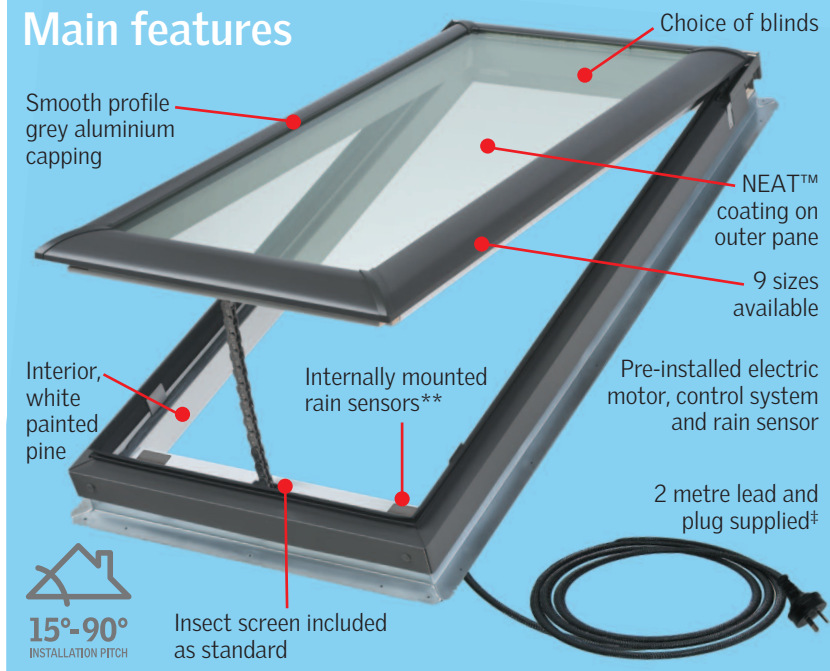


VSE electronically operated top-hung skylight

Main features



VSE technical performance

Australian Standards

VELUX Skylights are tested and approved to the appropriate Australian Standards.

AS4285 SKYLIGHTS
Cyclonic & Non-Cyclonic ✓

AS1288 OVERHEAD GLAZING
Laminated inner pane ✓

AS3959 BUSHFIRE
Attack Level 40^ ✓

AS1530.1 NON-COMBUSTIBILITY ✓

BCA BOUNDARY SEPARATION#
Class 1 & Class 10 buildings:
Within 900mm of a boundary wall ✓
Class 2 to Class 9 buildings:
3 metres from a boundary wall^^ ✓

VELUX Skylights are deemed non-combustible and thereby comply with BCA Fire Separation requirements*.

* CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences.

^ Bushfire testing applicable to 2004 glazing variant skylight in roof pitch 18°-75°. Skylight only. Custom-made flashing required. Additional mesh protection may be required for opening apertures (consult local council).

Skylight to be in closed position.

^^ Skylight cannot be closer than 3mtrs unless the boundary is adjoining a road or public place.

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 (2004 glazing).

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.

Glazing type 2004

U-value (W/m²K)

Complete skylight	2.50
Glass only	1.93

Solar Heat Gain Co-efficient

Complete skylight	0.21
Glass only	0.27

Visible Light Transmittance

Complete skylight	0.48
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Luminous Efficacy (Ke = VT/SHGC)

Complete skylight	2.29
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All figures generated by AFRC accredited simulators. Figures based on complete skylight: nominal size 1140mm (W) x 1180mm (H).

Construction

Quality frame of Ponderosa pine. Factory treated with a base preservative to reduce mould and mildew.

Further treated with paint (2 coats) for a clean white interior finish.

Wireless control

The VSE Skylight comes complete with a self programming radio frequency controller with advanced control options for both skylight and blind operations.

