⁾ ($R_{v,0,edge,d}$) with $\varnothing 2.8 \times 63$ mm smooth nails						
75 mm nail centres	kN	—	—	—	8.89	10.9
100 mm nail centres	kN	—	—	—	7.42	9.07
150 mm nail centres	kN	—	—	—	5.58	6.82
Stiffness (all values are per metre width of panel)						
EI_{inst} for wind load checks	N·mm ²	7.02 E+11				
EI_{perm} for long-term deflection	N·mm ²	$EI_{inst} / (1 + 1.87)^{(7)}$				
GA_{inst} for wind load checks	N	6.89E+05				
GA_{perm} for long-term deflection	N	$GA_{inst} / (1 + 6.45)^{(7)}$				

(1) The strength values in this Table are design values that should be compared to the worst loading case at the ULS.

(2) When checking a panel under combined loading (axial + bending), the formula $N_{Ed} / N_{Rd} + M_{Ed} / M_{Rd} < 1.0$ (where N_{Ed} and M_{Ed} are calculated from design loads and N_{Rd} and M_{Rd} are taken from the values in the above Table). The deflection of the panel should also be checked to ensure it is within appropriate limits.

(3) The bearing strength (B) should be used where a panel spans continuously over a central support. The bearing strength at an end support should be resisted by including an edge timber in the panel at the support.

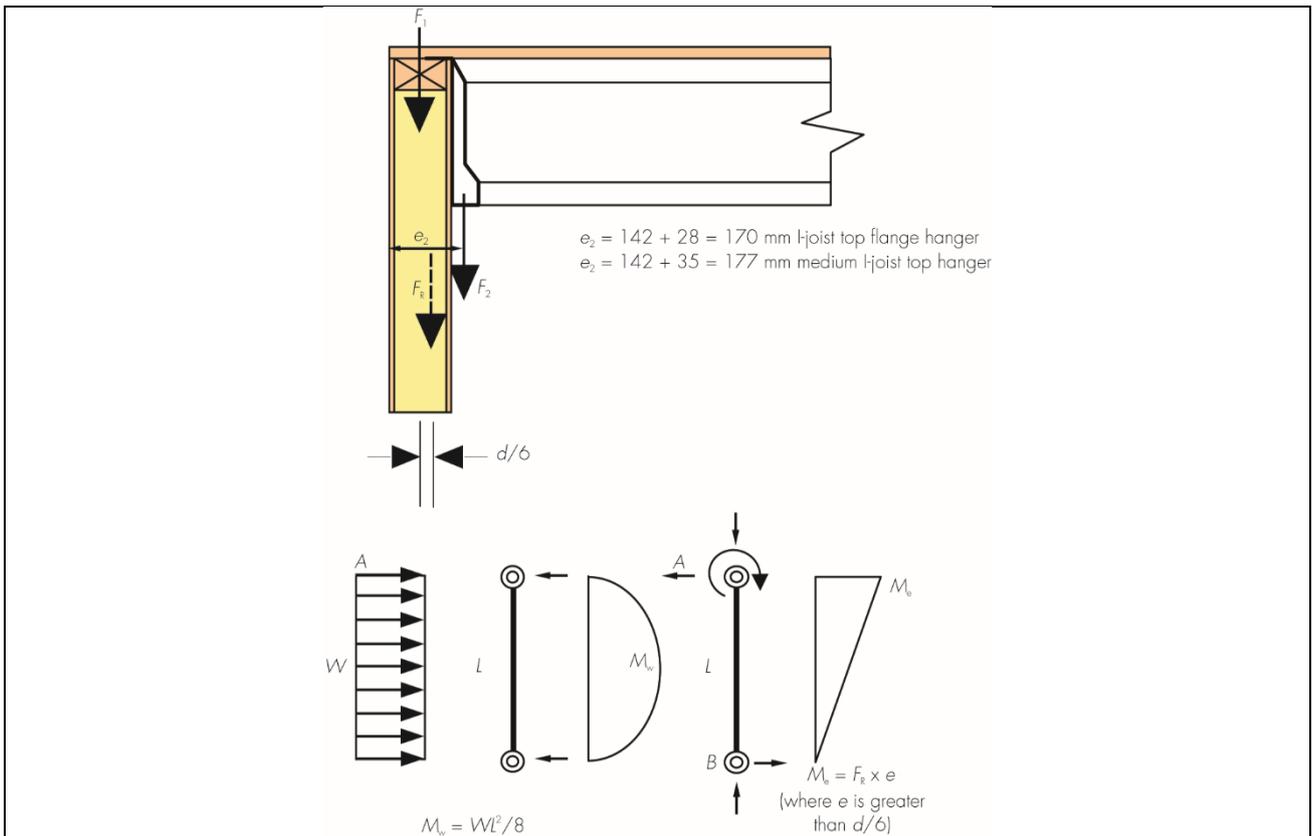
(4) Racking resistance is influenced by the spacing of fixing nails around the perimeter (minimum 50 mm, maximum 150 mm). The racking resistance for other nail spacing can be calculated – the Certificate holder's advice should be sought.

(5) The fixing spacing factor (k_s) is included in the racking resistance values, but the wall shape factor (k_d) and the load factor ($k_{i,q}$) must be applied to the strength values.

(6) The dimension of nails given for the racking resistance relates to machine-driven nails with tensile strength of 600 N·mm⁻². The capacity of other fixings can be calculated in accordance with BS EN 1995-1-1 : 2004, Method B.

(7) Where 1.87 and 6.45 are deformation factors (k_{def}) for normal and shear deformations, respectively.

Figure 4 Basic panel design criteria⁽¹⁾



(1) These calculations assess the performance of the TEK wall panel only. Ancillary timbers and posts are assessed separately and may be used to enhance the overall performance of the panel.

