# **GGL** centre-pivot roof window



VELUX GGL is an openable, centrepivoting roof window for in-reach applications used to bring natural light and air into attic or loft rooms where ventilation is required.

## **Operation**

The GGL is operated manually. The control bar at the top of the window is clicked open once for limited filtered air flow, whilst the window remains

closed and watertight. A second click of the control bar opens the sash.

The sash is frictioned to stay in a pivot position to maximise ventilation. The sash can be locked in two positions, either slightly ajar or 180°, in the fully rotated position, allowing the outside pane to be cleaned safely from inside the room.

ZIL Insect screen (optional extra) to be fitted to plaster reveal.

# 10 YEAR WARRANTY



#### GGL technical performance

#### Australian Standards

All VELUX Roof Windows are tested and approved to the appropriate Australian Standards.

#### **AS4285 SKYLIGHTS**

Cyclonic & Non-Cyclonic

**AS1288 OVERHEAD GLAZING** Laminated inner pane

#### **AS3959 BUSHFIRE** Attack Level 40'

#### AS1530.1: BCA BOUNDARY SEPARATION'

Class 1 & Class 10 buildings: Within 900mm of a boundary wall Class 2 to Class 9 buildings: 3 metres from a boundary wall^^

VELUX Roof Windows are deemed noncombustible and thereby comply with BCA Fire Separation requirements.

- CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences. Roof Window to be in closed position.
- Bushfire testing applicable to 3076 glazing variant Roof Window in roof pitch 18°-75°. Roof Window only. Custom-made flashing required. Tested in closed position, additional mesh protection may be required for opening apertures (consult local council).
- ^^Roof Window cannot be closer than 3mtrs unless the boundary is adjoining a road or public place. Consult BCA for further details.

#### Construction

Frame and sash: Nordic Pine timber. Factory lacquered (2 coats) and treated with a base preservative to reduce mould and mildew.

Exterior capping: Grey aluminium.

### Glazing type

1.20

100

0.30

0.30

#### U-value (W/m<sup>2</sup>K)

Complete Roof Window Glass only

#### Solar Heat Gain Co-efficient

Complete Roof Window Glass only

#### Visible Light Transmittance

Complete Roof Window

0.62

2.07

#### Luminous Efficacy (Ke = VT/SHGC)

Complete Roof Window

U-value and SHGC calculated according to EN 14351-1:2006 and A1:2010 (window size 1140 x 1400mm).

## Laminated double glazing as standard

#### Laminated double 3076 glazing Outer - 4mm toughened Low-E3 coated glass. Cavity - 15mm sealed Argon gas space. Inner - 6.38mm clear laminated glass (0.38 PV B inter layer). Warm edge technology increases energy efficiency.

· Radiant heat block

approx 70% · UV rays block

95%

35dB

· Noise reduction factor

• Double layer of Low-E<sup>3</sup> coating

• 10 year warranty on insulated glass seal

#### Australian Standard AS1288

Laminated glass must be used for roof windows installed 3m or more above floor level.

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# Choice of manually operated blinds



#### **Blockout blinds**

- Provides blockout from light.
- Colour: White on internal side. Silver coating on external side.
- Materials: Light-tight polyester with heat resistant coating. Clear anodized aluminium side channels and top cover.
- Reduce light by approx 100%.
  Reduce heat by approx 40%.



#### Honeycomb blinds

- Adds a decorative effect.
- · Colour: White on both sides.
- Materials: Double layered pleats (polyester) form a 'honeycomb' structure. Inner faces of honeycomb structure have aluminium coating.
- Reduce light by up to 95%. Reduce heat by approx 60%.

Now even easier to fit using VELUX  $\begin{tabular}{ll} Pick & Click! \end{tabular} \begin{tabular}{ll} system. \end{tabular}$ 

NB: NEW VELUX blinds do not fit GGL/GHL/GPL windows purchased prior to June 2015.

#### **GGL** – frame and glazing dimensions SK06 New Product/size code **CK02 CK04 MK04 MK08** (Old code pre June 2015 (CO2) (CO4)(M04)(S06) (80M)550x780 550x980 780x980 780x1400 1140x1180 Overall frame size wxh - mm Internal glass size wxh - mm 371x583 371x783 601x783 601x1203 961x983 Daylight area (M2) 0.22 0.29 0.47 0.72 0.95 Ventilation area (M2) 0.26 0.34 0.53 0.81 1.03 3076 laminated glazing as standard Weight in kg \* 34.9 45.7 53.9 23.6 27.6

#### Weight includes flashing.

## **Choice of flashing**



# EDW flashing for profiled roofing material

EDW flashing is used for Roof Windows installed into tiled roofs and low profiled metal roofs (such as corrugated iron and custom orb).



#### EDL flashing for flat roofing material

EDL flashing is used for Roof Windows installed into slate or shingle roofs – typically 4-8mm thick. 'L' shaped sections are provided that act as soaker pieces on either side of the Roof Window. These soakers sit under each course of slate or shingle and interlock with the course above.

#### **Opening Restrictors**

BCA 2013 Vol 1 & 2 regulations (Prevention of Falls from Windows – Balustrades & Barriers): contact VELUX for information relating to restrictor devices for within-reach opening Roof Windows.

\* For roofs below 15° pitch, roof windows need to be raised to 15° and custom flashed. VELUX can assist with technical advice and drawings. (NB: build-up not recommended in Bushfire areas.)



**NB:** When used in side-by-side/above-below combination, roof windows must be 100mm apart and utilise EKW/L combination flashing.