# -05-2023 20:20:18 VRW Roof windows en-HQ - Approved

# VELUX manual 2-in-1 roof window GPLS



Glazing 66SG





Enjoy the best view with the manual panoramic VELUX 2-in-1 roof window GPLS with two windows in one frame. The elegant handle at the bottom of the window allows it to be opened up to 45° for an extra spacious balcony feeling.

- Open the window outwards up to 45° to enjoy a panoramic view and a feeling of space.
- One frame module allows a simple well-known installation process with few components.
- Enjoy an extensive view to the outside and more daylight due to extra slim frame profiles
- 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, easy to clean, antidew and our unique rain noise reduction.
- One-piece top cover and slim profile covers feature a very aesthetic integration in the roof.
- Adjust the bottom handle position to ventilate your home without opening the window.





# Application guidance

The window can be installed in roof pitches between 15° and 55° (75°) to the horizontal.



VELUX 2in1 manual roof window GPLS opens outwards for an unobstructed, panoramic view. It consists of two windows, one openable, bottom-operated and one fixed, in one frame. This provides extra daylight and an extensive view while offering all the benefits of our bottom-operated windows. 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.

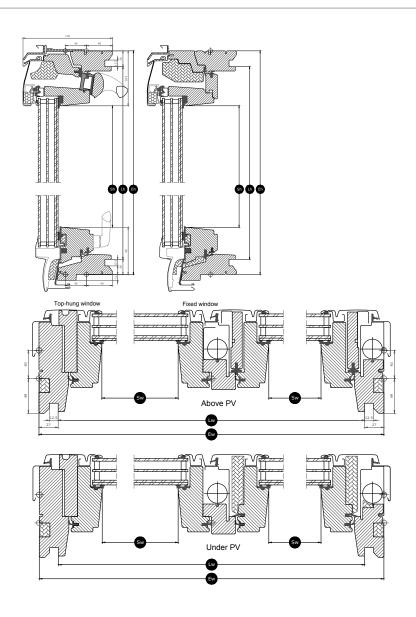
# Available sizes and daylight area

|      | 1270          | 1390          | 1510          | 1552          |
|------|---------------|---------------|---------------|---------------|
| 1178 | GPLS<br>FFK06 | GPLS<br>FMK06 | GPLS<br>MMK06 | GPLS<br>FPK06 |
|      | (0.94)        | (1.06)        | (1.18)        | (1.22)        |
| 8    | GPLS<br>FFK08 | GPLS<br>FMK08 | GPLS<br>MMK08 | GPLS<br>FPK08 |
| 1398 | (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     |

| Heigh | t                                       | 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 66SG



|  |   | 4                    |
|--|---|----------------------|
| */.  | Heat insulation The low energy glazing unit reduces heat loss through the window and enhanced indoor comfort.   | U <sub>g</sub> = 0.6 |
|  | Solar gain In colder climates and in rooms with large window areas, solar gain provides a better indoor climate during winter periods.                        | 0.44                 |
| -\\\-\\\-\\\\-\\\\\\\\\\\\\\\\\\\\\\\\   | Solar protection In warm climates and in rooms with large window areas, a sun protective glazing unit provides a better indoor climate during summer periods. | ***                  |
| 2/   | Security Thicker laminated inner glass increases resistance to manual attack (burglary).  | ***                  |
| /.0  | Safety lamination Prevents glass from falling into the room in case of accidental breakage.   | J                    |
|  | <b>Toughened glass</b> Adds strength to the outer glass surface to protect from wayward balls and extreme weather such as heavy storms and hail.              | V                    |
| , UNIVERSITY OF THE PROPERTY O | <b>UV filter</b> Protects your interior furnishings from fading due to the sun's harmful UV rays.   | J                    |
| Dig  | Rain noise reduction Rain noise reduction creates a barrier between the window and the weather outside for undisturbed moments during rainy days – or nights. | J                    |
| ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )  | Easy-to-clean Dirt-repellent coating lets you spend less time cleaning and more time enjoying the view.   | V                    |
| 00   | Anti-dew The anti-dew coating significantly reduces the days with dew on the outer glass and thus gives you a clear view.                                     | J                    |

#### Glazing structure

| Glazing unit  | Composition (from inside to outside)   |
|---------------|--|
| Triple-glazed | 6.8 mm laminated float glass - 13 mm Argon - 3 mm heat strengthened glass - 13 mm Argon - 4 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.

| Window characteristics                       | Performance             |
|--|-------------------------|
| Thermal transmittance (U-value)              | 1.1 W/(m2K)             |
| Light transmittance (τ,ν)                    | 0.62                    |
| Total solar energy transmittance (g-value)   | 0.44                    |
| Sound insulation (Rw)                        | 36 (-1;-5)              |
| Air permeability, [class]                    | 4                       |
| External fire performance - British [class]  | NPD                     |
| External fire performance - European [class] | NPD                     |
| Impact resistance [class]                    | 3                       |
| Load-bearing capacity of safety devices      | J                       |
| Reaction to fire [class]                     | C-s1,d2                 |
| Resistance to snow load                      | See glazing description |
| Resistance to wind load [class]              | C3                      |
| Water tightness [class]                      | 9A                      |

NPD: No Performance Determined



#### Visible features



#### Operating handle, top-hung, bottom

Easy to operate handle allows for effortless opening and closing of the window.



#### Detachable sash

The fixed sash is detachable and can be taken out for an easier process during service or installation from the inside.



#### Lifting device, top-hung

The lifting device facilitates the opening of the top-hung sash, once engaged with the spring rods.



#### Blind bracket, manual

Easily install blinds on the window without the need for extra tools. Simply click on the blind in the pre-fitted brackets.



#### Ventilation flap

The full-width ventilation flap can be used for ventilation even with a closed window. The ventilation flap is connected to the top sash with the lock casing.



#### 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 glass.



#### Interior insulation, frame top

Innovative ThermoTechnology  $^{\text{TM}}$  insulation is integrated into the top frame of the window to increase energy-efficiency.



#### Barrel bolt

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.



# Interior finish

| Material<br>Description                | White-painted<br>Finished with triple coat, white painted. |
|--|--|
| Colour code NCS, inner surface         | S 0500-N   |
| Colour code nearest RAL, inner surface | 9003   |

## Exterior covers

| Material<br>Description                | Aluminium, dark grey<br>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 openable window.



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.