

Summary of U Value Calculation

Undertaken by Sliders (UK) Limited
Door Style: Centre Glazed

Capstone door, 44mm, Plastic Frame (PVC Hollow with 3 Chambers)
Calculated following the principles of EN ISO 10077-1:2006

Basic Dimensions

Width of Opening: 1000 mm
Height of Opening: 2000 mm

Door Glazing Profile

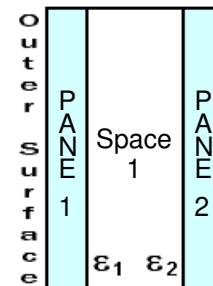
Number of Spaces: 1 (Double Glazing)
Gas Temperature: 283.15 K (10°C)
Normal Emissivity of Internal Glass Surface: 0.89

Space	Width	Gas Type
1	18 mm	Air Filled

Space	e1	e2
1	0.89 (0.84 corr)	0.89 (0.84 corr)

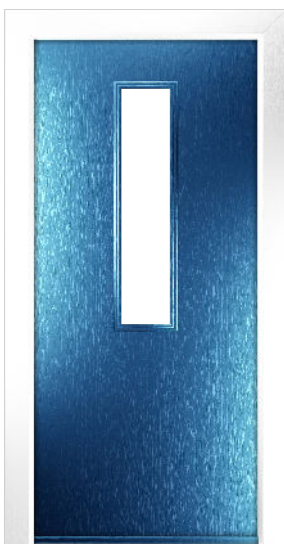
Pane	Thickness
1	4 mm
2	4 mm

Total Thickness of Glazing: 26 mm
External Heat Transfer Coefficient: 25 W/m².K
Internal Heat Transfer Coefficient: 7.7 W/m².K



Configuration of Unit: Frame & Pane Areas

Numbers on each frame edge correspond to the Frame Side in the frame table on the next page, and Circled Numbers refer to the Pane in the panes table.



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Door Frame

Side	A _{f,i}	A _{f,e}	A _{frame}	Int. Frame W	Ext. Frame W	A _{f,di}	A _{f,de}	Thm Break	U frame
1	0.095 m ²	0.133 m ²	0.133 m ²	48 mm	68 mm	-	-	-	2.00 W/m ² .K
2	0.046 m ²	0.063 m ²	0.063 m ²	48 mm	68 mm	-	-	-	2.00 W/m ² .K
3	0.095 m ²	0.133 m ²	0.133 m ²	48 mm	68 mm	-	-	-	2.00 W/m ² .K
4	0.007 m ²	0.014 m ²	0.014 m ²	7 mm	15 mm	0.007 m ²	0.014 m ²	0.0 mm	5.88 W/m ² .K
Cassette	-	-	0.131 m ²	-	-	-	-	1.51 W/m ² .K	

$$\Sigma A_{\text{frame}} : 0.475 \text{ m}^2$$

$$\Sigma A_{\text{frame}} \cdot U_{\text{frame}} : 0.940 \text{ W/K}$$

Door Panes

Pane	Type	A _{panel}	U _{panel}	Perimeter	Spacer	PSI
1	Glass	0.082 m ²	2.740 W/m ² .K	3.712 m	Aluminium Generic	0.060 W/m.K
2	Glass	1.443 m ²	0.641 W/m ² .K	5.698 m	None	0.000 W/m.K

$$\Sigma A_{\text{frame}} : 1.525 \text{ m}^2$$

$$\Sigma A_{\text{panel}} \cdot U_{\text{panel}} : 1.149 \text{ W/K}$$

Mould value : 0.000 W/K

$$\Sigma I_{\text{panel}} \cdot \psi_{\text{panel}} : 0.223 \text{ W/K}$$

Total Thermal Conductance of Glazing: 5.13W/m².K

Final U Value for Unit: 1.2 W/m².K