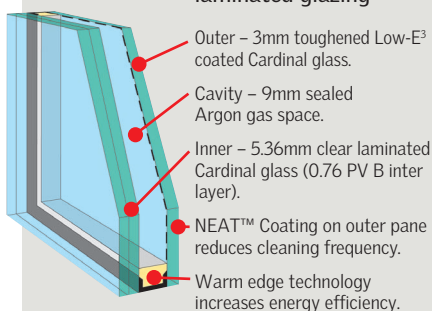
Internally mounted rain sensor, exposed to the rain when the skylight is open, automatically closes the skylight once rain is detected**.

One controller (provided) can operate up to 200 VSE Skylights. Timer function included. Home Automation Systems interface (KLF 100) available.



High Performance glazing as standard

2004 High Performance laminated glazing



Benefits:

- Radiant heat block: Complete window Glass only **approx 80%**
- UV Harmful rays block **approx 75%**
- Noise reduction factor **approx 99%**
- WERS rating **32 decibels**
- Double layer of Low-E³ coating. **5 stars**
- 10 year warranty on insulated glass seal. ✓
- Reduced cleaning frequency. ✓

Australian Standard AS1288

2004 laminated glass must be used for skylights installed 3m 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.



‡ Requires connection to a GPO (power outlet) which can be located in the roof space. **Activation causes the skylight to close faster than normal operation. Rain Sensor can be de-activated for a set period using the remote control unit.

VSE electronically operated top-hung skylight

Choice of electronically controlled blinds

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 either Blockout or Venetian blinds. 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.

Blockout blinds



- Provides blockout from light.
- Colour: White on internal side. Silver coating on external side.
- Materials: Light-tight polyester with heat resistant coating. Clear, anodized aluminium side channels and top cover.
- Reduce light by approx 100%. Reduce heat by approx 40%.

Venetian blinds



- Controls the amount and direction of light.
- Colour: Egg-shell white on both sides.
- Materials: 35mm wide slimline aluminium blades. Clear, anodized aluminium side channels and top cover.
- Reduce light by up to 85%. Reduce heat by approx 57%.

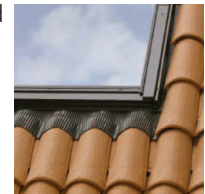
Now even easier to fit using VELUX **Pick&Click!** system.

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 tile or corrugated (or similar) roofing. Concrete or terracotta tiles with standard profiles can be used. Custom orb profile metal roofing can be used.



EDL flashing for flat roofing material

EDL flashing is used for skylights installed into slate or shingle roofs – typically 4-8mm 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 15° and custom flashed. VELUX can assist with technical advice and drawings. (NB: build-up not recommended in Bushfire areas.)



NB: When used in side-by-side/above-below combination, skylights must be 100mm apart and utilise EKW/L combination flashing.

Opening Restrictors

BCA 2013 Vol 1 & 2 regulations (Prevention of Falls from Windows – Balustrades & Barriers): contact VELUX for information relating to restrictor devices for within-reach opening Skylights.

VSE – frame and glazing dimensions – technical details

2004 High Performance double glazing as standard

Product/size code (Old code – pre April 2010)	C01 (101)	C04 (104)	C06 (106)	C08 (108)	M04 (304)	M06 (306)	M08 (308)	S01 (601)	S06 (606)
Overall frame size wxh – mm	550x700	550x980	550x1180	550x1400	780x980	780x1180	780x1400	1140x700	1140x1180
Internal glass size wxh – mm	407x519	407x799	407x999	407x1219	637x799	637x999	637x1219	997x519	997x999
Daylight area (M ²)	0.21	0.33	0.41	0.50	0.51	0.64	0.78	0.52	1.00
Ventilation area (M ²)	0.24	0.33	0.38	0.44	0.39	0.44	0.49	0.40	0.54
2004 High Performance glazing sizes available	✓	✓	✓	✓	✓	✓	✓	✓	✓
2004 – weight in kg*	24.7	29.1	32.8	37.0	36.6	42.6	47.3	40.1	55.8

Skylights can only be installed as per orientation depicted above.
 • Weight includes flashing.