Figure 5 External wall window detail including lintel

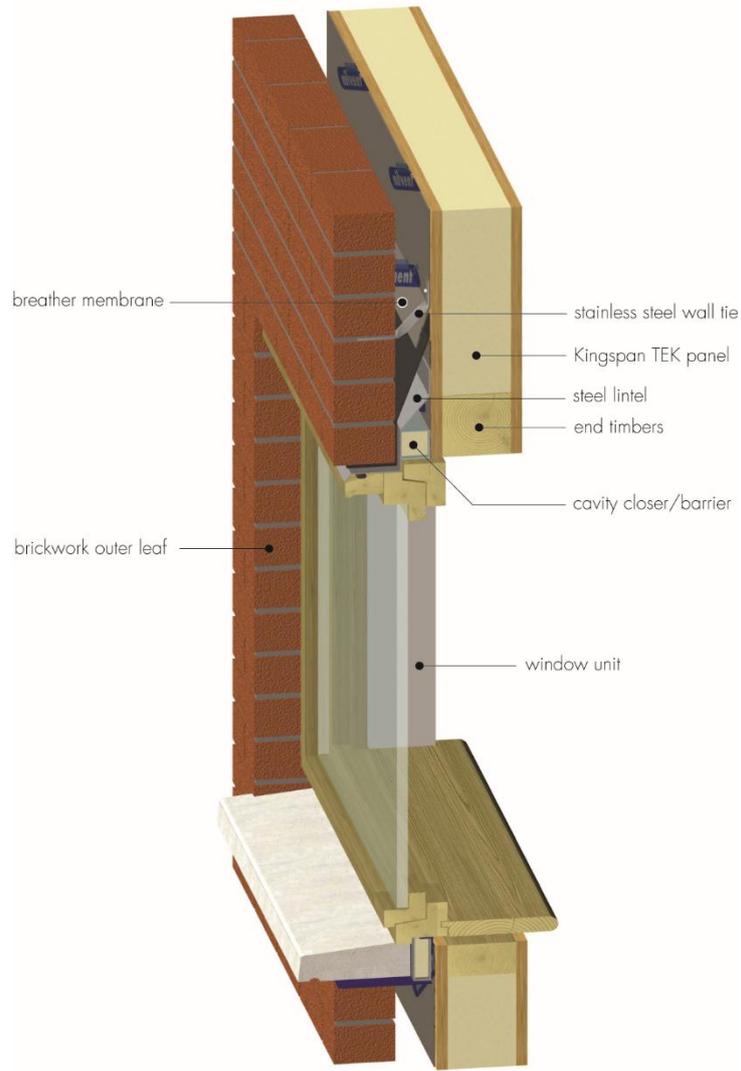
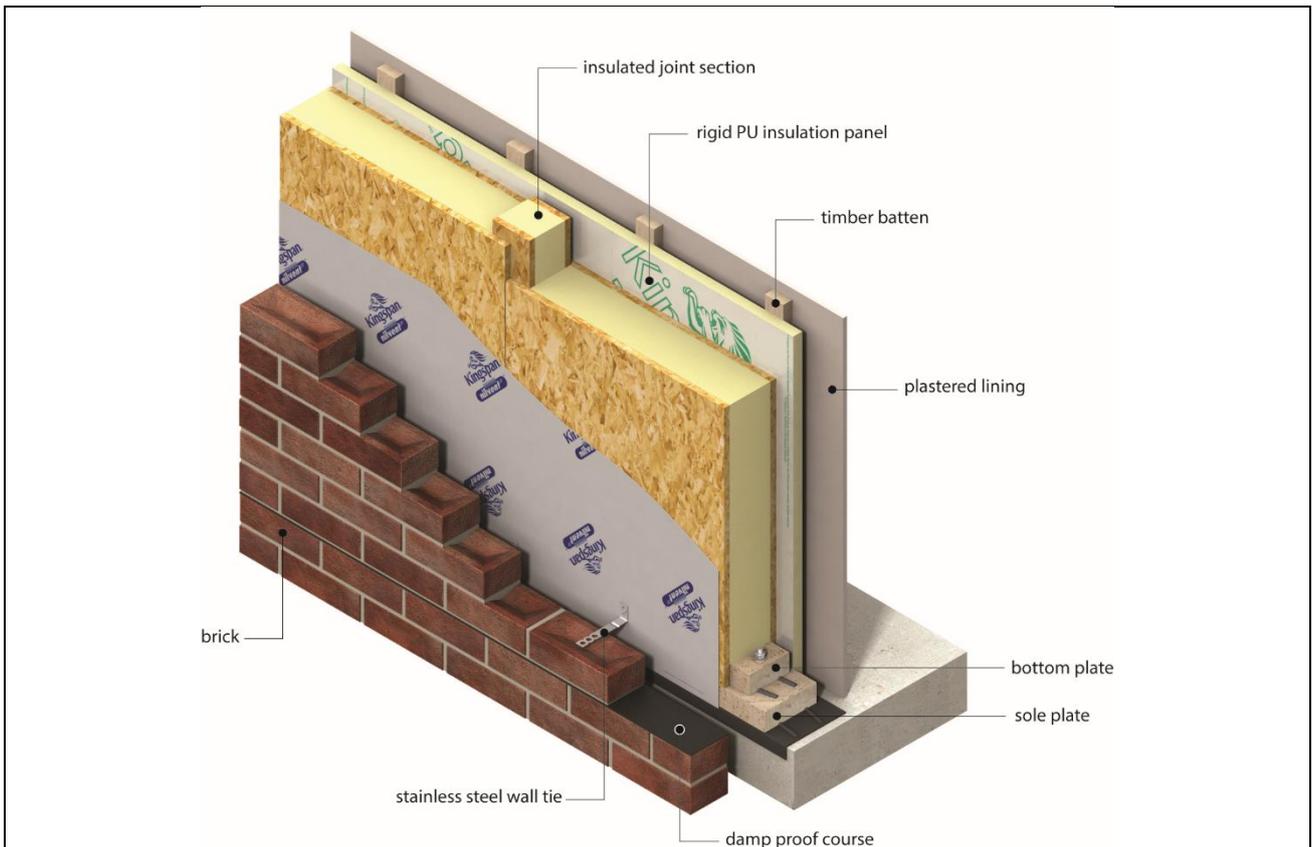


Figure 6 External wall window detail including lintel



2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The Certificate holder has not declared a reaction to fire classification for the system to BS EN 13501-1 : 2018.

