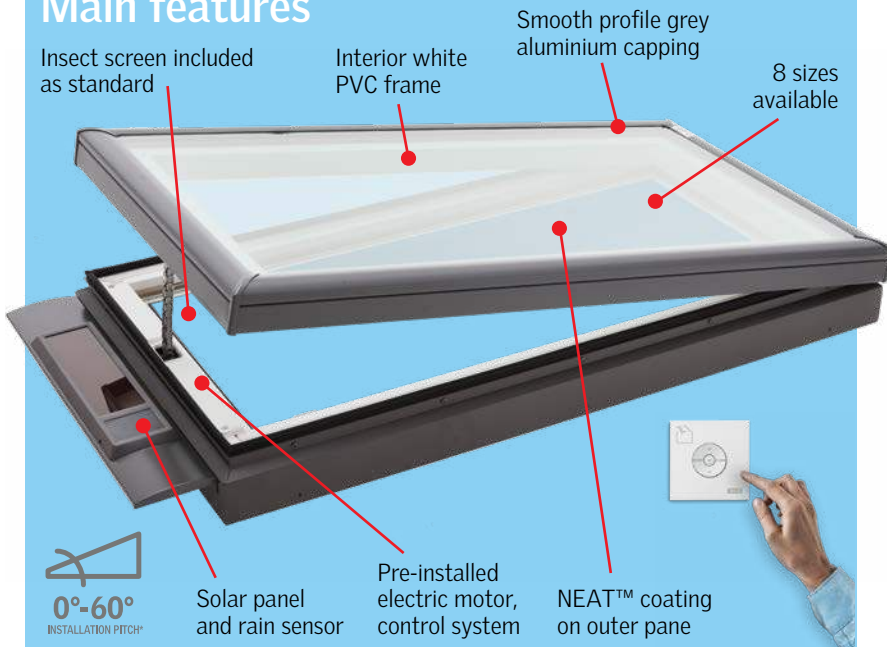


# VCS Solar Skylight Flat Roof

## 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 pre-programmed radio frequency controller for skylight operation.

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

## VELUX ACTIVE

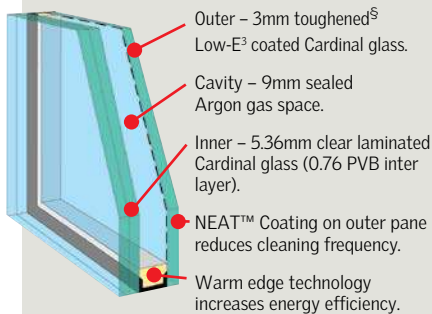
Indoor climate control (sold separately)

- **Sensor-based ventilation:** Smart sensors continuously monitor temperature, humidity and CO<sub>2</sub> levels and open or close your skylights accordingly.
- **Stay in control:** Use the app to operate your skylights and blinds using your smartphone.



VELUX Active operates on 2.4GHz and is compatible with modern 'smart' modems. (Select the 2.4GHz channel in dual mode on your modem).

## High Performance Double Glazing



<sup>§</sup> 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%**
- WERS rating **5 stars**
- Double layer of Low-E<sup>3</sup> coating.
- 10 year warranty on insulated glass seal.
- Reduced cleaning frequency.

### Australian Standard AS1288

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

## NEAT™ Photocatalytic Coating

- Silicene 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 reduce condensation build-up and water ponding on the glass.

\*\*Activation causes the skylight to close faster than normal operation.

**10 YEAR WARRANTY**  
on skylights and glazing

**3 YEAR WARRANTY**  
on blinds, accessories & electric controls

## VCS technical performance

Code Mark is a voluntary certification scheme owned by the Commonwealth of Australia that provides legally binding evidence of compliance to the National Construction Code of Australia. One certificate replaces dozens of technical papers.



### Australian Standards

VELUX Skylights are tested and approved to the appropriate Australian Standards.

### AS4285 SKYLIGHT-Cyclonic and Non-Cyclonic Tests<sup>‡</sup>

Pressure Rating -2.16kPa

### AS1288 OVERHEAD GLAZING Laminated inner pane

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

### NCC BOUNDARY SEPARATION<sup>†</sup> Class 1 and Class 10 buildings: Within 900mm of a boundary wall Class 2 to Class 9 buildings: 3 metres from a boundary wall<sup>^^</sup>

VELUX Skylights are deemed non-combustible by CSIRO and thereby comply with NCC boundary separation requirements.

<sup>‡</sup> Tests performed on skylight installed with #8 roofing screws (no screws provided). Not certified for NT DTCM.

<sup>†</sup> CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences. Skylight assessed in closed position.

<sup>^</sup> Roof pitch 0°-60° Skylight only. Custom-made flashing required. Skylight tested in closed position (VCS BAL assessed – based on VSS results), metal flywire mesh protection may be required for opening apertures (consult local council).

<sup>^^</sup> Skylight cannot be closer than 3m unless the boundary is adjoining a road or public place. Consult NCC for further details.

## Hailstone Test

VELUX Simulated Tests <sup>††</sup>ASTM E822-2009.

<sup>††</sup> ASTM E822-2009 standard practice for determining resistance of Solar Collector Covers to Hail impact with propelled ice balls. Hailstone test not performed on solar panel.

## Energy rating

VCS Openable 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.

## Technical Values

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

Complete skylight	2.9 <sup>‡</sup>
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
-------------------	------

### Acoustic performance

Complete skylight	31dB <sup>#</sup>
-------------------	-------------------

Figures generated by AFRC accredited simulators. Figures based on complete skylight: nominal size 1275mm (W) x 1275mm (H).

<sup>‡</sup> See required installation method overleaf.

<sup>#</sup> Based on Rw value tested to A1276.1.

# VCS Solar Skylight Flat Roof

## 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 white powder-coated aluminium side channels allowing blinds to be positioned at any point on the skylight.

No additional electrical control system required when adding blinds. (Blinds supplied with wireless wall-mounted keypad).

## 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. White powder-coated aluminium side channels and top cover.
- Provides near total light reduction.
- Reduce heat by approx 70%.<sup>^</sup>
- Easy to install.

Blinds sold separately.

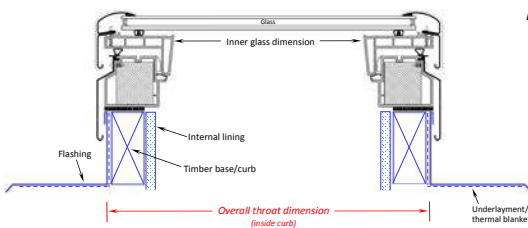
## Important considerations

- 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 reduce 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, solar panel needs to be relocated using relocation kit (supplied with skylight).

## Opening Restrictions

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

## Preparation guide for custom-made flashing



Note: If timber hob is greater than 38mm the Gyprock will encroach past the edge of the internal frame.

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

## VCS – frame and glazing dimensions

Product/size code ▶	2222	2234	2246	3030	3046	3434	4622	4646
Throat dimensions wxh (mm)	665x665	665x970	665x1275	870x870	870x1275	970x970	1275x665	1275x1275
Internal glass size wxh (mm)	495x495	495x799	495x1104	698x698	698x1104	799x799	1104x495	1104x1104
Daylight area (m <sup>2</sup> )	0.24	0.39	0.55	0.49	0.77	0.64	0.55	1.22
Ventilation area (m <sup>2</sup> )	0.46	0.66	0.87	0.77	1.13	0.96	0.87	1.65
Weight in kg‡	20.6	29.9	34.6	31.3	43.1	41.7	34.1	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.