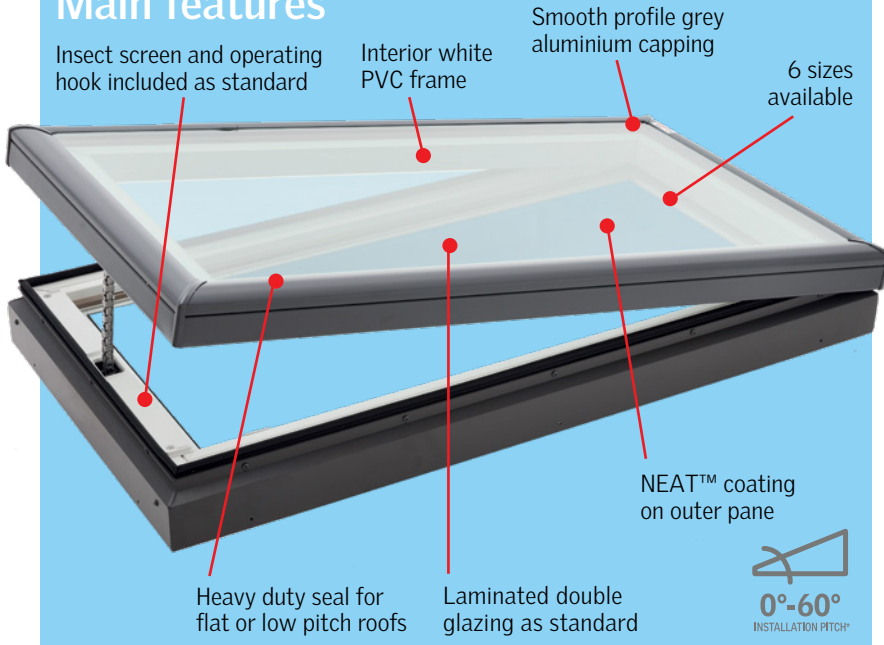


VCM Manual Skylight Flat/Low Pitched roof

Main features



Construction

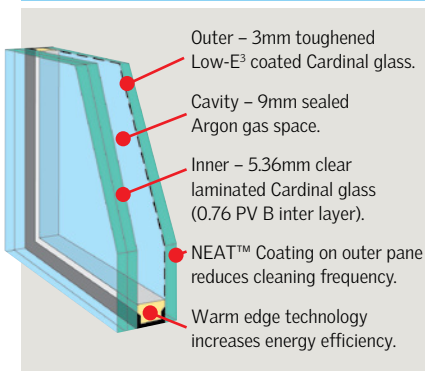
White PVC frame and sash components with extruded gaskets. White framed insect screen included as standard.

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

Operation

VCM Skylights are manually operated. The VCM has a hook included which requires a rod control to wind the hook and open the sash, or for applications within reach, a winder handle can be used.

High Performance Double Glazing



Benefits:

- Radiant heat block: Complete window **approx 76%**
Glass only **approx 70%**
- UV Harmful rays block **approx 99%**
- WERS rating **5 stars**
- Low-E³ coating. ✓
- Reduced cleaning frequency. ✓

New Zealand Standard 4223.4

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

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 VCM 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.

VCM 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.

Energy rating

VCM 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 (VCM nominal skylight size 1200mm x 1200mm).

#Based on STC value tested to AS1276.1.

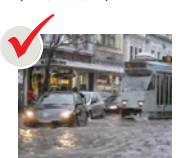
WORLD-CLASS QUALITY



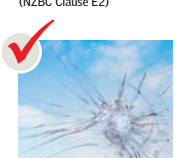
LOAD TESTED
(NZBC Clause B1)



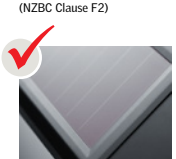
DURABILITY
(NZBC Clause E2)



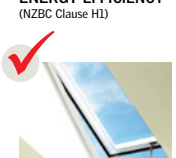
WEATHERTIGHTNESS
(NZBC Clause E2)



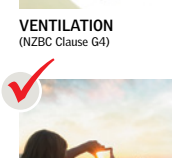
SAFETY GLAZING
(NZBC Clause F2)



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°.

VCM Manual Skylight Flat/Low Pitched roof

Solar Powered Honeycomb Blind (FSCC)

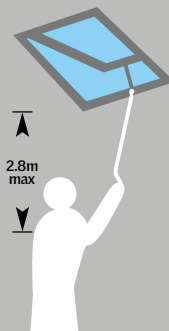


- Provides near total light reduction.
- Adds a decorative effect.
- Colour: White material and rails.
- Materials: Double layered pleats (polyester) form a 'honeycomb' structure. Inner structure of honeycomb has aluminium coating. White powder-coated aluminium side channels and top cover.
- Reduce heat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

Blinds sold separately.

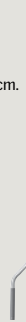
Control options- sold separately

Out of reach



ZCT 300 extension rod

Telescopic rod control adjustable from 145 – 285cm. Attaches to operating hook for simple winding action to open and close.



Within reach situations



ZZZ 212 winder handle

Replaces operating hook for simple winding action to open and close.



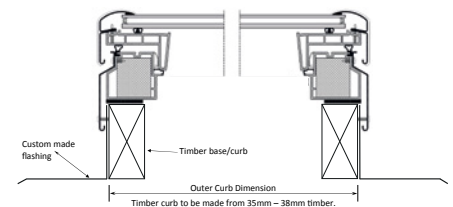
Important considerations

- VELUX VCM 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.
- VCM 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 Restrictors

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



VCM – frame and glazing dimensions

Product/size code ▶	2222	2234	2246	3030	3046	4646
External frame dimensions wxh (mm)	692x692	692x997	692x1302	895x895	895x1302	1302x1302
Outer curb dimensions wxh (mm)	645x645	645x950	645x1255	650x650	850x1255	1255x1255
Visible glass dimensions wxh (mm)	572x572	572x876	572x1181	775x775	775x1181	1181x1181
Daylight area (m ²)	0.24	0.39	0.55	0.49	0.77	1.22
Ventilation area (m ²)	0.29	0.46	0.62	0.55	0.85	1.32
Weight in kg [*]	19.8	26.0	32.2	29.1	39.1	55.1

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.