2.1.2 On the basis of the data assessed, the system will be restricted in use under the documents supporting the national Building Regulations in some cases.

2.1.3 In England, the system must not be used in external walls of buildings with a storey 11 m or more in height, or as infill panels in buildings with a storey 18 m or more in height.

2.1.4 In Scotland, the system must not be used within 1 m of a relevant boundary, unless the external wall cladding is constructed from products that achieve reaction to fire classification A1 or A2, and requirements for fire resistance and unprotected areas are met.

2.1.5 In Wales and Northern Ireland, the system must not be used as infill panels in buildings with a storey 18 m or more in height.

2.2 Resistance to fire

2.2.1 The panels achieved the periods of fire resistance given in Table 5.

Table 5 Resistance to fire classification to BS EN 13501-2 : 2016

Product Assessed	Assessment method / Report reference	Construction	Loading (kN)	Result
TEK Composite Wall Panel	BS EN 1365-1 : 2012 / Efectis UK/Ireland Classification Report EUI-19-B-000198 ⁽¹⁾	3000 x 3000 x 179.5 mm (w x h x t) wall consisting of 12.5 mm thick Knauf plasterboard Type A fixed over 38 mm wide x 25 mm thick C16 soft wood grade battens fixed to the exposed face of the 142 mm TEK panel	38.3	REI30
	BS EN 1365-1 : 2012 / WF Classification Report no. 370193 Issue 3 ⁽¹⁾	3010 x 2400 x 182 mm (w x h x t) wall consisting of 15 mm gypsum Firecheck board fixed over 50mm wide x 25 mm thick wide softwood battens fixed to the exposed face of the 142 mm TEK panel	38.3	REI60

(1) The results of the fire test are directly applicable to similar constructions incorporating any of the below changes, where the construction continues to comply with the appropriate design code for its stiffness and stability:

- the height may be decreased
- the thickness of the wall may be increased
- the thickness of component materials may be increased
- the linear dimensions of boards or panels may be decreased, apart from their thickness
- the number of fixings used to attach the panels to supporting constructions may be increased and the distance between fixings may be reduced
- the load may be decreased.

2.2.2 On the basis of the data assessed, the constructions in Table 5 can contribute to satisfying requirements of the national Building Regulations. For constructions other than those in Table 5, the fire resistance must be confirmed by a suitably experienced and competent individual, or by a test from a suitably accredited laboratory.

2.2.3 The minimum proximity to a relevant boundary will depend mainly on the performance of the external weather cladding selected for use with the system.

2.2.4 Designers must ensure that junctions between elements maintain the required period of fire resistance.

2.3 Designers must refer to the relevant national Building Regulations and supporting documents for detailed conditions of use, particularly in respect of requirements for fire resistance, cavity barriers, service penetrations and combustibility limitations for other materials and components used in the overall element construction.

3 Hygiene, health and the environment

3.1 Condensation

Surface condensation

3.1.1 The risk of surface condensation under normal domestic use is acceptable for elements, junctions and openings in accordance with section 6.1.1.2.

Interstitial condensation

3.1.2 Elements will adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2011 (Annexes D, F, G and H), and for flat roofs, BS 6229 : 2018, using the following water vapour diffusion factors (μ):

- 50 OSB warm side
- 60 PUR foam core
- 30 OSB cold side.

Example calculations for the constructions in Table 6 of this Certificate for humidity Class 4 (high occupancy dwellings) indicate that any interstitial condensation forming will dissipate.

3.1.3 For flat roof build-ups, a separate air and vapour control layer (AVCL) on the warm side and a cross-ventilated cavity on the cold side of the panel/breather membrane are an essential part of the construction.

3.1.4 In roofs, a vapour permeable membrane with a maximum vapour resistance of $0.25 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}$ should be used; for walls, a breather membrane with a maximum vapour resistance of $0.6 \text{ MN}\cdot\text{s}\cdot\text{g}^{-1}$ should be used.

3.1.5 The risk of interstitial condensation in both the external walling and roofing is greatest when the building is drying out after construction. Guidance on preventing condensation is given in BRE Digest 369 and BRE Report BR 262 : 2002.

3.1.6 Weathertightness

3.1.6.1 When the system is used to form the inner leaf of an external cavity wall, the outer masonry leaf must be designed and constructed in accordance with BS EN 1996-1-1 : 2005, BS EN 1996-2 : 2006 and BS EN 1996-3 : 2006 and their UK National Annexes, and PD 6697 : 2019, and must incorporate DPCs and cavity trays. A breather membrane is required with this type of construction.

3.1.6.2 When used with other outer leaf construction, the final weather resistance of the building is dependent upon the efficient positioning and sealing of all joints. The guidance given in BRE Report BR 262 : 2002, Section 3, must be followed with regard to rain penetration; the designer must select a construction appropriate to the local wind-driven rain index, paying due regard to the design detailing, workmanship and materials to be used.

3.1.6.3 Roofing should be detailed in accordance with BS 5534 : 2014 to ensure moisture is prevented from coming into contact with the panels.

