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VELUX roof window GGL

VELUX®

Glazing 70







The original VELUX top-operated, centre-pivot roof window GGL is easy to operate and gives you the freedom to place furniture underneath. The innovative top control bar allows you to install the window at a lower position to get an excellent view while standing and even when seated.

- Open the top control bar to the ventilation position for fresh air through a closed window.
- Easily rotate the window 180° for safe cleaning of the outer glass from the inside.
- The glazing comes standard with premium features like safety lamination, toughened glass, UV filter and our unique rain noise reduction.
- Easily open and close the roof window even with furniture placed underneath.
- Removable and cleanable ventilation filter protects your home from dust and insects while ventilating.
- Quickly and easily add blinds using the unique Pick&Click!™ system.
- Upgradeable to a remote-controlled mains- or solar-powered motor for extra convenience.







Application guidance operation method

The window can be installed in roof pitches between 15° and 90° to the horizontal.



Manually top-operated, centre-pivot roof windows make it possible to place furniture directly below the window without obstructing the window's operation. We recommend an installation height that allows for a clear sight line to the outside from both a standing and seated position. Please note that the optimum window height depends on the roof pitch.

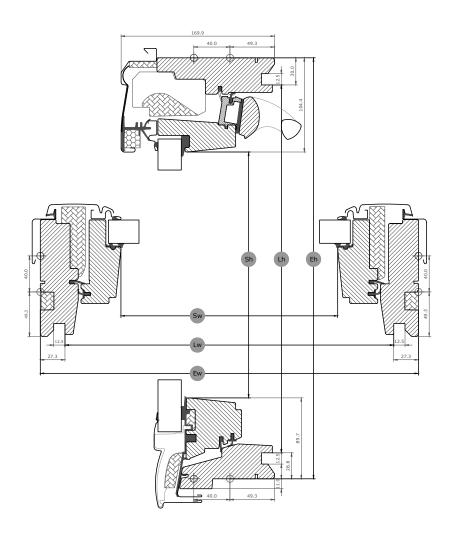
Available sizes and daylight area

	472	550	660	780	942	1140	1340
624				GGL MK27			
9				(0.26)			
8		GGL CK01				GGL SK01	
869		(0.19)				(0.48)	
8		GGL CK02					
778		(0.22)					
8	GGL BK04	GGL CK04	GGL FK04	GGL MK04	GGL PK04		GGL UK04
978	(0.23)	(0.29)	(0.38)	(0.47)	(0.60)		(0.91)
78		GGL CK06	GGL FK06	GGL MK06	GGL PK06	GGL SK06	GGL UK06
1178		(0.37)	(0.47)	(0.59)	(0.75)	(0.95)	(0.72)
1398			GGL FK08	GGL MK08	GGL PK08	GGL SK08	GGL UK08
136			(0.58)	(0.72)	(0.92)	(1.16)	(1.40)
00				GGL MK10	GGL PK10	GGL SK10	GGL UK10
1600				(0.85)	(1.07)	(1.35)	(1.63)
1800				GGL MK12			
18				(0.97)			

All measurements are in mm. () = Effective daylight area, ${\rm m}^2$



Cross section dimensions



Width		BK	CK	FK	MK	PK	SK	UK
Sw	Sash aperture width	293	371	481	601	763	961	1161
Lw	Distance between lining grooves, width	417	495	605	725	887	1085	1285
Ew	External frame width	472	550	660	780	942	1140	1340

Heigh	Height		02	04	06	08	10	12	25	27
Sh	Sash aperture height	504	584	784	984	1204	1406	1606	356	430
Lh	Distance between lining grooves, height	639	719	919	1119	1339	1541	1741	491	565
Eh	External frame height	698	778	978	1178	1398	1600	1800	550	624



