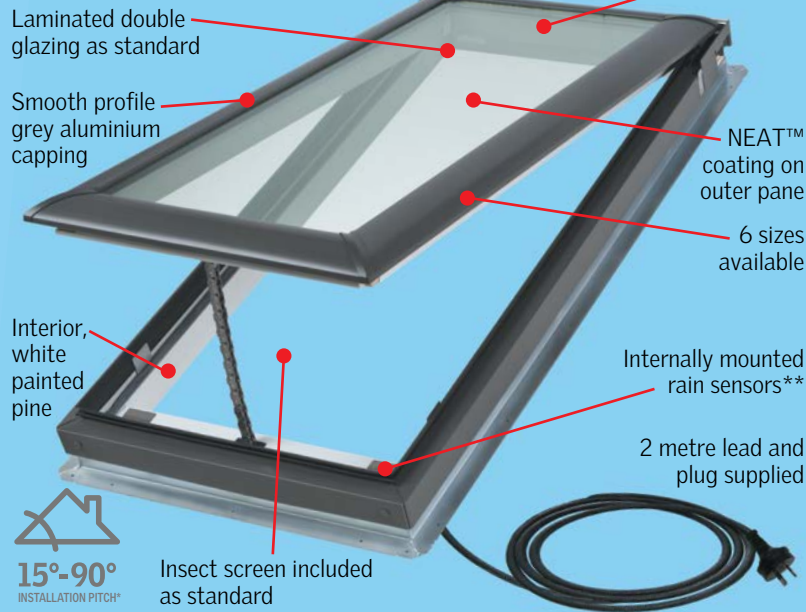


# VSE Electric Skylight Pitched roof

## Main features



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

**1 YEAR WARRANTY**  
on blinds  
and accessories



BRANZ Appraised  
Appraisal No.958 [2017]

**WORLD-CLASS QUALITY**

## VSE 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.

### Energy rating

VSE 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.



**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 or installations over 60°.

## 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.

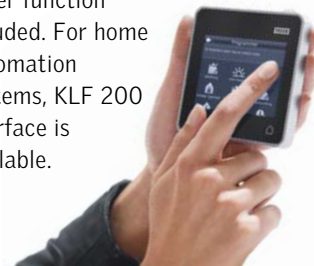
Aluminium external capping finished in a smooth grey colour, similar to 'COLORSTEEL® Grey Friars'.

## Wireless control

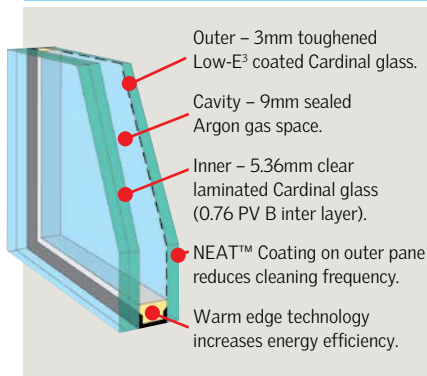
The VSE Skylight comes with a radio-frequency touch screen controller and advanced control options for both skylight and blind operations.

Internally mounted rain sensors, exposed to the rain when the skylight is open, automatically close the skylight once rain is detected\*\*.

One controller (provided) can operate up to 200 VSE 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 77%**
- Harmful UV rays block **approx 99%**
- Noise reduction factor **32 decibels#**
- WERS rating **5 stars**
- Low-E<sup>3</sup> coating.
- 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.



\* 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.

| Glazing type                              | 04   |
|---|------|
| R-value <sup>‡</sup>                      |      |
| Complete skylight                         | 0.50 |
| Solar Heat Gain Co-efficient <sup>‡</sup> |      |
| Complete skylight                         | 0.23 |
| Visible Light Transmittance               |      |
| Complete skylight                         | 0.54 |
| Luminous Efficacy (Ke = VT/SHGC)          |      |
| Complete skylight                         | 2.35 |

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

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

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

# VSE Electric Skylight Pitched roof

## Solar-Powered Blackout Blind (DSH)

The thermal performance of VSE Skylights can be enhanced with the inclusion of a blind. Different levels of light and heat control are available by using the Blackout 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 VSE). NEW VELUX blinds and flashings do not fit VELUX Skylights manufactured prior to March 2010 and must be ordered accordingly.

## Choice of flashing

### EDW flashing for profiled roofing material

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 for flat roofing material

EDL flashing is used for skylights installed into slate or shingle roofs – max 8mm thick. 'L' shaped sections are provided that act as soaker pieces on either side of the skylight.



\* 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.







**NB:** When used in side-by-side combination, skylights must have 100mm frame separation and utilise EKW/L combination flashing.

## 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.

## VSE – frame and glazing dimensions – technical details

High Performance Double Glazing as standard

| Product/size code ▶                          |  C04 |  M04 |  M06 |  M08 |  S01 |  S06 |
|--|---|---|---|---|---|---|
| External frame dimensions mm (wxh)           | 550x980   | 780x980   | 780x1180  | 780x1400  | 1140x700  | 1140x1180   |
| Internal glass size mm (wxh)                 | 407x799   | 637x799   | 637x999   | 637x1219  | 997x519   | 997x999   |
| Daylight area (m <sup>2</sup> )              | 0.33  | 0.51  | 0.64  | 0.78  | 0.52  | 1.00  |
| Ventilation with open sash (m <sup>2</sup> ) | 0.33  | 0.39  | 0.44  | 0.49  | 0.40  | 0.54  |
| Weight (kg) including flashings              | 25.2  | 31.9  | 35.9  | 40.2  | 36.2  | 48.6  |
| Weight (kg) excluding flashings              | 21.8  | 28.0  | 31.8  | 35.9  | 31.5  | 43.6  |

Skylights can only be installed as per orientation depicted above.