3.1.6.4 The minimum cavity widths between the wall panel outer face and the back of cladding/external finishes must be in accordance with the requirements of *NHBC Standards 2026*.

3.2 Airtightness

3.2.1 The panels can contribute to achieving adequate resistance to unwanted air infiltration provided there is effective sealing around junctions.

3.2.2 A proportion of completed buildings in a development is subject to pre-completion airtightness testing. Exceptions for small developments can be found in the documents supporting the national Building Regulations.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Data were assessed for the following characteristics.

5.1 Resistance to airborne sound

5.1.1 Separating walls may be in the form of single- or double-party walls and are subject to pre-completion testing.

5.1.2 Wall panels may be used in combination with Robust Details Ltd timber separating walls E-WT-1 and E-WT-2 (see Robust Details Handbook, Appendix A2). Reference should also be made to the Certificate holder's Standard Details.

5.1.3 Good working practices should be adopted for sealing all joints with caulk or tape. Double or treble layers of plasterboard should be staggered. Relevant practices detailed within the relevant regulatory guidance must be adopted.

5.1.4 It is essential that care is taken in the design and during installation to avoid direct paths for airborne sound transmission and to minimise paths for flanking sound transmission.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal performance

6.1.1 Calculations of thermal transmittance (U value) should be carried out in accordance with BS EN ISO 6946 : 2017 and BRE Report BR 443 : 2006, using the thermal conductivities ($W \cdot m^{-1} \cdot K^{-1}$) below, or the panel R-values in Table 4 of this Certificate:

PUR insulation	0.024 ⁽¹⁾
OSB	0.13
Solid timber	0.12.

(1) λ_D .

Table 6 Example panel thermal resistance (R) values ($m^2 \cdot K \cdot W^{-1}$)

Element	Wall		Roof	
Panel thickness (mm)	142	172	142	172
Solid timber bridging fraction	4%		1%	
Tek Panel R value ($m^2 \cdot K \cdot W^{-1}$) ⁽¹⁾	4.237	5.317	4.584	5.788

(1) In accordance with section 7 'SIPS' of BRE Report BR 443 : 2006 and additionally including cassette spline (see Figure 2 of this Certificate) bridging fractions of 2.6% for walls and 5.6% for roofs. These panel R values may be used in combined U value calculations when the stated solid timber and cassette spline bridging fractions are not exceeded.

6.1.1.1 The U value of a complete element will depend on the selected panel thickness, the amount of timber bridging and the internal and external finishes. Calculated U values for example constructions are given in Table 5.

Table 7 Example element thermal transmittance (U) values ($W \cdot m^{-2} \cdot K^{-1}$)

Element ⁽¹⁾	Wall ⁽²⁾		Roof ⁽³⁾	
Panel thickness (mm)	142	172	142	172
Element U value ($W \cdot m^{-2} \cdot K^{-1}$)	0.20	0.16	0.20	0.16

(1) Includes a 25 mm services cavity (11.8% timber battens at $0.13 W \cdot m^{-1} \cdot K^{-1}$) and 15 mm plasterboard $\lambda = 0.25 W \cdot m^{-1} \cdot K^{-1}$.

(2) Includes 102.5 mm brickwork, 50 mm vented cavity, breather membrane, TEK Panel with 4% solid timber bridging and 2.6% cassette spline bridging and the internal finish in note (1), above.

(3) Includes slates/tiles, well-ventilated air space, LR roof tile underlay, TEK Panel with 1% solid timber bridging and 5.6% cassette spline bridging and the internal finish in note (1), above.

6.1.1.2 The system can contribute to maintaining continuity of thermal insulation around openings and between panels. Care must be taken in the overall design and construction of junctions with other elements to minimise thermal bridges and air infiltration. Detailed guidance can be found in the documents supporting the national Building Regulations.

7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1.1 The potential mechanisms for degradation and the known performance characteristics of the materials in the system were assessed.

8.1.2 The system will have comparable durability to that of OSB/3 to BS EN 300 : 2006. Therefore, provided the installation remains weathertight and damp-proof, a service life in excess of 60 years may be expected.

8.1.3 Timber used in areas that could be at risk, eg sole plates, should be preservative treated in accordance with the recommendations given in BS 8417 : 2011.

8.2 Service life

Under normal service conditions, the product will have a life in excess of 60 years, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 Structural calculations for design of the wall and roof panels must be carried out by a suitably experienced and competent individual such as a chartered structural engineer, who should contact the Certificate holder for full design guidance. All production drawings should be carried out by the Certificate holder, or one of their approved designers in accordance with the Standard Details and Design Manuals for the system (the latest versions of which can be requested from the Certificate holder).

9.1.3 When panels are used to construct the inner leaf of an external cavity wall, the outer masonry leaf and all masonry below the DPC must be designed and constructed in accordance with BS EN 1996-1-1 : 2005, BS EN 1996-1-2 : 2005 and BS EN 1996-2 : 2006, and their UK National Annexes, and PD 6697 : 2019. When the panels are used in a roof, the roof tiles and slates must be applied in accordance with BS 5534 : 2014. The external wall design detail with the TEK wall panel to be included as the inner leaf, is shown in Figure 6 of this Certificate.

9.1.4 Foundations (outside the scope of this Certificate) must be approved for use by the Certificate holder's technical staff and should be suitably level and square to accept the system.

9.1.5 When using the panels, building designers must take account of the long-term creep effects of permanent loading and cracking to internal finishes and the shear deformation. Due consideration must also be given to any fire-resistance restrictions (see section 2).