Glazing features

Glazing 70



		4
*.	Heat insulation The low energy glazing unit reduces heat loss through the window and enhanced indoor comfort.	U _g = 1.0
	Solar gain In the wintertime, the heat from the sun entering through the windows is a usable solar gain.	g = 0.46
-0	Solar protection In warm climates and in rooms with large window areas, a sun protective coating provides a better indoor climate during summer periods.	** *☆
\$3 _{0/}	Sound insulation A combination of laminated glass and optimal glass thickness provides better sound insulation against noise from outside (traffic, playgrounds, etc).	R _w dB = 35(- 1;-3)
\$\frac{1}{2}\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right\right	Security Thicker laminated inner glass increases resistance to manual attack (burglary).	***
/.0	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.	J
	Outside strength Toughened outer glass makes your glazing more resistant to hail, heavy wind and snow loads.	J
-\\\-\\\-\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Delayed fading of material Laminated inner glass protects materials behind the glass against UV radiation and therefore delays fading of the materials.	J
Dig	Rain noise reduction The combination of laminated glass and extra thick glass helps provide a significant, audible reduction of rainfall sound.	J

Glazing structure

Glazing unit	Variant composition			
Double-glazed	6.8 mm laminated inner glass with coating - 16 mm argon - 4 mm toughened outer glass with coating			



Technical values for the window

Overview of technical values for the product, covering CE marking in accordance with EN 14531 and other EN standards.

Window characteristics	Performance
Thermal transmittance	1.3 W/(m2K)
Light transmittance	0.68
Total solar energy transmittance	0.46
Sound insulation	35(-1;-3)
Air permeability	4
External fire performance - British	AC
External fire performance - European	npd
Impact resistance	3
Load-bearing capacity of safety	
Reaction to fire	C-s1,d2
Resistance to snow load	See glazing composition
Resistance to wind load	C3 (>SK08: NPD)
Water tightness	E900



Visible features



Control bar standard

The ergonomic aluminum control bar allows effortless opening and closing of the window. It can also lock the ventilation flap in the ventilation position.



Blind bracket, manual

Easily install blinds on the window without the need for extra tools using the VELUX Pick&Click™ system.



Frame hinge, centre-pivot, side

Durable hinge design allows for reliable operation and enables the sash to be rotated for easy cleaning of the outer pane.



Interior insulation, frame top sides

Innovative ThermoTechnology™ insulation is integrated into the top frame sides of the window to increase energy-efficiency.



Barrel bolt, centre-pivot, top-operated

The barrel bolt can be placed into the integrated barrel bolt bushing to secure the window for cleaning of outer glass surface or for safe ventilation.



Headlock

When closed, the window is locked firmly into place by the headlock.



Data plate



Every VELUX roof window has a unique data plate with information that can be used to look up CE marking documentation, when purchasing accessories or in case of service or replacement.



Interior finish

Material Description	Clear lacquer Finished with triple coat, clear lacquered.	White-painted Finished with triple coat, white painted.		
Colour code NCS, inner surface	-	S 0500-N		
Colour code nearest RAL, inner surface	-	9003		

Exterior covers

Material Description	Aluminium, black Black	Aluminium, dark grey Dark grey	Titanium zinc	Untreated copper
Colour code NCS, outer surface	S 9000-N	S 7500-N	No colour code	
Colour code nearest RAL, outer surface	9005	7043	No co	olour code

Cleaning and maintenance



To clean the outer glass surface from the inside, rotate sash manually and secure in cleaning position with barrel bolts.



VELUX repair and maintenance kits are

Guarantee period





Flashings and installation products



Flashings

Install the VELUX roof window in virtually any roofing material by using genuine VELUX flashing solutions. Our flashings are designed specifically for the exact size and shape of the roof windows to create a perfect, watertight fit. Flashings can also be used to combine multiple roof windows.

Installation products

Ensure a proper insulation and an air- and watertight connection between the window and roof with VELUX installation products. All installation products are designed to perfectly fit the roof window for a reliable and durable result.

Blinds, awnings and shutters

Complete the VELUX roof window installation with roller shutters and awning blinds for heat protection and interior blinds for light dimming, blackout and insect protection. Choose from a wide range of manually operated or remote-controlled products that are made to fit the particular window type and size. Please contact your local VELUX sales company for more details about compatibility.

Further information

We reserve the right to make technical changes.

For more information on our products, please visit https://www.velux.co.uk