

U Value Calculation

Software: Stroma U-value Calculator - Version 0.92
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 Construction Type: Roof - Example Extension Pitch Roof
 Calculation Method: BS EN ISO 6946

Roof Construction

No	Description	Main Element			Bridging Element		
		Thickness	λ	R-value	λ	R-value	Fraction
-	Internal Surface Resistance	-	-	0.1	-	-	-
1	Plaster (Lightweight)	3	0.18	0.017	-	-	-
2	Plasterboard Standard	12.5	0.21	0.06	-	-	-
3	PL4000 (25 mm)	25	0.022	1.136	-	-	-
4	XR4000 (120 mm)	120	0.022	5.455	0.13	0.923	0.125
5	Unventilated Cavity - (Roof - Low Emissivity)	30	-	0.34	0.13	0.231	0.125
6	Membrane	1	-	0.001	-	-	-
-	External Surface Resistance	-	-	0.04	-	-	-

$\Sigma=191.5\text{mm}$

$\Sigma=7.148$

Resistances

Lower Limit	Upper Limit	Average
5.055	5.859	5.457 m ² K/W

Roof U-value Corrections

No Correction Values

Roof U-value

U-value	0.183
U-value rounded	0.18 W/m ² K