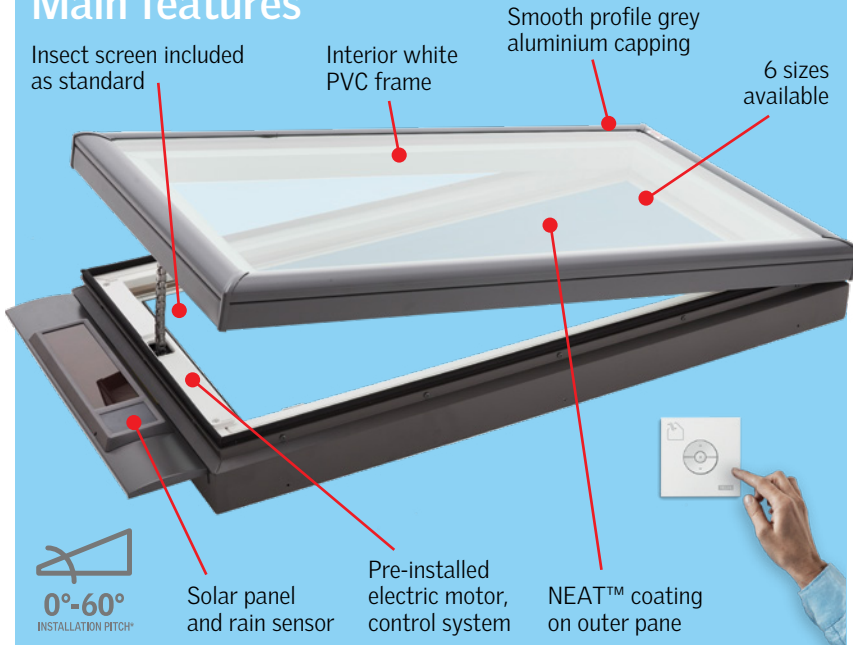


# VCS Solar Skylight Flat/low-pitched roof

## Main features



## VCS technical performance

### New Zealand Standards

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

NZS4223 NZS3604 NZS1170

**AS4285 SKYLIGHTS**  
Cyclonic & Non-Cyclonic

### 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**



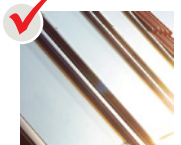
**LOAD TESTED**  
(NZBC Clause B1)



**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 flyscreen as standard.

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

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

## Wireless control

The VCS Skylight comes complete with a pre-paired radio frequency controller for skylight operation.

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

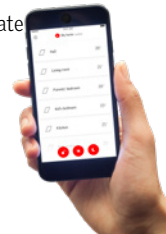
## VELUX ACTIVE

Indoor climate control (sold separately)

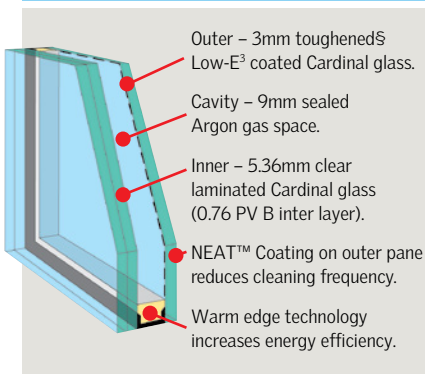
- **Sensor-based ventilation:** Smart sensors continuously monitor

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.



## High Performance Double Glazing



### Benefits:

- Radiant heat block: Complete window **approx 75%**  
Glass only **approx 70%**
- UV Harmful rays block **approx 99%**
- WERS rating **5 stars**
- Low-E<sup>3</sup> coated. ✓
- Reduced cleaning frequency. ✓

### New Zealand Standard 4223.4

Laminated glass (standard) must be used for skylights installed 5m or more above floor level.

§ VCS 4646 outer pane is 3.9mm

## Technical Values

**R-value<sup>‡</sup>**  
Complete skylight 0.40

**Solar Heat Gain Co-efficient<sup>‡</sup>**  
Complete skylight 0.24

**Visible Light Transmittance**  
Complete skylight 0.55

**Luminous Efficacy (Ke = VT/SHGC)**  
Complete skylight 2.29

**Acoustic performance**  
Complete skylight 31dB<sup>#</sup>

<sup>‡</sup> 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).

<sup>#</sup> Based on RW value tested to AS1276.1.

## 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.



\* The VCS is watertight for pitches between 0-60°, though raising the installation pitch to 10° may be preferred for best aesthetic appearance. Below this pitch you are likely to experience water ponding on the glass.

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

# VCS Solar Skylight Flat/low-pitched roof

## 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.

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



- 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%.
- Reduce heat by approx 40%.
- Increased thermal efficiency.
- Easy to fit using VELUX **Pick&Click!**® system.

Blinds sold separately.

**NB:** No additional electrical control system required when adding blinds. (Blinds supplied with remote control).

## 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°. Raising the installation pitch to 10° may be preferred for best aesthetic appearance. Below this pitch you are likely to experience water ponding on the glass.
- 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).

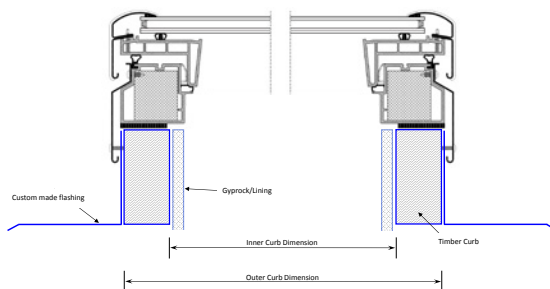
## Opening Restrictions

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

## Consideration

When installing VCS in an above/below combination, solar panel may need to be moved using relocation kit (provided). Contact VELUX for more information.

## Preparation guide for custom-made flashing



## VCS – frame and glazing dimensions

Profile height above batten 100mm

Product/size code ▶	2222	NEW 2234	2246	3030	NEW 3046	4646
External frame dimensions wxh (mm)	692x692	692x997	692x1302	895x895	895x1302	1302x1302
Outer curb dimensions wxh (mm)	645x645	645x950	645x1255	850x850	850x1255	1255x1255
Inner curb dimensions wxh (mm)	572x572	572x876	572x1181	775x775	775x1181	1181x1181
Daylight area (m <sup>2</sup> )	0.24	0.39	0.55	0.49	0.77	1.22
Ventilation area (m <sup>2</sup> )	0.29	0.39	0.48	0.42	0.54	0.66
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.