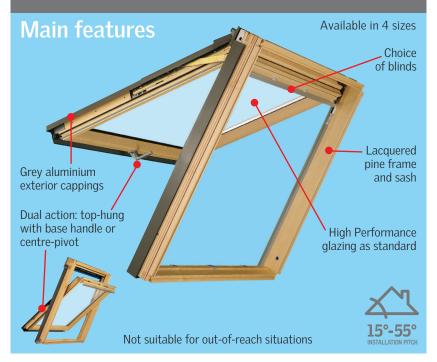
# **GHL** dual action roof window



VELUX GHL is an openable centrepivoting and top-hung "dual action" roof window for within reach applications. Used to bring natural light and air into attics or loft rooms where ventilation is required.

### **Operation**

The GHL 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 central-pivoting 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 GHL can also be opened as a tophung awning window using the bottom handle for full opening or egress.

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

## High Performance glazing as standard

#### High Performance 3076 laminated glazing Outer - 4mm toughened Low-E<sup>3</sup> coated glass. Cavity - 14.5mm sealed Argon gas space. Inner - 6.38mm clear laminated glass (0.38 PV B inter laver). Warm edge technology increases energy efficiency.

Benefits:	3076

80%

35dB

· Radiant heat block

· UV rays block

· 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.





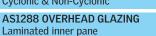
#### GHL technical performance

#### **Australian Standards**

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

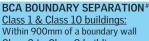
**AS4285 SKYLIGHTS** 

Cyclonic & Non-Cyclonic

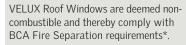


**AS3959 BUSHFIRE** Attack Level 40<sup>^</sup>

#### **AS1530.1 NON-COMBUSTIBILITY**



Class 2 to Class 9 buildings: 3 metres from a boundary wa



- CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences.
- Bushfire testing applicable to 3076 glazing variant Roof Window in roof pitch 18°-55°. Roof Window only. Custom-made flashing required. Additional mesh protection may be required for opening apertures (consult local council).
- Roof Window to be in closed position.

  Roof Window cannot be closer than 3mtrs unless the boundary is adjoining a road or public place.

#### Construction

Frame and sash: Nordic Pine timber. Factory lacquered (3 coats) and treated with a base preservative to reduce mould and mildew.

Exterior capping: Grey aluminium.

Glazing performance

Glazing periormance	
Glazing type	3076
U-value (W/m <sup>2</sup> K)	
Complete Roof Window Glass only	1.40 1.10
Solar Heat Gain Co-efficient	
Complete Roof Window Glass only	0.28 0.28
Visible Light Transmittance	
Complete Roof Window	0.45

#### Complete Roof Window Luminous Efficacy (Ke = VT/SHGC)

Complete Roof Window 1.61

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

# **GHL** dual action roof window

## 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 56%.

Insect screen available as extra.



#### Venetian blinds

- Controls the amount and direction of light
- Colour: Egg-shell white on both sides.
- Materials: 35mm wide slimline aluminium blades. Clear, anodized aluminium side channels and top cover.
- Reduce light by up to 85%. Reduce heat by approx 50%.

Insect screen available as extra.

Now even easier to fit using VELUX (Pick&Click!") system.

## GHL - frame and glazing dimensions

Product/size code ►	C04	M04	M06	M08	
Overall frame size wxh – mm	550x980	780x980	780x1180	780x1400	
Internal glass size wxh – mm	373x730	603x730	603x930	603x1150	
Daylight area (M²)	0.27	0.44	0.56	0.69	
Ventilation area (M²)	0.35	0.55	0.69	0.84	
3076 High Performance glazing sizes available	<b>1</b>	~	~	~	
3076 - weight in kg •	34.9	41.8	47.5	53.9	

#### Weight includes flashing.

## **Choice of flashing**



EDW flashing for profiled roofing material

EDW flashing is used for skylights and roof windows being installed into tile or corrugated (or similar) roofing. Concrete or terracotta tiles with standard profiles can be used. Custom orb profile metal roofing can be used.



#### EDL flashing for flat roofing material

EDL flashing is used for skylights and roof windows being 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.

\* 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 permitted 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.