

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

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.

Technical values

| | --70 | --68 | --66 | --62 | --69 | --67 |
|---|------|------|------|------|------|------|
| U_w [W/m²K] | 1.3 | 1.1 | 1.0 | 0.92 | 1.1 | 0.83 |
| U_g [W/m²K] | 1.0 | 0.7 | 0.6 | 0.5 | 0.7 | 0.5 |
| R_w [dB] | 35 | 35 | 37 | 42 | 35 | 38 |
| g [] | 0.46 | 0.55 | 0.44 | 0.52 | 0.27 | 0.44 |
| τ_v [] | 0.68 | 0.73 | 0.62 | 0.73 | 0.57 | 0.62 |
| τ_{uv} [] | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| Air permeability [class] | 4* | 4* | 4* | 4* | 4* | 4* |

* size PK10 Air permeability is class 3.

Thermal improvements such as lower U-value (U_w) 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. | • | •• | ••• | ••• | •• | ••• |
|  | Solar gain In the wintertime, the heat from the sun entering through the windows is a usable solar gain. | ••• | •• | •• | •• | • | •• |
|  | 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 suncreening 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. | •• | •• | ••• | ••• | •• | ••• |
|  | Security Thicker laminated inner glass pane designed to increase resistance to manual attack (burglary). | • | • | • | • | • | • |
|  | 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. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|  | Outside strength Toughened outer glass pane makes your glazing more resistant to hail, heavy wind and snow loads. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|  | Delayed fading of materials Inner laminated glass protects materials behind the glass against UV radiation and therefore delays fading of the materials. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|  | 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. | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
|  | 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. | | | ✓ | ✓ | | ✓ |

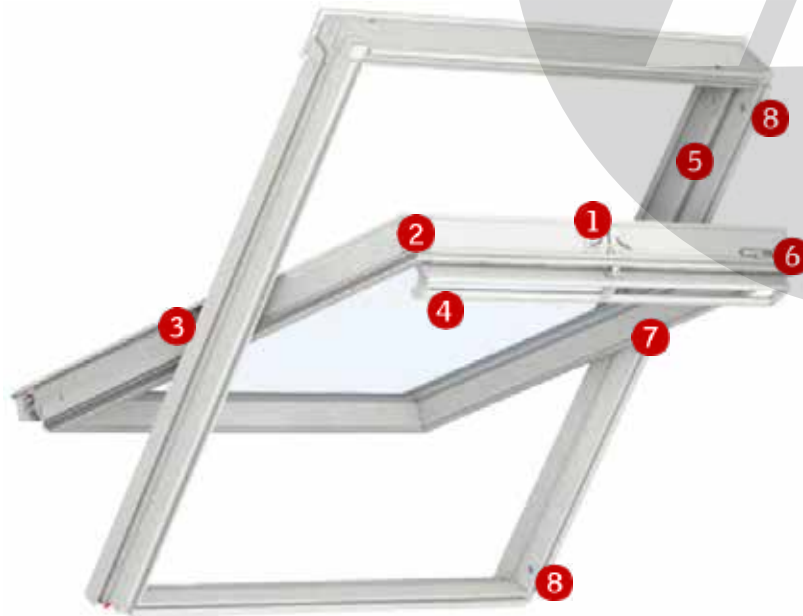
• Good •• Better ••• Best ✓ Feature included in glazing variant

Technical values, ventilation through ventilation flap

| Property | Windows with double or triple glazing | | | | | |
|---|---------------------------------------|------|------|------|------|-------|
| | Width | | | | | |
| | CK-- | FK-- | MK-- | PK-- | SK-- | UK-- |
| Air flow characteristics [l/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 [l/s] | 4.0 | 4.8 | 5.8 | 7.1 | 8.5 | 10.0 |
| Ventilation capacity at 8 Pa [l/s] | 5.7 | 6.9 | 8.4 | 10.2 | 12.3 | 14.5 |
| Ventilation capacity at 10 Pa [l/s] | 6.4 | 7.8 | 9.5 | 11.5 | 13.9 | 16.3 |
| Ventilation capacity at 20 Pa [l/s] | 9.3 | 11.3 | 13.7 | 16.6 | 20.1 | 23.5 |
| Equivalent area through ventilation flap [mm ²] | 2600 | 3100 | 3700 | 4600 | 5600 | 6600 |
| Geometrical free area [mm ²] | 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



1 Lock casing

- electro-galvanised steel
- colour: "silver"



2 Data plate

- window type, size and variant code
- CE marking
- production code
- QR code



3 Click-on covers

- lacquered aluminium



4 Control bar

- anodised aluminium



5 Excellent insulation

- expanded polystyrene
- colour: grey charcoal
- thermally modified timber



6 Barrel bolt

- plastic
- colour: white
- steel
- colour: "silver"



7 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 | RAL nearest standard colour |
|----------------------------------|---------------------|-----------------------------|
| Lacquered aluminium (-0--) grey | S 7500-N | 7043 |
| Lacquered aluminium (-5--) black | S 9000-N | 9005 |
| Copper (-1--) | - | - |
| Titanium zinc (-3--) | - | - |

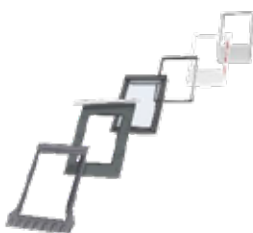
Special colour requests, please contact velux.co.uk

Interior finish

| | |
|---------------|--|
| White lacquer | Lacquer, white NCS standard colour: S 0500-N, nearest RAL standard colour: 9003. |
|---------------|--|

Special colour requests, please contact velux.co.uk

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)

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

Blinds, awnings and shutters



Interior suncreening

- Blackout blind
- Roller blind
- Pleated blind
- Flying pleated blind
- Double pleated energy blind
- Venetian blind
- Duo blackout blind



Exterior suncreening

- Awning blind
- Roller shutter



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 range.

Control options



VELUX INTEGRA®

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



- Telescopic rod