VCS Solar Skylight
Flat/Low-Pitched roof

Main features

Insect screen included as standard

Interior white PVC frame

Smooth profile grey aluminium capping

7 sizes available

0°-60° INSTALLATION PITCH*

Solar panel and rain sensor

Pre-installed electric motor, control system

NEAT™ coating on outer pane
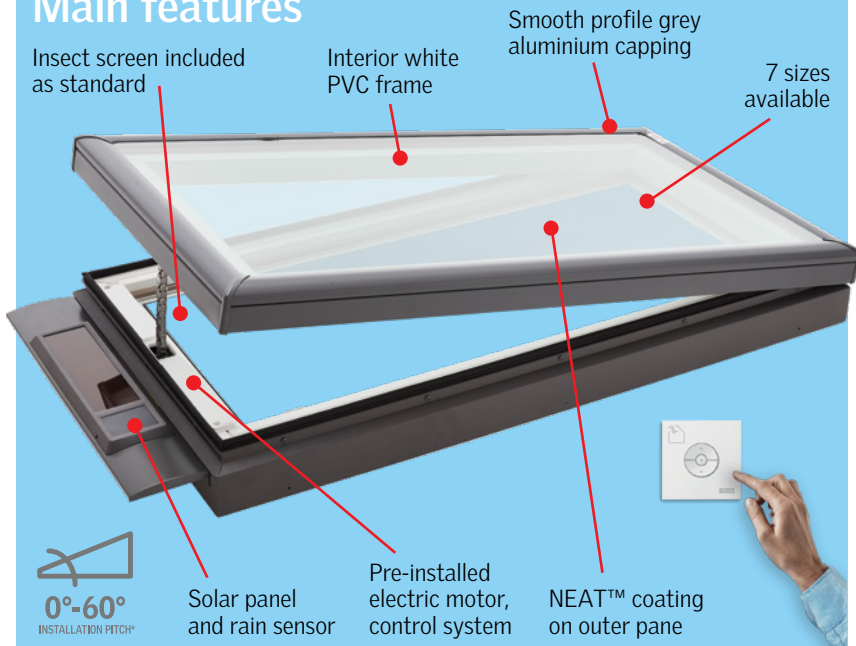
Construction

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.'

Wireless control

The VCS Skylight comes complete with a pre-programmed wireless wall mounted keypad for skylight operation. Externally mounted rain sensor automatically closes the skylight once rain is detected**.
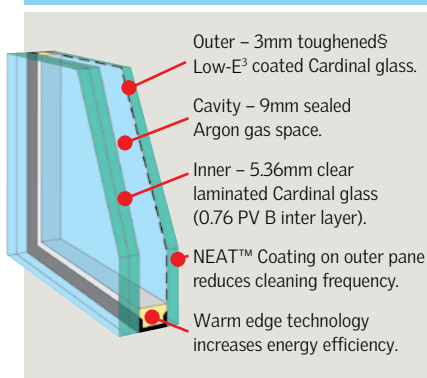
VELUX ACTIVE

Indoor climate control (sold separately)

• **Sensor-based ventilation:**
  Smart sensors continuously monitor temperature, humidity and CO_2 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

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.

Benefits:

• Radiant heat block: Complete window	approx 75%
Glass only	approx 70%
• UV Harmful rays block	approx 99%
• WERS rating	5 stars
• Low-E³ 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

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.

Neat

* 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 technical performance

CodeMark® is a voluntary scheme owned by the Ministry of Business, Innovation & Employment that provides an easily understood and robust way to show a building product, design or method meets the requirements of the New Zealand Building Code. CodeMark is unchallengeable and has legal status equivalent to that of an Acceptable Solution or Verification Method.

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.

Technical Values

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

Acoustic performance	
Complete skylight	31dB#

‡ R-value (m² K/W) and SHGC data based on NFRC simulations at 90° installation pitch (VCS nominal skylight size 1275mm x 1275mm).

Based on STC value tested tp AS1276.1.

CODEMARK® New Zealand
BRANZ-CM-1008

BRANZ Appraised
Appraisal No.968 [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: CodeMark certification and BRANZ appraisal scope does not cover installations over 60°.

VCS Solar Skylight
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Solar-Powered Honeycomb Blind (FSCC)

The thermal performance of VCS Skylights can be enhanced with the inclusion of a blind. Different levels of light and heat control are available by using Honeycomb blinds. 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).

- Provides near total light reduction.
- Adds a decorative effect.
- Colour: White material and rails.
- Materials: Double layered pleats (polyester) form a 'honeycomb' structure. Inner structure of honeycomb has aluminium coating. White powder-coated aluminium side channels and top cover.
- Reduce heat by approx 60%.^
- Unique installation system allows easy installation.

Blinds sold separately.

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

Custom made flashing

Timber base/curb

Outer Curb Dimension

Timber curb to be made from 35mm – 38mm timber.
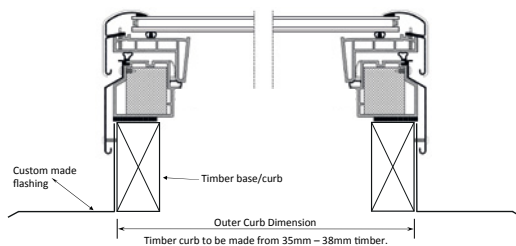
VCS – frame and glazing dimensions

Product/size code ▶	2222	2234	2246	3030	3046	4622	4646
External frame dimensions wxh (mm)	692x692	692x997	692x1302	895x895	895x1302	1302x692	1302x1302
Outer curb dimensions wxh (mm)	645x645	645x950	645x1255	850x850	850x1255	1255x645	1255x1255
Visible glass dimensions wxh (mm)	572x572	572x876	572x1181	775x775	775x1181	1181x572	1181x1181
Daylight area (m²)	0.24	0.39	0.55	0.49	0.77	0.55	1.22
Ventilation area (m²)	0.46	0.66	0.87	0.77	1.13	0.87	1.65
Weight in kg †	22.0	28.3	34.6	31.3	41.3	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.