

U-value calculation

by BRE U-value Calculator version 2.03

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Element type: Window - Plastic frame - Double glazed

Calculation Method: BS EN 673, BS EN ISO 10077-1

Rapid PVC-U - Euroslide Patio Door

Window height: 2180 mm
Window width: 2000 mm
Vertical divider: width of left-hand side (from edge of window to centre of divider): 1000 mm
width of right-hand side (from centre of divider to edge of window): 1000 mm
Angle to horizontal: 90° (vertical window)

Glazing

Glazing U-value calculated by method in BS EN 673

Layer	d (mm)	λ glass	emiss.1	emiss.2	gas	% fill	R layer	Description	
1	10	1.0					0.130	Rsi	
2	12		0.050	0.890	Argon	90	0.010	Glass	
3	6.4	1.0					0.568	Gas space	
							0.006	Glass	
							<u>0.040</u>	Rse	
	<u>28 mm</u> (total glazing thickness)							<u>0.754</u>	

Glazed area: 3.166 m²
Centre-pane U-value: 1.326 W/m²K

Frame	Left side	Divider	Right side	
Frame width:	130	91	130	mm
3 hollow chambers				
Frame area:	0.498	0.198	0.498	m ²
Frame U-value:	2.000	2.000	2.000	W/m ² K (from ISO 10077-1)
<u>Frame/glazing</u>				
Glazing perimeter:	3569	3840	3569	mm
Spacer bar:	Aluminium or steel spacer			
Linear Ψ -value:	0.080	0.080	0.080	W/m·K (from ISO 10077-1)

Window area: 4.36 m², Glazed area: 3.17 m² (72.6%), Frame area: 1.19 m² (27.4%)

U-value 1.712
U-value (rounded) 1.7 W/m²K

Calculated by:
Eurocell PLC