

# **Product information**

# VELUX Centre-pivot polyurethane roof window **GGU**



### **Product description**

- High quality moulded polyurethane with white lacquer finish
- Top control bar for easy operation even with furniture under the window
- · Ventilation flap and integrated dust and insect filter
- Maintenance-free interior surface
- Maintenance-free exterior covers

#### **Roof pitch**

• Can be installed in roof pitches between 15° and 90°

#### Materials

- Polyurethane around a timber core
- Glass
- Lacquered aluminium, copper or zinc
   VELUX ThermoTechnology™ insulation

#### **Downloads**

For installation instructions, CAD drawings, 3D BIM objects, 3D GDL objects etc, please visit velux.co.uk

### Certifications



The VELUX product factories guarantee quality systems implementation process and environmental management systems through appropriate accreditations ISO 9001 and ISO 14001

**EUTR** 

In compliance with the EU Timber Regulation (EUTR), EU regulation 995/2010

REACH

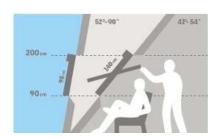
We are aware of the REACH regulation and acknowledge the obligations. No products are obliged to be registered in accordance to REACH and none of our products contain any Substances of Very High Concern.



### Available sizes and daylight area

	472 mm	550 mm	660 mm	780 mm	942 mm	1140 mm	1340 mm
778 mm		GGU CK02					
978 mm		GGU CK04	GGU FK04	GGU MK04			GGU UK04
1178 mm		GGU CK06	GGU FK06	GGU MK06	<b>GGU</b> <b>PK06</b> (0.75)	GGU SK06	
1398 mm		(0.07)	GGU FK08	GGU MK08	GGU PK08	GGU SK08	GGU UK08
1600 mm				GGU MK10	GGU PK10		

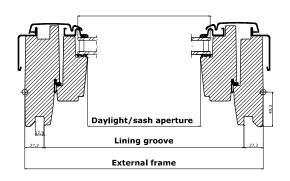
### ( ) = Effective daylight area, $m^2$



Centre-pivot roof windows make it possible to place furniture directly below the window without obstructing operation of the window.

For windows to be placed within reach, try to allow for a clear view when standing and when seated. Note that the optimum window height depends on the roof pitch.

### Width

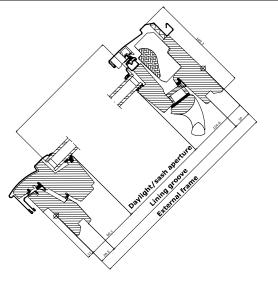


### Lining measurements

Size	Width (mm)
CK	495
FK	605
MK	725
PK	887
SK	1085
UK	1285

Size	Height (mm)
02	719
04	919
06	1119
08	1339
10	1549

Height





## Technical values

	70	68	66	62	69	67
Uw [W/m²K]	1.3	1.1	1.0	0.92	1.1	0.83
Ug [W/m²K]	1.0	0.7	0.6	0.5	0.7	0.5
Rw [dB]	35	35	37	42	35	38
g[]	0.46	0.55	0.44	0.52	0.27	0.44
τν [ ]	0.68	0.73	0.62	0.73	0.57	0.62
τυν [ ]	0.05	0.05	0.05	0.05	0.05	0.05
Air permeability [class]	4*	4*	4*	4*	4*	4*

<sup>\*</sup> size PK10 Air permeability is class 3.

Thermal improvements such as lower U-value (U<sub>w</sub>) and lower linear heat loss coefficient (φ) can, for some variants, be obtained with frame insulation collar and/or recessed installation.

### Glazing structure

	70	68	66	62	69	67
Inner glass pane	2 x 3 mm laminated float with low ε coating	2 x 3 mm laminated float with low ε coating	2 x 3 mm laminated float with low ε coating	2 x 3 mm laminated float with low ε coating	2 x 3 mm laminated float with low ε coating	2 x 3 mm laminated float with low ε coating
Middle glass pane	-	3 mm heat strengthened float with low ε coating	3 mm heat strengthened float with low ε coating	3 mm heat strengthened float with low ε coating	3 mm heat strengthened float	3 mm heat strengthened float with low ε coating
Outer glass pane	4 mm toughened with coatings	4 mm toughened with coatings	4 mm toughened with coatings	8 mm toughened with coatings	4 mm toughened with coatings	4 mm toughened with coating
Cavity	15 mm	2 x 12 mm	2 x 13 mm	2 x 11 mm	2 x 12 mm	2 x 12 mm
Glass panes	Double	Triple	Triple	Triple	Triple	Triple
Gas filling	Argon	Argon	Argon	Krypton	Argon	Krypton



