



Jersey Part 11 – Building Regulations

The new 2016 Editions of Technical Guidance Documents for Part 11: Conservation of Fuel and Power for the island of Jersey came into effect on July 18th, 2016 and all plans submitted for Building Control approval after this date must comply with the new requirements.

New Buildings (Documents 11.1A & 11.2A)

The main requirement of Documents 11.1A and 11.2A is that buildings meet defined CO₂ emissions targets, and a fabric energy efficiency target in the case of Document 11.1A. The roof, wall and floor U-values required to meet this target will depend on the design of the building, orientation, heating system etc. To ease the process, Kingspan Insulation has undertaken analysis to give the ‘best starting point’ U-values, for specifiers to work from in getting their designs to comply. They will be almost exactly what is required for some buildings and short of what is required for others. These ‘best starting point’ U-values are shown below.

Element	U-value (W/m ² ·K)	
	Dwellings	Buildings Other Than Dwellings
Lofts	0.11	0.14
All other roofs	0.11	0.14
Walls	0.16	0.22
Floors	0.11	0.18

Existing Buildings (Documents 11.1B & 11.2B)

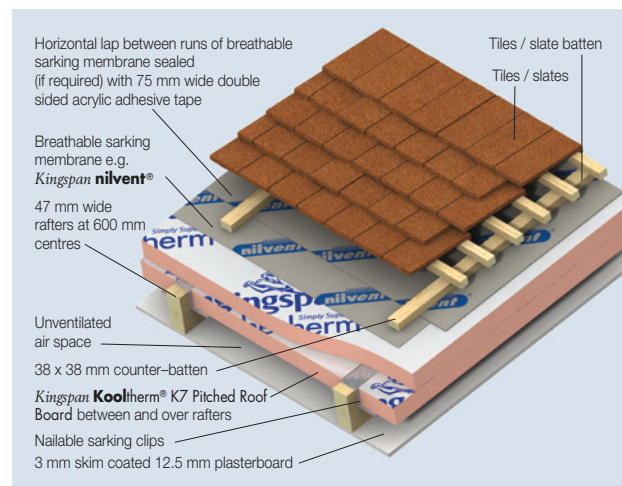
Documents 11.1B and 11.2B give specific U-value requirements for newly constructed elements and retained / refurbished elements. They apply to all works, regardless of whether the works relate to an extension, conversion or renovation. These suggested U-values are shown below.

Element	U-value (W/m ² ·K)	
	New Elements	Refurbishment / Retained Elements
Lofts	0.16	0.16
All other roofs	0.18	0.18
Walls	0.28	0.55 ¹ / 0.30 ²
Floors	0.22	0.25

1 Cavity insulation
2 External / internal insulation

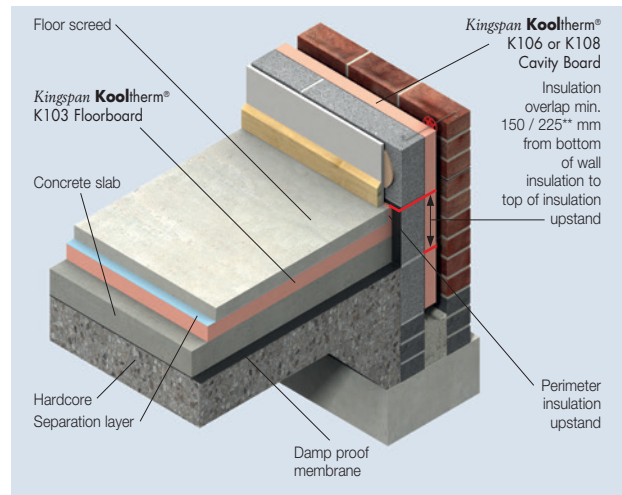
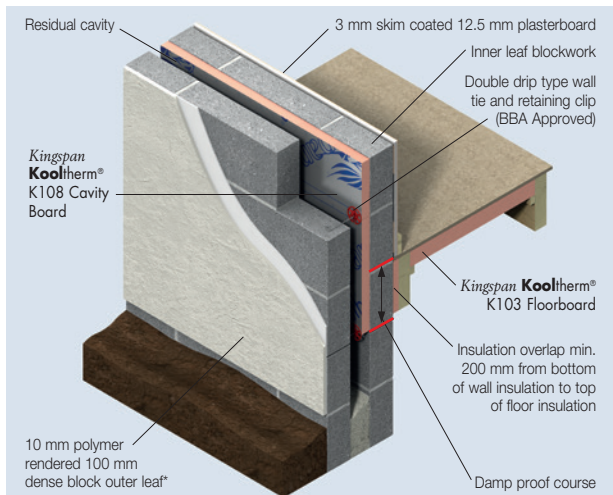
Kingspan Insulation Solutions

Set out below are examples of constructions using Kingspan Insulation products. Each example construction is accompanied by a table, which gives the corresponding U-values. Please note these constructions do not comprise an exhaustive list of Kingspan Insulation solutions. Visit www.kingspaninsulation.co.uk for further information.