9.1.6 The strength of all connection details which tie walls to other structural elements (such as walls, floors, roofs and solid timber splines) must be evaluated and provide adequate stability and robustness for the overall building design (see Figure 4). The specification and design for these items must be determined by the suitably experienced and competent structural engineer responsible for the overall stability of the building. Guidance on the design of connection details may be obtained from the Certificate holder.

9.1.7 Lintels and framing around openings form an integral part of the loadbearing wall panels (see Figure 5). The sizing of lintels should be determined by the design engineer responsible for the design. The formation of openings for windows and doors in panels should only be carried out under approved factory conditions, or alternatively on site, by using individual pre-engineered panels. The structural design of any buildings must take account of the reduction in loadbearing capacity of the panels and the overall stability of the building due to the number and location of openings. Small service openings (such as for pipework for flues) may only be made through the panels on site when agreed by the Certificate holder.

9.1.8 As part of the structural design, consideration should be given to the support of eccentric loads imparted by central heating systems or kitchen appliances.

9.1.9 The structure incorporating the system must be designed by a suitably experienced and competent engineer, to satisfy the requirements of disproportionate collapse in the national Building Regulations and BS EN 1991-1-7 : 2006 (Consequence Class 1) and its UK National Annex.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. Additional guidance is provided in Annex A of this Certificate.

9.2.3 Erection of the Kingspan TEK Building System must comply with the details given in the Certificate holder's construction manual, and the provisions of this Certificate.

9.2.4 When used in loadbearing applications, the main contractor must ensure that the accuracy of the foundation is in accordance with the Certificate holder's instructions. In particular, the following details must be within the tolerance of ± 5 mm:

- level of the foundation or other bearing support
- overall width and length of the building footprint
- diagonals used for checking the overall squareness of the building⁽¹⁾.

(1) Adjustment may be possible through the sole plates.

9.2.5 When using the SIP as an infill panel, the main contractor must ensure that the accuracy of the structural frame is in accordance with the Certificate holder's acceptable tolerances:

- panels to be held in place with proprietary brackets to the structural engineer's specification
- a 5 mm gap should be left at the head of the infill panel to allow for expansion/differential movement. The gap should be filled with an expanding polyurethane foam or proprietary compressible foam.

9.2.6 Guidance on the procedures for installing the infill panels is limited due to the variations in the structural frame construction and detailing. Erection methods for lifting the non-load bearing wall panels into place, specification and design of brackets, and fixings and tolerances will therefore need to be determined by the project design engineer for each structure in which the infill wall panels are used. Further guidance can be obtained from the Certificate holder (see Figure 9 and section 9.2.13).

9.2.7 Procedure (loadbearing construction)

Foundation construction

9.2.7.1 A suitable DPC must be laid on top of the foundation, with 2 beads of silicone sealant applied to the top surface.

9.2.7.2 A 40 mm deep, treated softwood (C24) sole plate is combined with a 40 mm deep bottom plate, positioned over the DPC and fixed to the foundation using fixings approved by the Certificate holder and as per the chartered structural engineer's requirements. Tolerances for sole plates can be adjusted as per *Kingspan TEK Technical Bulletin No 5* or the Certificate holder's recommendations. Proprietary injectable sole plate grout is used to seal against air infiltration.

Ground-floor construction

9.2.8 A bead of expanding urethane sealant is run along the top of the sole plate/bottom plate or in the route of the panel(s). Starting at one corner, the first panel is positioned correctly on the combination sole plate and fixed to the bottom plate section with nails/screws (as approved by the Certificate holder) through the OSB inner and outer skins. Any building grade PU foaming adhesive is suitable for this application. This forms the standard basis for connecting panel-to-panel runs, panel/intermediate floor joints or timber-to-timber at corner junctions. Panels are temporarily braced to maintain stability. Beads of adhesive are applied to the bottom and vertical recesses of subsequent panels and fitted together, plumbed and secured with nails.