## Glazing features

		70	68	66	62	69	67
*	Heat insulation Low energy glazing provides reduced heat loss through the window and enhanced indoor comfort.	•	••	•••	•••	••	•••
1	Solar gain In the wintertime, the heat from the sun entering through the windows is a usable solar gain.	•••	••	••	••	٠	••
1	Solar protection In warm climates and in rooms with large window areas, a sun protective coating provides a better indoor climate during summer periods. Alternatively, exterior sunscreening can be installed.					•••	
	Sound insulation A combination of laminated glass and optimal glass thickness provides better sound insulation. Frame/sash construction and gaskets are equally important.	••	••	•••	•••	••	•••
3	Security Thicker laminated inner glass pane designed to increase resistance to manual attack (burglary).	•	•	•	•	•	•
D <sub>i</sub>	Safety Laminated inner glass is designed to hold the fragments together if the glass breaks. We recommend that you consider using glass units with laminated glass on the inside for windows placed above areas where people sleep, play or work.	/	1	/	/	/	/
3334	Outside strength Toughened outer glass pane makes your glazing more resistant to hail, heavy wind and snow loads.	1	1	1	1	1	1
	Delayed fading of materials Inner laminated glass protects materials behind the glass against UV radiation and therefore delays fading of the materials.	/	1	/	/	/	/
<b>(a)</b>	Rain noise reduction The combination of laminated glass and extra thick glass helps provide a significant, audible reduction of rainfall sound. Frame/sash construction and gaskets are equally important.	/	1	/	1	1	/
*	Easy-to-clean The easy-to-clean coating minimises the cleaning frequency of the outer glass pane and gives you a clearer view in case of rain.			/			/
	Anti-dew The anti-dew coating significantly reduces the days with dew on the outer glass pane and thus gives you a clear view.			/	/		/

• Good •• Better ••• Best Feature included in glazing variant



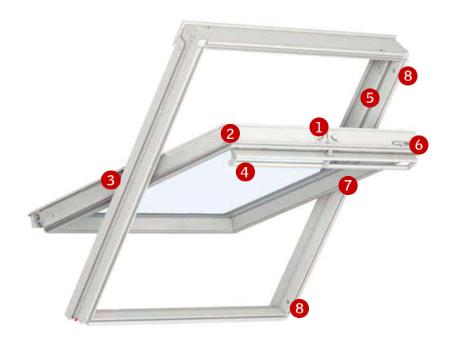
## Technical values, ventilation through ventilation flap

	Windows with double or triple glazing						
Property	Width						
	ск	FK	МК	PK	SK	UK	
Air flow characteristics [I/s]	1.9	2.3	2.8	3.4	4.1	4.8	
Air flow exponent [-]	0.53	0.53	0.53	0.53	0.53	0.53	
Ventilation capacity at 4 Pa [I/s]	4.0	4.8	5.8	7.1	8.5	10.0	
Ventilation capacity at 8 Pa [I/s]	5.7	6.9	8.4	10.2	12.3	14.5	
Ventilation capacity at 10 Pa [I/s]	6.4	7.8	9.5	11.5	13.9	16.3	
Ventilation capacity at 20 Pa [I/s]	9.3	11.3	13.7	16.6	20.1	23.5	
Equivalent area through ventilation flap [mm2]	2600	3100	3700	4600	5600	6600	
Geometrical free area [mm2]	2800	3700	4500	6100	7200	10600	

Please note that the glazing type 62 has negligible ventilation through the ventilation flap due to the construction of the window.



## Visible features





- Lock casing
- electro-galvanised steel
- colour: "silver"



- Data plate
- window type, size and variant code
- CE marking
- production codeQR code



- Click-on covers
- lacquered aluminium



- Control bar
- anodised aluminium



Thermo**Technology**™



- expanded polystyrene
- colour: grey charcoal
  thermally modified

timber



6 Barrel bolt

plastic

• colour: white

steel

• colour: "silver"



- Hinges with friction
- electro-galvanised steel

• colour: "silver"



- 8 Barrel bolt bushings
- plastic
- colour: white



### Cleaning and maintenance



To clean the outer pane from the inside, rotate sash and secure in cleaning position with barrel bolt.



VELUX repair and maintenance kits are available.

### **Exterior covers**

Material	NCS standard colour	<b>RAL</b> nearest standard colour		
Lacquered aluminium (-0) grey	S 7500-N	7043		
Lacquered aluminium (-5) black	S 9000-N	9005		
<b>Copper</b> (-1)	-	-		
Titanium zinc (-3)	-	-		

Special colour requests, please contact velux.co.uk

### Interior finish

White lacquer	Lacquer, white NCS standard colour: S 0500-N, nearest RAL standard colour: 9003.
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Special colour requests, please contact velux.co.uk

### Blinds, awnings and shutters



Pleated blind Flying pleated blind Double pleated energy blind Venetian blind Duo blackout blind **Exterior sunscreening** Awning blind Roller shutter

Interior sunscreening Blackout blind Roller blind



#### **Additional accessories** Insect roller screen



Available in manual and mains/solar powered versions
 Available in manual and mains powered versions
 Available in manual version
The mains and solar powered versions are part of the VELUX INTEGRA® product

### Flashings and installation products



#### Flashings:

- ED-for single installation
- EB- for twin installation
- EK- for combi installation

Available for standard and recessed installation

- Installation products:
   Installation set BDX 2000 (incl BFX)
- Underfelt collar BFX 1000 incl transverse drainage gutter

  Vapour barrier collar BBX 0000

  Linings LS- (incl BBX)

### Control options



#### VELUX INTEGRA®

Solar upgrade kit KSX 100K can be fitted to upgrade manual windows to obtain a series of benefits



Telescopic rod

#### Note

We reserve the right to make technical changes.

For more information on roof window GGU and other VELUX products, please visit www.velux.co.uk