VCS Solar Skylight Flat Roof

Main features

Construction

White PVC frame and sash components with extruded gaskets. White framed flyscreen as standard.

VCS needs a custom-made flashing, preparation guide overleaf.

Wireless control

The VCS Skylight comes complete with a radio frequency controller with advanced control options for both skylight and blind operations.

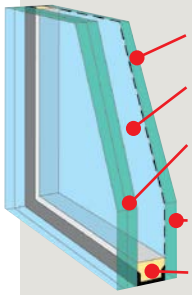
Externally mounted rain sensor automatically closes the skylight once rain is detected**.

One controller (provided) can operate up to 200 VELUX products. Timer function included. For home Automation Systems, KLF 200 interface is available.

High Performance Double Glazing as standard

2004

High Performance laminated glazing



- Outer – 3mm toughened§ Low-E³ coated Cardinal glass.
- Cavity – 9mm sealed Argon gas space.
- Inner – 5.36mm clear laminated Cardinal glass (0.76 PV B inter layer).
- NEAT™ Coating on outer pane reduces cleaning frequency.
- Warm edge technology increases energy efficiency.

§ VCS 4646 outer pane is 3.9mm.

Benefits:

• Radiant heat block: Complete window	approx 75%
Glass only	approx 70%
• UV Harmful rays block	approx 99%
• Noise reduction factor#	32 decibels
• WERS rating	5 stars

- Double layer of Low-E³ coating.
- 10 year warranty on insulated glass seal.
- Reduced cleaning frequency.

Australian Standard AS1288

Laminated glass must be used for skylights installed 3m or more above floor level (standard with VCS).

NEAT™ Photocatalytic Coating

- Silicone Dioxide/Titanium Dioxide coating reacts with the sun's UV rays to decompose surface organic dirt before rinsing away with the next shower of rain, thereby reducing cleaning frequency.
- The coating also makes the glass surface smoother, so water disperses evenly, sheets off, and evaporates quickly; thereby minimising water spotting on the pane.

* VELUX recommends VCS is installed with a slight pitch (e.g. 3°-5°) to help prevent condensation build-up and water ponding on the glass.
**Activation causes the skylight to close faster than normal operation. Rain Sensor can be de-activated for a set period using the remote control unit.
#Based on STC value tested to ISO/IEC 17025:2005.

10 YEAR WARRANTY on skylights and glazing

3 YEAR WARRANTY on blinds, accessories & electric controls

VCS technical performance

Australian Standards

VELUX Skylights 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 Skylights are deemed non-combustible and thereby comply with BCA Fire Separation requirements.

± Tests performed on skylight installed with #8 roofing screws (not screws provided).
† CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences. Skylight assessed in closed position.
^ Roof pitch 0°- 60°. Skylight only. Custom-made flashing required. Skylight assessed in closed position, additional mesh protection may be required for opening apertures (consult local council). BAL assessed – based on VSS results.
^^ Skylight cannot be closer than 3m unless the boundary is adjoining a road or public place. Consult BCA for further details.

Energy rating

VCS Skylights have been energy rated in accordance with the Skylight 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.

Glazing type	2004
U-value (W/m²K)	
Complete skylight	2.9‡
Glass only	1.93
Solar Heat Gain Co-efficient	
Complete skylight	0.24
Glass only	0.28
Visible Light Transmittance	
Complete skylight	0.55
Luminous Efficacy (Ke = VT/SHGC)	
Complete skylight	2.29

All figures generated by AFRC accredited simulators.
Figures based on complete skylight: nominal size 1275mm (W) x 1275mm (H).
‡ See required installation method overleaf.

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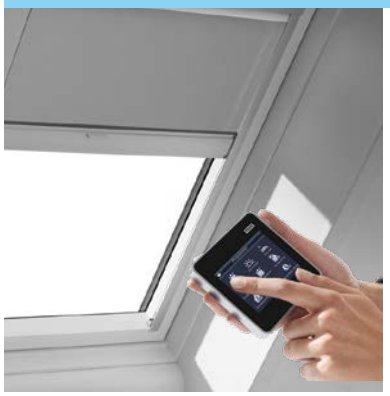
Solar powered blinds

The thermal performance of VCS Skylights can be enhanced with the inclusion of a blind. Tailor-made to fit perfectly to each size of skylight, they are easy to install and are supplied with aluminium side channels allowing blinds to be positioned as any point on the skylight.

No additional electrical control system required when adding blinds. (Blinds use remote control supplied with VCS).

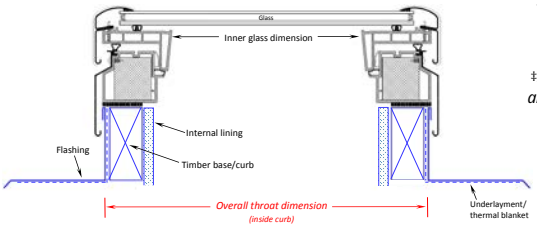
Blockout blinds



- Provides blockout from light.
- Colour: White on internal side. Silver coating on external side.
- Materials: Light-tight polyester with heat resistant coating. Aluminium side channels and top cover.
- Reduce light by approx 100%. Reduce heat by approx 40%.^
- Easy to fit using VELUX Pick&Click!® system.

Blinds sold separately.

Preparation guide for custom-made flashing



Throat on custom-made flashing must not exceed 35mm – otherwise Gyprock, when installed, will encroach upon glass area.

‡Skylight must be installed with timber hob and Gyprock, as shown (typical installation), to achieve 2.9 U-value rating.

Important considerations

- VELUX VCS Skylights can be used for flat and low sloping roofs. The low profile external covering and glazing seal prevents water infiltration even at 0°. To help prevent water 'ponding' on the glass a slight pitch (e.g. 3°-5°) is recommended.
- VELUX VCS does not come with a flashing kit but can be used with a variety of custom-made curb flashings. Contact VELUX or a local flashing manufacturer for more information.
- When installing VCS in an above/below combination, a minimum 250mm frame separation is required to allow clearance of the solar/rain sensor panel.

Opening Restrictions

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 skylights.

VCS – frame and glazing dimensions

2004 High Performance laminated glazing as standard

Product/size code ▶	2222	2234	2246	3030	3046	4646
Throat dimensions wxh (mm)	665x665	665x970	665x1275	870x870	870x1275	1275x1275
Internal glass size wxh (mm)	495x495	495x799	495x1104	698x698	698x1104	1104x1104
Daylight area (m^2)	0.24	0.39	0.55	0.49	0.77	1.22
Ventilation area (m^2)	0.30	0.39	0.48	0.42	0.54	0.66
2004 High Performance glazing	✓	✓	✓	✓	✓	✓
Weight in kg *	20.6	29.9	34.6	31.3	43.1	57.2

Skylights can only be installed as per orientation depicted above.
* Weight does not include flashing.
^ Based on VELUX internal testing with 3076 model Roof Window.