

CERTIFICATE

Certified Passive House Component

ID: 0360cs03 valid until 31. December 2025

Passive House Institute

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Category	Construction system Lightweight construction
Manufacturer	Kingspan Insulation Ltd Herfordshire UK
Product name	Kingspan TEK Bausystem

This certificate for the cool, temperate climate zone was awarded based on the following criteria

Hygiene criterion

The minimum temperature factor of the interior surfaces is

$$f_{R_{si}=0,25m^2K/W} \geq 0.70$$

Comfort criterion

The U-value of the installed windows is

$$U_{W,i} \leq 0.85 \text{ W}/(m^2K)$$

Efficiency criteria

Heat transfer coefficient of building envelope

$$U \cdot f_{PHI} \leq 0.15 \text{ W}/(m^2K)$$

Temperaturfactor of opaque junctions

$$f_{R_{si}=0,25m^2K/W} \geq 0.86$$

Thermal bridge free design for key connection details

$$\Psi \leq 0.01 \text{ W}/(m^2K)$$

An airtightness concept for all components and connection details was provided.



cool, temperate climate

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Determined values

Thermal heat transfer coefficient	Dimension [m]	U-Wert [W/(m²K)]
EW01 - External Wall	0.29	0.128
RO01 - Roof	0.28	0.129
BC01 - Basement Ceiling	0.46	0.118
FS01 - Floor Slab	0.54	0.120
BW01 - Basement Wall	0.51	0.133

Thermal bridge coefficient opaque envelop	fRsi [-]	Ψ [W/(mK)]
EWEC01 - External Wall Outer Corner	0.93	-0.038
EWIC01 - External Wall Inner Corner	0.87	-0.012
FSIW01 - Floor Slab Internal Wall	0.98	0.031
BFBW01 - Basement Floor Basement Wall	0.90	-0.049
BFIW01 - Basement Floor Internal Wall	0.97	0.015
BCEW01 - Basement Ceiling External Wall	0.92	-0.016
BCEW02 - Basement Ceiling External Wall	0.93	-0.053
BCIW01 - Basement Ceiling Internal Wall	0.98	0.041
BCIW01 - Basement Ceiling Internal Wall	0.98	0.041
BWBC01 - Basement Wall Basement Ceiling	0.95	0.013
BWBC02 - Basement Wall Basement Ceiling	0.95	0.023
EWCE01 - External Wall internal CEiling	0.96	0.009
EWEC01 - External Wall Outer Corner	0.91	-0.086
EWIC01 - External Wall Inner Corner	1.00	0.061
EWIW01 - External Wall Internal Wall	0.97	0.002
ROEA01 - Roof Eaves	0.90	-0.032
ROVE01 - Roof Verge	0.90	-0.058
ROIW01 - Roof Internal Wall	0.96	0.022