# ion date 11-03-2024 14:04:40 VRW Roof windows en-WW - Approved

# VELUX manual centre-pivot 2in1 roof window GGLS







With our new VELUX 2in1 daylight solution, you will experience an extensive view, increased influx of daylight and an aesthetic design due to extra slim profiles. With two windows in one frame, this daylight solution allows for easy installation.

- Enjoy an extensive view to the outside and more daylight due to extra slim frame profiles
- One frame module allows a simple well-known installation process with few components.
- One-piece top cover and slim profile covers feature a very aesthetic integration in the roof.
- Upgrade to a remote-controlled mains- or solar-powered motor for extra convenience.
- Get more control over your indoor climate with our wide range of accessories.
- · Quickly and easily add blinds by simply clicking them into the pre-fitted brackets
- Easily rotate the window 180° for safe cleaning of the outer glass from the inside.





### Application guidance

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 operation. The 2inl roof window GGLS consists of one openable centre-pivot window and one fixed window in one frame to provide extra daylight and an extensive view while offering all the benefits of our centre-pivot window. To benefit optimally from the wide view, we recommend an installation height that allows for a clear sight line to the outside from both a standing and seated position.

### Available sizes and daylight area

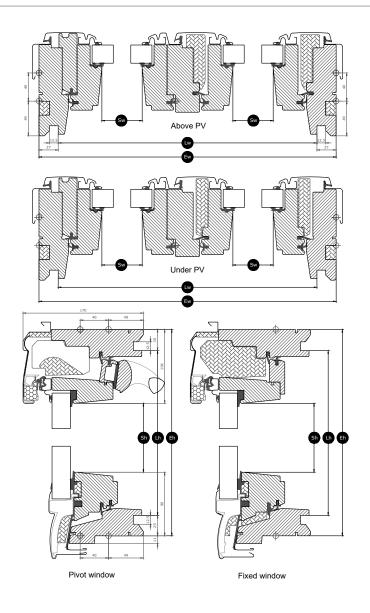
The size overview shows the availability across the different glazing variants. Please note that the individual glazing variant may not be available in all the sizes shown.

		1270	1390	1510	1552
	GGLS FPK08				
	(1.50)				
1178		GGLS FFK06	GGLS FMK06	GGLS MMK06	GGLS FPK06
		(0.94)	(1.06)	(1.18)	(1.22)
1398		GGLS FFK08	GGLS FMK08	GGLS MMK08	GGLS FPK08
1		(1.16)	(1.30)	(1.44)	(1.50)

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



# Cross section dimensions

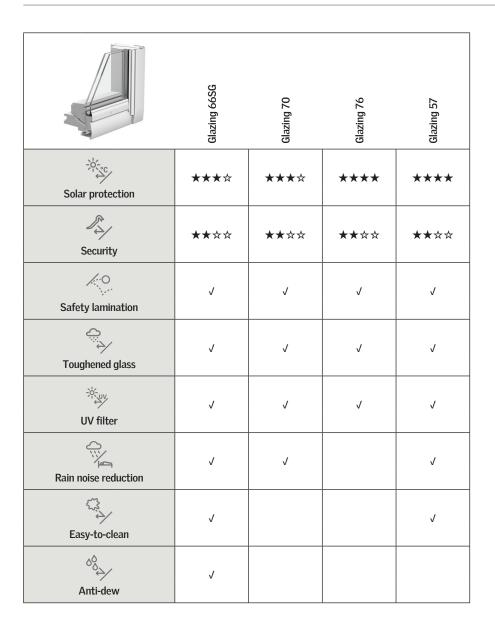


Widtl	1	FFK	FMK	FPK	MMK
Sw	Sash aperture width	481, 481	481, 601	481, 763	601, 601
Lw	Distance between lining grooves, width	1216	1336	1498	1456
Ew	Exterior frame width	1270	1390	1552	1510

Height		06	08
Sh	Sash aperture height	984	1204
Lh	Distance between lining grooves, height	1119	1339
Eh	Exterior frame height	1178	1398



# Glazing features



### **Glazing structure**

Glazing variant	Glazing unit	Composition (from inside to outside)
Glazing 66SG	Triple-glazed	6.8 mm laminated float glass - 13 mm Argon - 3 mm heat strengthened glass - 13 mm Argon - 4 mm toughened glass
Glazing 70	Double-glazed	6.8 mm laminated float glass - 16 mm Argon - 4 mm toughened glass
Glazing 76	Double-glazed	6.8 mm laminated float glass - 16 mm Argon - 4 mm toughened glass
Glazing 57	Double-glazed	6.8 mm laminated float glass - 16 mm Argon - 6 mm toughened glass



### Technical values for the window

Overview of technical values for the product, covering among other, CE marking in accordance with EN 14351-2.

	Glazing 66SG	Glazing 70	Glazing 76	Glazing 57
Window characteristics		Perfor	mance	
Thermal transmittance (U-value)	1.0 W/(m <sup>2</sup> K)	1.3 W/(m <sup>2</sup> K)	1.3 W/(m <sup>2</sup> K)	1.3 W/(m <sup>2</sup> K)
Light transmittance (τ,ν)	0.62	0.68	0.68	0.61
Total solar energy transmittance (g-value)	0.44	0.46	0.46	0.30
Sound insulation (Rw)	36 (-1;-5)	34(-1;-4)	34(-1;-4)	34(-1;-4)
Air permeability, [class]	4	4	4	4
External fire performance - British [class]	npd	npd	npd	npd
External fire performance - European [class]	npd	npd	npd	npd
Impact resistance [class]	Class 3	3	3	3
Load-bearing capacity of safety devices	V	V	V	V
Reaction to fire [class]	C-s1,d2	C-s1,d2	C-s1,d2	C-s1,d2
Resistance to snow load	**	**	**	**
Resistance to wind load [class]	Class C3	C3	C3	C3
Water tightness [class]	9A	9A	9A	9A

Resistance to snow load = \*\* See glazing composition

NPD: No Performance Determined



### Interior finish

Material Description	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, dark grey Dark grey
Colour code NCS, outer surface	S 7500-N
Colour code nearest RAL, outer surface	7043

## Cleaning and maintenance



To clean the outer glass surface from the inside, rotate sash and secure in cleaning position with barrel bolts. The fixed sash can be cleaned outside by opening the left sash (seen from the inside).



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 perfect, watertight fit. Flashings can also be used to combine multiple roof windows.

### **Installation products**

Ensure a proper installation 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 or blackout. 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://velux.com.