U-values (W/m ² ·K) for Various Thicknesses of Kingspan Kooltherm® K7 Pitched Roof Board and Different Rafter Depths			
Thickness of Kingspan Kooltherm® K7 Pitched Roof Board (mm)	Rafter Depth (mm)		
	100	125	150
35 + 35	X	X	X
35 + 40*	0.25	0.25	0.25
40 + 40	0.24	0.24	0.24
50 + 50	0.19	0.19	0.19
60 + 60	0.17	0.16	0.16
70 + 70	0.14	0.14	0.14
75 + 75	0.14	0.14	0.13
80 + 80	0.13	0.13	0.13
90 + 90	0.12	0.11	0.11
100 + 100	0.11	0.10	0.10
100 + 110*	0.10	0.10	0.10

* First thickness refers to thickness between rafters, second thickness over rafters.
The thermal resistance of the over rafter layer of insulation must be ≥ that of the between rafter layer so as to avoid condensation.



U-values (W/m²·K) for Various Thicknesses of Kingspan Kooltherm® K108 Cavity Board

Insulant Thickness (mm)	Inner Leaf Blockwork Density and λ-value (W/m·K)			
	Dense (1.13)	Medium (0.51)	Lightweight (0.15)**	Aerated (0.11)**
25	X	X	0.32	0.30
30	X	0.32	0.29	0.28
35	0.31	0.30	0.27	0.26
40	0.28	0.28	0.25	0.24
50	0.24	0.24	0.22	0.21
60	0.22	0.21	0.20	0.19
70	0.19	0.19	0.18	0.17
75	0.18	0.18	0.17	0.16
80	0.19††	0.18†	0.17†	0.16
90	0.17	0.17	0.16	0.15
100	0.16	0.15	0.14	0.14
110	0.14	0.14	0.13	0.13
120	0.13	0.13	0.13	0.12

* Calculations assume dense block outer leaf of λ-value (1.13 W/m·K).
 ** A 6.6% thermal bridging factor has been assumed for the effect of mortar joints.
 † U-values with a 40 mm cavity are 0.01 W/m·K lower (better) than those shown.
 †† U-values with a 40 mm cavity are 0.02 W/m·K lower (better) than those shown.

U-values (W/m²·K) for Various Thicknesses of Kingspan Kooltherm® K103 Floorboard and Floor Perimeter / Area Ratios

Insulant Thickness (mm)	Perimeter / Area (m ⁻¹)					
	0.2	0.3	0.4	0.5	0.6	0.7
25	0.25	X	X	X	X	X
30	0.24	X	X	X	X	X
40	0.21	0.24	X	X	X	X
45	0.20	0.22	0.24	0.25	X	X
50	0.18	0.21	0.23	0.24	0.25	0.25
60	0.17	0.19	0.20	0.21	0.22	0.22
70	0.15	0.17	0.18	0.19	0.19	0.20
75	0.14	0.16	0.17	0.18	0.18	0.19
80	0.14	0.15	0.16	0.17	0.17	0.18
90	0.13	0.14	0.15	0.16	0.16	0.16
100	0.12	0.13	0.14	0.14	0.15	0.15
110	0.11	0.12	0.13	0.13	0.14	0.14
120	0.11	0.11	0.12	0.12	0.13	0.13
125	0.10	0.11	0.12	0.12	0.12	0.12
130	0.10	0.11	0.11	0.12	0.12	0.12
140	0.09	0.10	0.11	0.11	0.11	0.11
150	0.09	0.10	0.10	0.10	0.10	0.11
80 + 80	0.09	0.09	0.09	0.10	0.10	0.10
80 + 90*	0.08	0.09	0.09	0.09	0.09	0.09
75 + 100*	0.08	0.09	0.09	0.09	0.09	0.09

* Where multiple layers of insulation of different thicknesses are used, the thickest layer should be installed as the outermost layer in the construction.
 ** 150 mm applies to the UK and 225 mm to the Republic of Ireland.



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