

# **GGU** Centre-pivot **Roof Window**



Recommended for within-reach situations only

## Construction

VELUX GGU is an opening, centrepivoting roof window used for in-reach applications to bring natural light and air into attic or loft rooms where ventilation is required. Easy to clean, high quality polyurethane molded over a timber core and finished in white. Aluminium external cappings finished in a smooth grey colour, similar to 'COLORSTEEL® Grey Friars'.

# Operation

The GGU is operated manually. The control bar at the top of the window is clicked to allow passive ventilation, whilst the window remains locked and watertight. A second click of the control bar opens the sash. The sash is frictioned to stay in a horizontal pivot position to maximise ventilation.

The sash can be locked in two positions, either slightly ajar or 180°, the fully rotated position, allows the outside pane to be cleaned safely from inside the room.

### **GGU** technical performance

CodeMark<sup>®</sup> is a voluntary scheme owned by the Ministry of Business, Innovation & Employment that provides an easily understood and robust way to show a building product, design or method meets the requirements of the New Zealand Building Code. CodeMark is unchallengeable and has legal status equivalent to that of an Acceptable Solution or Verification Method

#### New Zealand Standards

VELUX Roof Windows are tested and appraised to the appropriate New Zealand Standards.

#### NZS4223 NZS3604 NZS1170

#### H1 Compliance

Listed thermal values (see reverse side) have been verified by BRANZ and can be used for all climate zones to show compliance with NZBC H1/AS1 using Alternative Solution VELUX Schedule Method (CodeMark), or the Calculation Method.

#### Energy rating

GGU Roof Windows have been energy rated in accordance with the Roof Window Energy Rating Scheme (WERS).

## ★ ★ ★ ★ ★ Maximum 5 stars Summer Ratings

4.5 out of 5 stars for Winter Rating. 4.5 out of 5 stars for Cool Daylight in Summer.

#### Construction

Frame and sash: Moulded Polyurethane (white) encapsulating a timber core. Exterior capping: Grey aluminium.



PASSIVE VENT-For controllable passive ventilation when you want it

Technical Values					
R-value					
Refer to reverse side					
Solar Heat Gain Co-efficient					
Complete Roof Window	0.30				
Visible Light Transmittance					
Complete Roof Window	0.64				
Luminous Efficacy (Ke = VT/SHGC)					
Complete Roof Window	2.07				
Acoustic performance					
Complete skylight	34dB#				











LOAD TESTED



DURABILITY Exceeds requirements for Exposure Zone D (NZ3604).



WEATHERTIGHTNESS (NZBC Clause E2)



#### SAFETY GLAZING



ENERGY EFFICIENCY



VENTILATION



NATURAL LIGHT NB: CodeMark certification and BRANZ appraisal scope does not cover installations over 60°

# minated Double Glazing as standard

Laminated Double Glazing as Standard							
Outer – 4mm toughened	Benefits:						
Low-E <sup>2</sup> coated glass.	Radiant heat bl						
Cavity – 15mm sealed Argon gas space.	• Harmful UV ray						
Inner – 6.38mm clear	WERS rating						
laminated glass (0.38 PV B inter layer).	<ul> <li>Low-E<sup>2</sup> coating.</li> </ul>						
Warm edge technology	New Zeala						
increases energy efficiency	. Laminated glass roof windows ins						

lock: Complete window approx 70% Glass only approx 70%

> approx 95% 5 stars

- s block

#### and Standard 4223.4

(standard) must be used for stalled 5m or more above floor level.



# **GGU** Centre-pivot Roof Window

## Manual Blackout Blind (DKL)



- Provides near total light reduction.
- Colour: White rails and internal fabric, silver coating on external fabric face.
- Materials: Light-tight polyester with heat resistant coating. White powder-coated aluminium side channels and top cover.
- Reduce heat by approx 40%^.
- Increased thermal efficiency.
- Unique installation system allows easy installation.

Blinds sold separately.

**NB:** NEW VELUX blinds and flashings do not suit roof windows purchased prior to March 2014.

#### **Opening Restrictions**

Building regulations may require the use of a restrictor device: contact VELUX for

information relating to restrictor devices for within-reach roof windows.

# Choice of flashing

## EDW flashing

EDW flashing is used for roof windows installed into tiled roofs and profiled metal roofs (such as corrugated iron not suitable for concealed clip roof profiles or membrane roofs).



### EDL flashing

EDL flashing is used for roof windows installed into slate or shingle roofs – max 5mm 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.

### EKW combination flashing $X_{150,9}$

Designed for installing multiple roof windows side-by-side or above-below. Roof windows must be spaced 100mm apart. EKW suitable for same roofs as EDW flashing.



#### **Custom flashing**

Useful for situations where VELUX flashing isn't suitable. Such as when installing in a roof outside the installation pitch range (15-90°) or when colour matching to roof is preferable. Not supplied by VELUX. Refer to website or contact VELUX for technical advice and drawings.

## **GGU – Technical Data**

Product/size code ►	СК02	СК04	МК04	МК06	МКО8	SK06	SK08
External frame dimensions mm (wxh)	550x780	550x980	780x980	780x1180	780x1400	1140x1180	1140x1400
Internal glass size mm (wxh)	371x583	371x783	601x783	601x983	601x1203	961x983	961x1203
Daylight area (m²)	0.22	0.29	0.47	0.59	0.72	0.95	1.16
Ventilation with open sash (m <sup>2</sup> )	0.29	0.38	0.58	0.72	0.86	1.10	1.32
R-Value (BRANZ Verified Horizontal R-Value)*	0.50	0.50	0.53	0.53	0.53	0.53	0.55
Weight (kg) including flashing	24.9	29.2	37.8	40.9	47.7	56.7	64.9
Weight (kg) excluding flashing	21.0	25.1	33.2	35.9	42.5	50.9	58.8

^ Based on VELUX internal testing with 3076 model Roof Window.

\* Listed thermal values have been verified by BRANZ and can be used for all climate zones to show compliance with NZBC H1/AS1 using Alternative Solution VELUX Schedule Method (CodeMark), or the Calculation Method.