

SPECIFICATION DATABASE



U25SDI - 7/24 - V1.0

Royale
Collection

'u' Value - 2500 Opening Inward Single Door

Summary of U Value Calculation

Undertaken by MB Frames PVCu Ltd MB Frames PVCu Ltd, of 43-0011009086

Reference Number: 2500 SingleDoor_OpenIn

Deceuninck Door: Traditional 2500 single + midrail (14.12.12.12.12.1.2.1)

Calculation Date: 2019-01-18

Calculated following the principles of EN ISO 10077-1:2006

Basic Dimensions

Width of Opening: 1230 mm

Height of Opening: 2180 mm

Door Glazing Profile

Number of Spaces: 1 (Double Glazing)

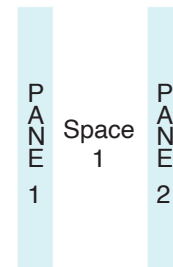
Gas Temperature: 283.15 K (10°C)

Normal Emissivity of Internal Glass Surface: 0.89

Space	Width	Gas Type
1	20 mm	10% Air : 90% Argon

Space	e1	e2
1	0.89 (0.84 corr)	0.05 (0.06 corr)

Pane	Thickness
1	4 mm
2	4 mm



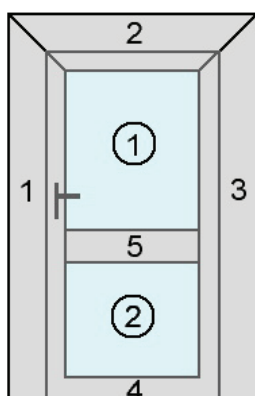
Total Thickness of Glazing: 28 mm

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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This data has been produced by the Oracle U Value Calculator.
The results have not been independently checked or verified by Build Check Ltd /
Build Check Publications Ltd. For verification contact publications@buildcheck.co.uk.
Calculations valid for one month.

Software Version: 2.1

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Summary of U Value Calculation (ctd)

Reference Number: 2500 SingleDoor_OpenIn
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Calculation Date: 2019-01-18

Door Frame

Side	A f,i	A f,e	A frame	Int. Frame W	Ext. Frame W	U frame
1	0.308 m ²	0.308 m ²	0.308 m ²	152 mm	152 mm	1.56 W/m ² .K
2	0.164 m ²	0.164 m ²	0.164 m ²	152 mm	152 mm	1.56 W/m ² .K
3	0.308 m ²	0.308 m ²	0.308 m ²	152 mm	152 mm	1.56 W/m ² .K
4	0.164 m ²	0.164 m ²	0.164 m ²	152 mm	152 mm	1.56 W/m ² .K
5	0.102 m ²	0.102 m ²	0.102 m ²	110 mm	110 mm	1.52 W/m ² .K

$$\Sigma A_{\text{frame}} : 1.046 \text{ m}^2$$

$$\Sigma A_{\text{frame}} : U_{\text{frame}} : 1.626 \text{ W/K}$$

Door Panes

Pane	Type	A panel	U panel	Perimeter	Spacer	PSI
1	Glass	1.040 m ²	1.219 W/m ² .K	4.098 m	Super Spacer Premium	0.031 W/m.K
2	Glass	0.595 m ²	1.219 W/m ² .K	3.138 m	Super Spacer Premium	0.031 W/m.K

$$\Sigma A_{\text{pane}} : 1.635 \text{ m}^2$$

$$\Sigma A_{\text{pane}} \cdot U_{\text{pane}} : 1.994 \text{ W/K}$$

$$\Sigma l_{\text{pane}} \cdot \psi_{\text{pane}} : 0.224 \text{ W/K}$$

Total Thermal Conductance of Glazing: 1.54W/m².K

Final U Value for Unit: 1.4 W/m².K

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