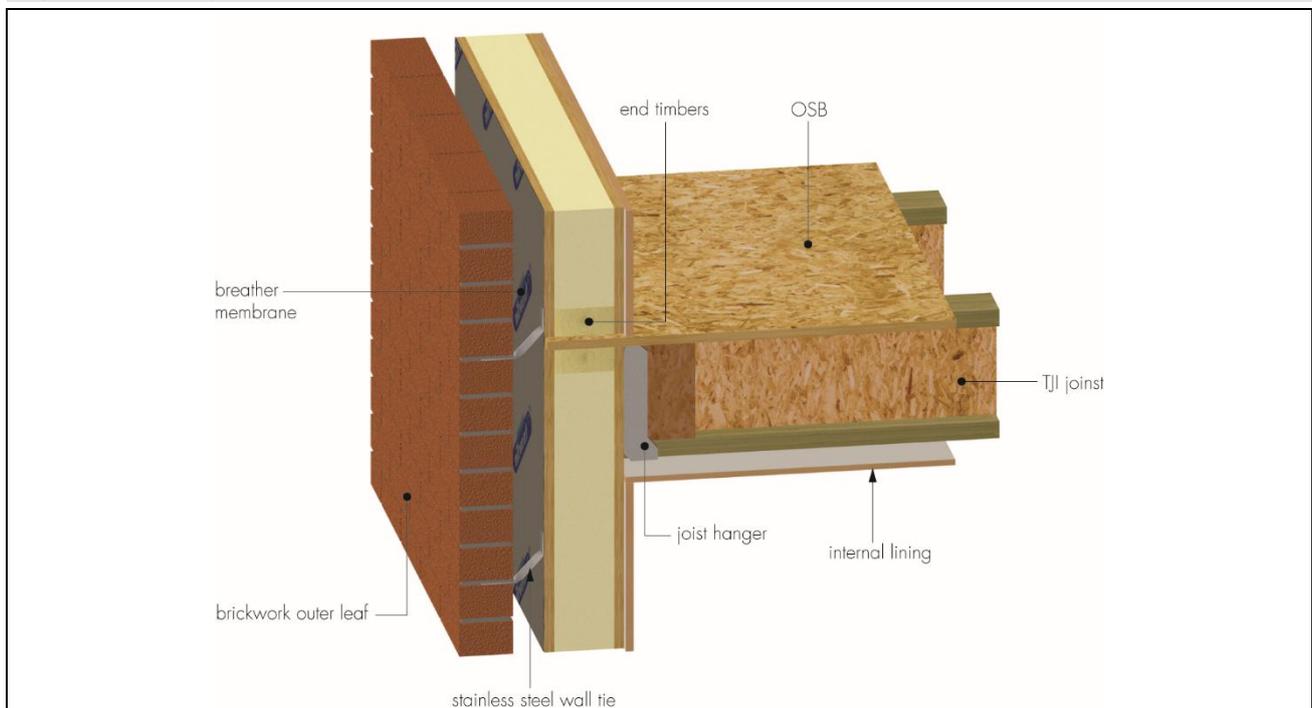
Internal wall construction

9.2.9 Wall panels are generally assembled horizontally, using a cassette joint, which is also sealed using expanding urethane sealant. Joints of the panel are tightened. Timber lintels, where required, are fixed into position over openings. A continuous timber head plate is fitted into the route at the top of the panels. Generally, all timber to rigid urethane core connections are sealed using expanding urethane sealant. All timber-to-timber connections are sealed using two beads of silicone sealant.

Internal floor construction

9.2.10 Engineered or traditional timber floor joists can be supported on the panel by either adopting a rim board detail or securing with joist hangers (see Figure 7). OSB/3 (22 mm thick) or P5 particle board floor decking is fixed over the engineered joist and head plate/rim board as appropriate. The system is protected externally using a vapour permeable membrane (see section 3.1.4). A sole plate or bottom plate (as per design requirements) is seated on silicone sealant and attached through the floor decking into the head plate/rim board. The process continues in the same manner as for the ground-floor construction.

Figure 7 Internal floor detail

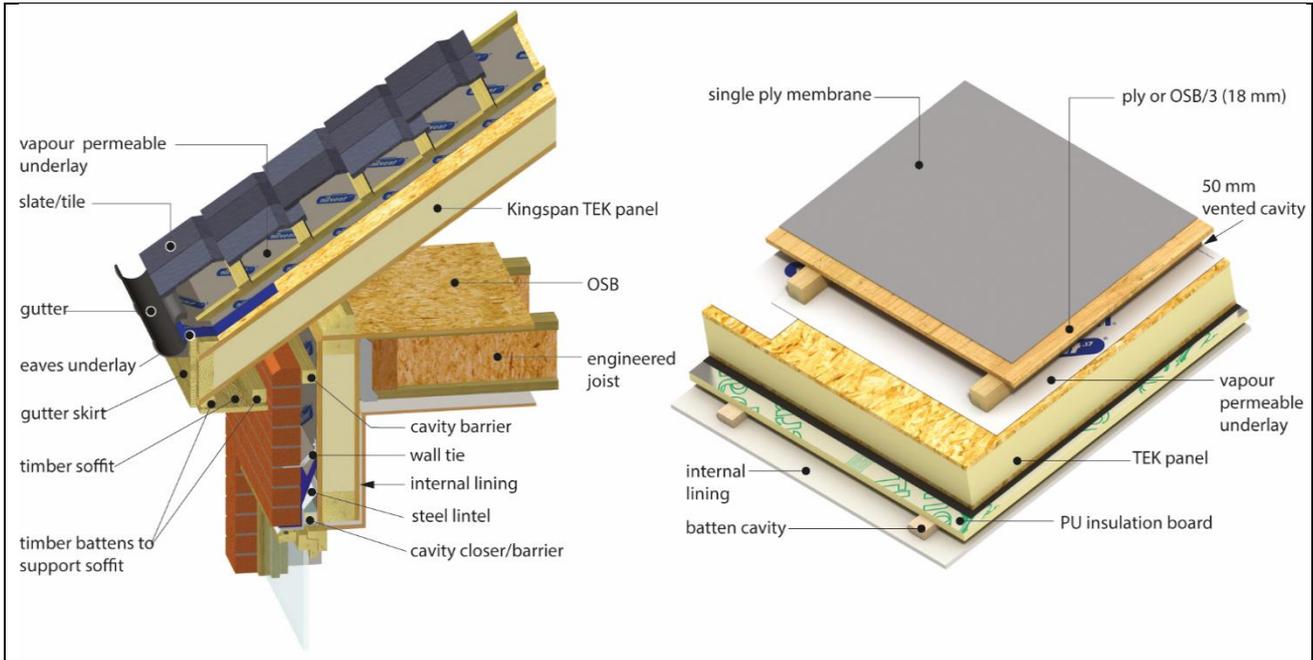


Roof construction

9.2.11 The supporting walls are made fully rigid by nail/screw fixings as approved by the Certificate holder, and intermediate/ridge beams/purlins in accordance with the design requirements, which are incorporated within preformed pockets in the wall panel. A wall plate is fixed onto the top of the head plate, the top of which is angled to suit the pitch of the roof.

9.2.12 Roof panels are positioned via mechanical handling, working from one gable wall to the other. Panels are joined (as for the wall construction) and fixed through to the structural supporting timber members using FastenMaster Headlok screws to the design engineer's requirements. The roof panel is overlaid with a vapour permeable membrane (see section 3.1.4). Treated softwood counter battens (minimum 25 mm deep by 50 mm wide) are fixed through to the roof panel using stainless steel screws as approved by the Certificate holder and at centres to the chartered engineer's design requirements. A variety of roof finishes (see Ancillary Items) can be adopted, subject to the Certificate holder's approval (see Figure 8).

