Summary of U Value Calculation

Undertaken by UCS, of 43-0011009118
Reference Number: GABBY

Deceuninck Window: Traditional 2500 casement (2.5.4.4.8.7.7.1)
Calculation Date: 2020-10-27 Calculated following the principles of EN ISO 10077-1:2006

Basic Dimensions

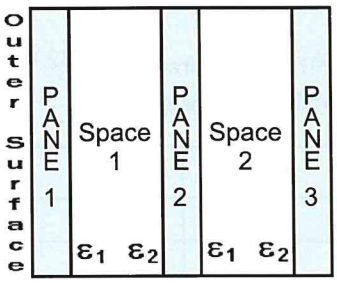
Width of Opening: 1230 mm
Height of Opening: 1480 mm

Window Glazing Profile

Number of Spaces: 2 (Triple Glazing)
Gas Temperature: 283.15 K (10°C)
Normal Emissivity of Internal Glass Surface: 0.89

Space	Width	Gas Type
1	14 mm	10% Air : 90% Argon
2	14 mm	10% Air : 90% Argon

Space	e1	e2
1	0.14 (0.16 corr)	0.14 (0.16 corr)
2	0.14 (0.16 corr)	0.14 (0.16 corr)

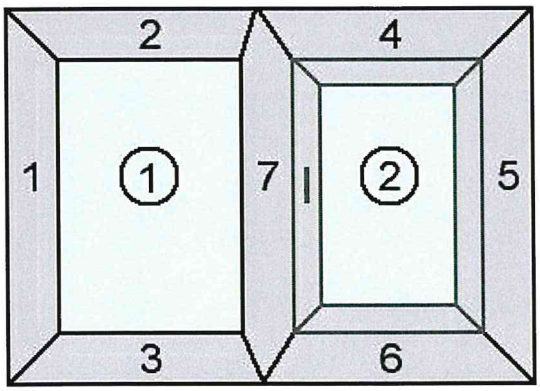


Pane	Thickness
1	4 mm
2	4 mm
3	4 mm

Total Thickness of Glazing: 40 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.



Summary of U Value Calculation (ctd)

Reference Number: GABBY
Deceuninck Window: Traditional 2500 casement (2.5.4.4.8.7.7.1)
Calculation Date: 2020-10-27

Window Frame

Side	A f,i	A f,e	A frame	Int. Frame W	Ext. Frame W	U frame
1	0.099 m²	0.099 m²	0.099 m²	70 mm	70 mm	1.04 W/m².K
2	0.039 m²	0.039 m²	0.039 m²	70 mm	70 mm	1.18 W/m².K
3	0.039 m²	0.039 m²	0.039 m²	70 mm	70 mm	1.18 W/m².K
4	0.060 m²	0.060 m²	0.060 m²	116 mm	116 mm	1.27 W/m².K
5	0.158 m²	0.158 m²	0.158 m²	116 mm	116 mm	1.27 W/m².K
6	0.060 m²	0.060 m²	0.060 m²	116 mm	116 mm	1.27 W/m².K
7	0.157 m²	0.157 m²	0.157 m²	114 mm	114 mm	1.17 W/m².K

ΣA_{frame} : 0.613 m²

$\Sigma A_{frame} : U_{frame}$: 0.732 W/K

Window Panes

Pane	Type	A panel	U panel	Perimeter	Spacer	PSI
1	Glass	0.685 m²	0.736 W/m².K	3.703 m	Thermobar	0.030 W/m.K
2	Glass	0.522 m²	0.736 W/m².K	3.333 m	Thermobar	0.030 W/m.K

ΣA_{frame} : 1.208 m²

$\Sigma A_{panel} \cdot U_{panel}$: 0.889 W/K

$\Sigma l_{panel} \cdot \Psi_{panel}$: 0.211 W/K

Total Thermal Conductance of Glazing: 0.84W/m².K

No cross bars and no attached bars: 0 W/m².K

Final U Value for Unit: 1.0 W/m².K