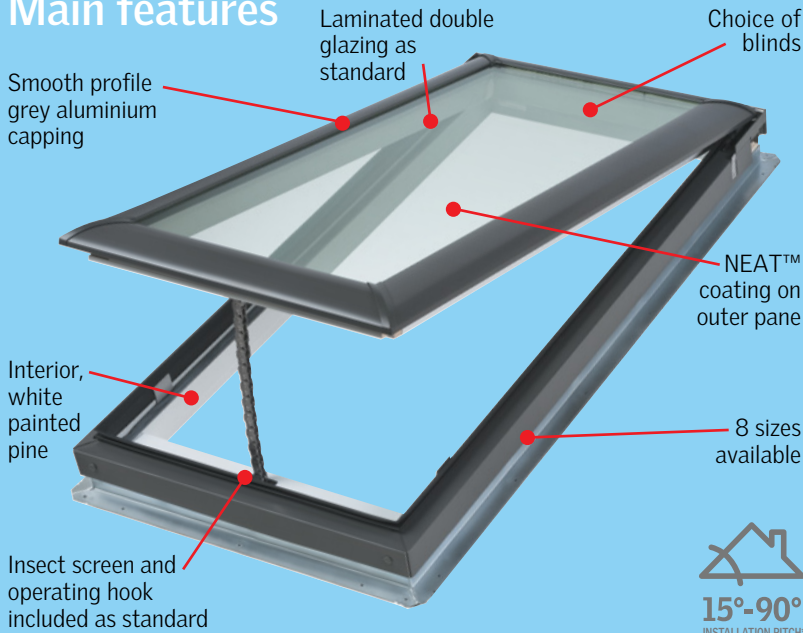


# VS Manual Skylight Pitched roof

## Main features



## Construction

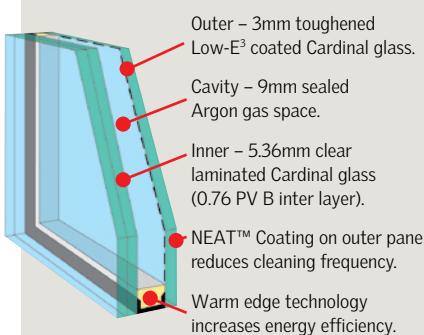
Quality frame made from Ponderosa pine. Factory treated with a wood preservative and further treated with white enamel paint (2 coats) for a clean interior finish.

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

## Operation

VS Skylights are operated manually. The VS has a hook included which requires the ZCT 300 rod control to wind the hook and open the sash. Or for applications within reach, the ZZZ 201 winder handle can be used.

## High Performance Double Glazing



### Benefits:

- Radiant heat block: Complete window **approx 80%**  
Glass only **approx 70%**
- UV Harmful rays block **approx 99%**
- WERS rating **5 stars**
- Low-E<sup>3</sup> 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.

\* For roofs below 15° pitch, skylights need to be raised to at least 15° and custom flashed. (Not supplied by VELUX). Refer to website or contact VELUX for technical advice and drawings.

## VS 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

VS 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.

## WORLD-CLASS QUALITY



LOAD TESTED  
(NZBC Clause B1)



DURABILITY  
(NZBC Clause B2)



WEATHER TIGHTNESS  
(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°.

## Technical Values

### R-value‡

Complete skylight 0.50

### Solar Heat Gain Co-efficient‡

Complete skylight 0.23

### Visible Light Transmittance

Complete skylight 0.54

### Luminous Efficacy (Ke = VT/SHGC)

Complete skylight 2.35

### Acoustic performance

Complete skylight 32dB#

‡ R-value (m² K/W) and SHGC data based on NFRC simulations at 90° installation pitch (VS nominal skylight size 1200mm x 1200mm).

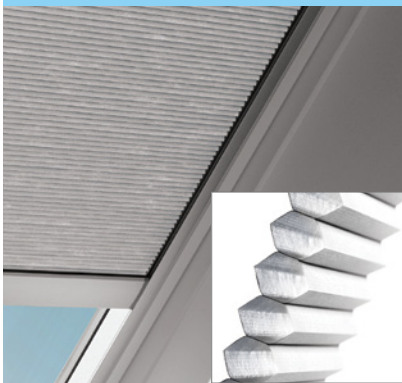
#Based on STC value tested to AS1276.1.

# VS Manual Skylight Pitched roof

## Choice of solar powered blinds

The thermal performance of VS Skylights can be enhanced with the inclusion of a blind. Different levels of light and heat control are available by using the Honeycomb or Blackout 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. (Blinds supplied with wireless wall mounted keypad).

### Honeycomb blinds (FSCH)



- Provides near total light reduction.
- Colour: White material and rails.
- 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.
- Reduce heat by approx 60%.<sup>^</sup>
- Unique installation system allows easy installation.

### Blackout blinds (DSH)



- Provides near total light reduction.
- Colour: White rails and internal fabric, silver coating on external fabric face.
- Materials: Light-tight polyester with heat resistant coating. White powder-coated aluminium side channels and top cover.
- Reduce heat by approx 40%.<sup>^</sup>
- Unique installation system allows easy installation.

Blinds sold separately.

## Choice of flashing

### EDW flashing



EDW flashing is used for skylights installed into tiled roofs and profiled metal roofs (such as corrugated iron – not suitable for concealed clip roof profiles or membrane roofs).



### EDL flashing



EDL flashing is used for skylights installed into slate or shingle roofs – max 5mm thick. 'L' shaped sections are provided that act as soaker pieces on either side of the skylight.



### EKW combination flashing



Designed for installing multiple skylights side-by-side or above-below. Skylights must be spaced 100mm apart. EKW suitable for same roofs as EDW flashing.

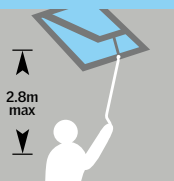


\* For roofs below 15° pitch, skylights need to be raised to at least 15° and custom flashed. (Not supplied by VELUX). Refer to website or contact VELUX for technical advice and drawings.

## Opening Restrictions

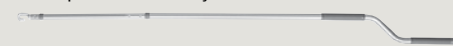
Building regulations may require the use of a restrictor device: contact VELUX for information relating to restrictor devices for within-reach opening skylights.

## Control options – sold separately



### ZCT 300 extension rod

Telescopic rod control adjustable from 145 – 285cm.



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



### ZZZ 201 winder handle



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

## VS – frame and glazing dimensions

Product/size code ▶	C04	C08	M02	M04	M06	M08	S01	S06
External frame dimensions mm (wxh)	550x980	550x1400	780x780	780x980	780x1180	780x1400	1140x700	1140x1180
Internal glass size mm (wxh)	407x799	407x1219	637x599	637x799	637x999	637x1219	997x519	997x999
Daylight area (m <sup>2</sup> )	0.33	0.50	0.38	0.51	0.64	0.78	0.52	1.00
Ventilation with open sash (m <sup>2</sup> )	0.44	0.64	0.51	0.65	0.79	0.95	0.68	1.20
Weight (kg) including flashing	24.7	31.9	28.5	31.6	35.3	39.7	36.1	48.3
Weight (kg) excluding flashing	21.1	28.0	24.5	27.4	31.0	35.2	31.3	43.1

Skylights can only be installed as per orientation depicted above.  
<sup>^</sup> Based on VELUX internal testing with 3076 model Roof Window.