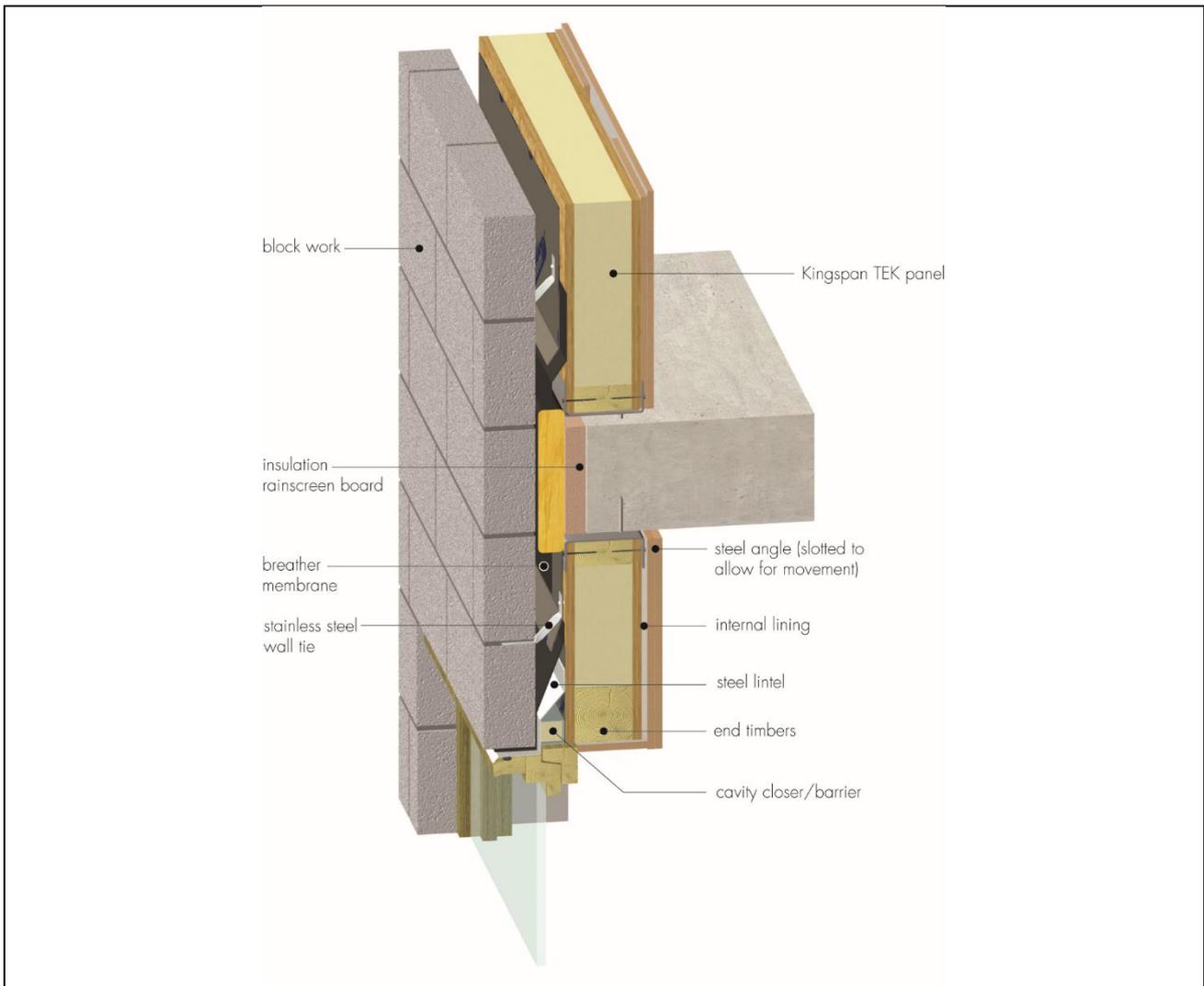
Figure 8 Typical roof detail, with and without membrane application



Infill panel application

9.2.13 The infill panels are prepared in the same way as for the wall panels. The panels can be fixed inside the structural frame of a building, as an infill panel between structural load-bearing elements (eg concrete posts). Typically, the panel is secured to the structural frame using dead bolt fixings. At floor level, the dead bolts are fixed through the panels to a continuous steel angle bracket; at ceiling level, they are fixed through the panels to angled cleats with slotted fixing connections, to allow for differential movement. A high-performance insulation should be fixed to the external face of the floor slab to reduce thermal bridging through the structural frame of the building (see Figure 9).

Figure 9 Infill panel



9.3 Workmanship

Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, installation of the system must be carried out by installers who have been trained and approved by the Certificate holder.

9.4 Maintenance and repair

Although maintenance is not envisaged for the system, regular checks should be carried out on the finishes to ensure that any damage is detected and repaired as soon as possible.

10 **Manufacture**

10.1 The production processes for the system have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate. An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

10.3 Kingspan TEK SIPs consist of a high-performance fibre-free rigid PUR core adhesively bonded to 2 x 15 mm grade 3 OSB during manufacture. The panels are cured and then cut to the desired length by a computer-controlled machine cutter, to agreed specifications or in accordance with British Standards and this Certificate. Each panel is marked with the production date and time, panel dimensions and process order number, along with the BBA logo and the number of this Certificate. Quality checks are made during the manufacturing process and on the finished components. They are delivered on site as a complete panel.

11 Delivery and site handling

11.1 The Certificate holder stated that the system components are delivered to site in shrink-wrap with edge protectors and banded packaging.

