

# VCS Solar Skylight Flat/low-pitched roof

## Main features



**10 YEAR WARRANTY**  
on skylights,  
and glazing

**1 YEAR WARRANTY**  
on blinds  
and accessories

## VCS technical performance

### New Zealand Standards

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

### New Zealand Standard NZS4223

### Hailstone Test

VELUX Simulated Tests ^ASTM E822-2009.

^ 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 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.



BRANZ Appraised  
Appraisal No.958 [2017]

**WORLD-CLASS QUALITY**



**LOAD TESTED**  
(NZBC Clause B1)



**DURABILITY**  
(NZBC Clause B2)



**WEATHERTIGHTNESS**  
(NZBC Clause E2)



**SAFETY GLAZING**  
(NZBC Clause F2)



**ENERGY EFFICIENCY**  
(NZBC Clause H1)



**VENTILATION**  
(NZBC Clause G4)



**NATURAL LIGHT**  
(NZBC Clause G7)

**NB:** BRANZ appraised scope does not cover custom flashing.

## Construction

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

Curb mounted VCS needs a custom made flashing made by roofer.†

Aluminium outer frame finished in a smooth grey colour, similar to 'COLORSTEEL® Grey Friars'.

## Wireless control

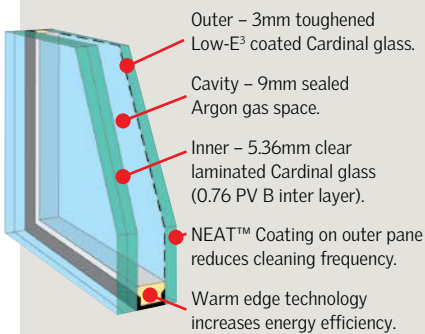
The VCS Skylight model comes with a radio-frequency touch screen controller and advanced control options for both skylight and blind operations.

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

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



## High Performance Double Glazing as standard



### Benefits and features:

- Radiant heat block: Complete window **approx 76%**
- Harmful UV rays block **approx 99%**
- Noise reduction factor **32 decibels\***
- WERS rating **5 stars**
- Low-E<sup>3</sup> coated.
- 10 year warranty on insulated glass seal.
- Reduced cleaning frequency.

## 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.



\*\*Activation causes the skylight to close faster than normal operation. Rain Sensor can be temporarily de-activated for a set period using the remote control unit.

\* Recommend 3°-5° pitch to help prevent water 'ponding' on the glass.

Glazing type	04
R-value‡	
Complete skylight	0.40
Solar Heat Gain Co-efficient‡	
Complete skylight	0.24
Visible Light Transmittance	
Complete skylight	0.55
Luminous Efficacy (Ke = VT/SHGC)	
Complete skylight	2.29

‡ R-value (m<sup>2</sup> K/W) and SHGC data based on NFRC simulations at 90° installation pitch (VCS nominal skylight size 1275mm x 1275mm).

† See preparation guide overleaf.

# Based on STC value tested to ISO/IEC 17025:2005.

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## Solar-Powered Blackout Blind (DSC)

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 at any point on the skylight.



- Provides blackout 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%.
- Increased thermal efficiency.

Now even easier to fit using VELUX **Pick&Click!**® system.

Blinds sold separately.

**NB:** No additional electrical control system required when adding blinds. (Blinds use remote control supplied with VCS or KLI 110 supplied with blind).

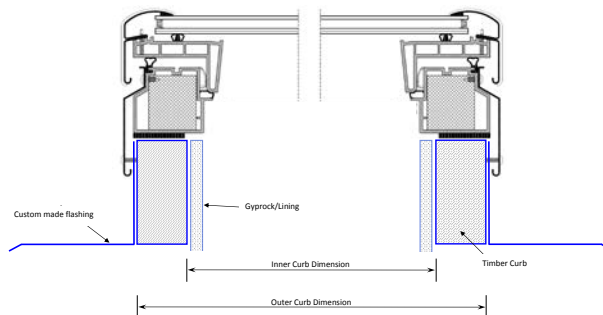
### Important considerations

- VELUX VCS Skylights can be used for low sloping roofs. The low profile external covering and glazing seal prevents water infiltration even at 0°. To prevent water 'ponding' on the glass a slight pitch (e.g. 3°–5°) is recommended.
- VCS is a curb mounted skylight and requires a custom made flashing to be made by roofer. See below for curb dimensions. (No VELUX proprietary flashing available).

### Opening Restrictions

Building regulations may require the use of a restrictor device: contact VELUX for information relating to restrictor devices for within-reach opening skylights.

## Preparation guide for custom-made flashing



Timber used in construction of curb must not exceed 35mm to avoid interference with skylight operation and glass areas.

### Consideration

When installing VCS in an above/below combination, a minimum 250mm frame separation is required to allow clearance of the solar/rain sensor panel.

## VCS – frame and glazing dimensions – technical details

High Performance Double Glazing as standard

Product/size code ▶	2222	2246	3030	4646
External frame dimensions wxh (mm)	692x692	692x1302	895x895	1302x1302
Outer curb dimensions wxh (mm)	648x648	648x1257	851x851	1257x1257
Inner curb dimensions wxh (mm)	572x572	572x1181	775x775	1181x1181
Daylight area (m <sup>2</sup> )	0.26	0.55	0.49	1.22
Ventilation area (m <sup>2</sup> )	0.29	0.48	0.42	0.66
Weight in kg *	20.6	34.6	31.3	57.2

Skylights can only be installed as per orientation depicted above.  
\* Weight does not include flashing.