

BFRC Energy Rating Calculation Spreadsheet



TILT & TURN - OVOLO SUITE

LARGE (70mm) OUTER FRAME

4mm OPTIWHITE
20mm ARGON
4mm PLANITHERM TOTAL 1.1

EDGETECH SUPER SPACER

Frame Dimensions

Thermal Conductivity

Insulation Panel

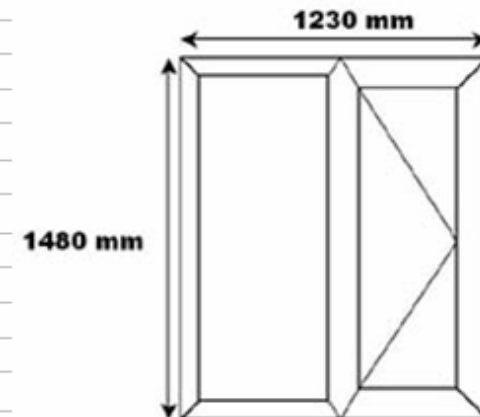
Glazed

	Projected Frame Height (mm)	Sight Line Height Worst Case (mm)	$U_{\text{frame+panel}}$	Panel Thickness (mm)	$U_{\text{frame+glass}}$
Fixed Outer Frame	70	70	1.152	28	1.336
Vent Frame (Vertical)	122	122	1.2359	28	1.4225
Vent Frame (Horizontal))	122	122	1.167	28	1.3524
Transom / Mullion	128	128	1.2025	28	1.4299

Overall Window Dimensions (mm)

Glazing Properties

Height	1480	U_g (Centre Pane Value)	1.19
Width	1230	Solar Heat Gain Coefficient (g_{glass})	0.68
Air Leakage Factor		(Normal Value)	
L_{50} value	2.1	(Must be obtained from relevant accredited test report)	



Results

Thermal Transmittance

U_{window} ($\text{W}/\text{m}^2\text{K}$)

1.4

Solar Factor

g_{window} ($\text{W}/\text{m}^2\text{K}$)

0.39

Effective Air Leakage

L_{factor} ($\text{W}/\text{m}^2\text{K}$)

0.03

Energy Index

-13

Energy Rating Band

C