11.2 Delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The panels are delivered in shrink-wrap, with edge protectors and banded packaging used for initial transit and temporary protection. They should be stored flat, no more than 16 panels high, over suitable stillage to a slight fall to allow rain run-off. Bearers should be at 600 mm (maximum) centres (end bearers no more than 150 mm from the edge of the panel) and aligned vertically between individual packs in accordance with the Certificate holder's guidelines.

11.2.2 The panels and all system components should be stored inside, or in dry, sheltered conditions, at least 150 mm off the ground, and covered with opaque polythene sheeting or tarpaulin until the panels and components are to be used.

11.2.3 The panels can withstand the normal loads associated with site handling and installation. Damaged panels should not be used.

Supporting information in this Annex is relevant to the system but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

CLP Regulations

The Certificate holder has taken the responsibility of classifying and labelling the system components under the *GB CLP Regulation* and *CLP Regulation (EC) No 1272/2008 - classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s).

UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the system components in accordance with UKAD 140022-00-0304.

CE marking

The Certificate holder has taken the responsibility of CE marking the system in accordance with EAD 140022-00-0304.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015 and ISO 14001 : 2015 by CIBSE Certification Limited (Certificates 0001QMS-1 and 0001EMS-1 respectively).

Additional Guidance

A.1 Other wall and roof weatherproofing systems can be used but are not covered by this Certificate.

A.2 Any cutting or forming of openings within wall or roof panels must be made only with the advice of the designer or calculated by a suitably experienced and competent individual, in order not to affect the loadbearing capacity of individual elements and the overall stability of the structure.

A.3 The provisions for service penetrations (eg holes or notches) through roof panels will affect the design assumptions (see Tables 2 and 3). Further advice must be sought from the Certificate holder.

Additional information on installation

A.4 The system differs to standard timber frame construction but is usually erected by timber frame erectors. For wall application, the OSB facing panels must be fully supported on both faces of the panel, typically bearing directly on the top and bottom sill.

Bibliography

- BRE Digest 369 *Interstitial condensation and fabric degradation*
- BRE report BR 262 : 2002 *Thermal insulation: avoiding risks*
- BRE report BR 443 : 2006 *Conventions for U-value calculations*
- BS 5250 : 2011 + A1 : 2016 *Code of practice for control of condensation in buildings*
- BS 5534 : 2014 + A2: 2018 *Slating and tiling for pitched roofs and vertical cladding — Code of practice*
- BS 6229 : 2018 *Flat roofs with continuously supported coverings — Code of practice*
- BS 8000-3 : 2001 *Workmanship on building sites — Code of practice for masonry*
- BS 8215 : 1991 *Code of practice for design and installation of damp-proof courses in masonry construction*
- BS 8417 : 2011 + A1 : 2014 *Preservation of wood — Code of practice*
- BS EN 300 : 2006 *Oriented Strand Boards (OSB) — Definitions, classification and specifications*
- BS EN 338 : 2016 *Structural timber — Strength classes*
- BS EN 845-1 : 2013 + A1: 2016 *Specification for ancillary components for masonry — Wall ties, tension straps, hangers and brackets*
- BS EN 1365-1 : 2012 *Fire resistance tests for loadbearing elements — Walls*
- BS EN 13501-1 : 2018 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*
- BS EN 13501-2 : 2016 *Fire classification of construction products and building elements — Classification using data from fire resistance tests, excluding ventilation services*
- BS EN 13963 : 2014 *Jointing materials for gypsum boards — Definitions, requirements and test methods*
- BS EN 15651-1 : 2017 *Sealants for non-structural use in joints in buildings and pedestrian walkways — Sealants for facade elements*
- BS EN 1991-1-7 : 2006 + A1 : 2014 *Eurocode 1 : Actions on structures — General actions — Accidental actions*
NA + A1 : 2014 to BS EN 1991-1-7 : 2006 + A1 : 2014 *Eurocode 1 : Actions on structures — General actions — Accidental actions*
- BS EN 1995-1-1 : 2004 + A2 : 2014 *Eurocode 5 : Design of timber structures — General — Common rules and rules for buildings*
- BS EN 1996-1-1 : 2005 + A1 : 2012 *Eurocode 6 : Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
NA to BS EN 1996-1-1 : 2005 + A1 : 2012 *Eurocode 6 : Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
- BS EN 1996-1-2 : 2005 + A2 : 2014 *Eurocode 5 : Design of timber structures — General — Common rules and rules for buildings*
NA to BS EN 1996-1-2 : 2005 + A2 : 2014 *UK National Annex to Eurocode 5 : Design of timber structures — General — Common rules and rules for buildings*
- BS EN 1996-2 : 2006 *Eurocode 6 : Design of masonry structures — Design considerations, selection of materials and execution of masonry*
NA to BS EN 1996-2 : 2006 *UK National Annex to Eurocode 6 : Design of masonry structures — Design considerations, selection of materials and execution of masonry*
- BS EN 1996-3 : 2006 *Eurocode 6 : Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

NA + A1 : 2014 to BS EN 1996-3 : 2006 UK National Annex to *Eurocode 6 : Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

BS EN ISO 6946 : 2017 *Building components and building elements — Thermal resistance and thermal transmittance — Calculation method*

BS EN 1363-1 : 2012 *Fire resistance tests — General requirements*

ISO 9001 : 2015 *Quality Management Systems — Requirements*

ISO 14001 : 2015 *Environmental management systems — Requirements with guidance for use*

PD 6697 : 2019 *Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2*

UKAD 140022-00-0304 *Prefabricated wood-based loadbearing stressed skin panels*

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- and any matter arising out of or in connection with it or its subject matter (including non-contractual disputes or claims) is governed by and construed in accordance with the law of England and Wales.
- the courts of England and Wales shall have exclusive jurisdiction to settle any matter arising out of or in connection with this Certificate or its subject matter (including non-contractual disputes or claims).

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

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