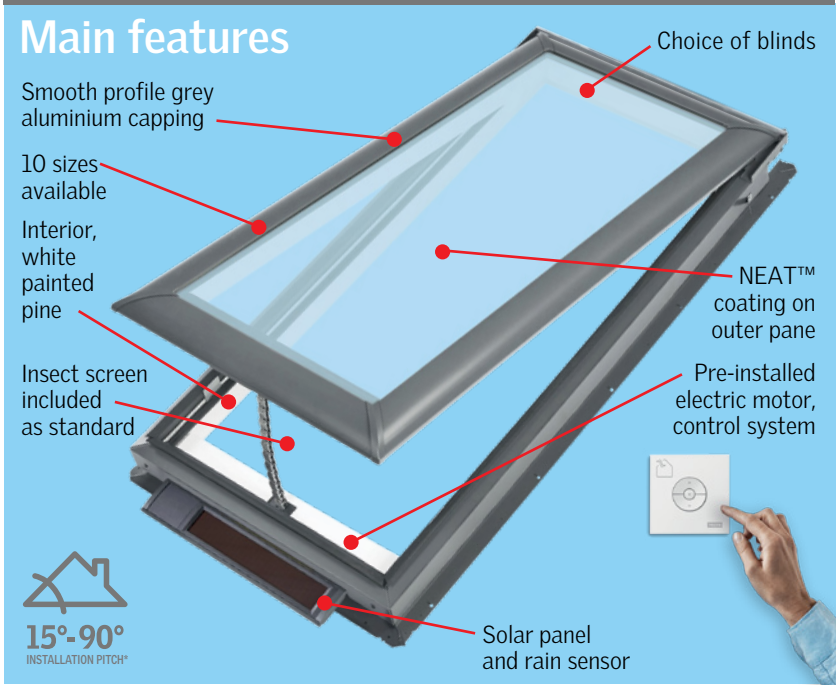
VSS Solar Skylight Pitched Roof

Main features



Construction

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

Further treated with a coat of white paint for a clean white interior finish.

Wireless control

The VSS Solar Powered Skylight comes complete with a pre-programmed radio frequency controller for skylight operation.

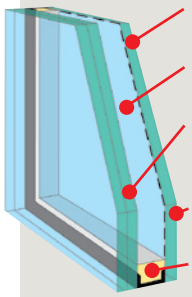
Externally mounted rain sensors automatically close the skylight once rain is detected**.

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 PVB inter layer).
- NEAT™ Coating on outer pane reduces cleaning frequency.
- Warm edge technology increases energy efficiency.

Benefits:

Radiant heat block: Complete window	approx 80%
Glass only	approx 70%
UV Harmful rays block	approx 99%
WERS rating	5 stars

- Double layer of Low-E³ coating.
- 10 year warranty on insulated glass seal.
- Reduced cleaning frequency.

Australian Standard AS1288

Laminated glass (standard with VSS) 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.

* 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.)
**Activation causes the skylight to close faster than normal operation.

10 YEAR WARRANTY on skylights, flashings & glazing

3 YEAR WARRANTY on blinds, accessories & electric controls

VSS technical performance

Code Mark is a voluntary certification scheme owned by the Commonwealth of Australia that provides legally binding evidence of compliance to the National Construction Code of Australia. One certificate replaces dozens of technical papers.

Australian Standards

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

AS4285 SKYLIGHTS±
Cyclonic & Non-Cyclonic

Cyclonic Rating	–2.8kPa

AS1288 OVERHEAD GLAZING
Laminated inner pane

AS3959 BUSHFIRE
Attack Level 40^

NCC 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 by CSIRO and thereby comply with NCC boundary separation requirements.

BASIX Selection Guide
Timber, Low-E, Double glazed, Argon filled

† CSIRO assessment report available on request. VELUX recommends consultation with relevant authority before work commences. Skylight assessed in closed position.
^ Roof pitch 18°-75°. Skylight only. Custom-made flashing required. Skylight tested in closed position, metal flywire mesh protection may be required for opening apertures (consult local council).
^^ Skylight cannot be closer than 3m unless the boundary is adjoining a road or public place. Consult NCC for further details.

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

VSS 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

U-value (W/m²K)	
Complete skylight	2.50
Glass only	1.93
Solar Heat Gain Co-efficient	
Complete skylight	0.21
Glass only	0.28
Visible Light Transmittance	
Complete skylight	0.48
Luminous Efficacy (Ke = VT/SHGC)	
Complete skylight	2.29
Acoustic performance	
Complete skylight	32dB#

Figures generated by AFRC accredited simulators. Figures based on complete skylight: nominal size 1140mm (W) x 1180mm (H).
Based on Rw value tested to AS1276.1.

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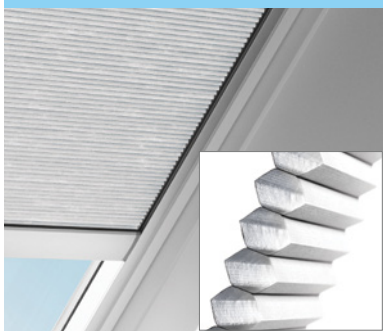
Choice of solar powered blinds

The thermal performance of VSS Skylights can be enhanced with the inclusion of a blind. Different levels of light and heat control are available by using either Honeycomb or Blockout 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.

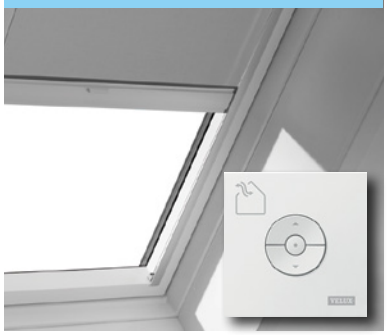
No additional electrical control system required when adding blinds. (Blinds supplied with wireless wall-mounted keypad).

Honeycomb blinds



- Adds a decorative effect.
- Colour: White on both sides.
- 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.
- Provides near total light reduction.
- Reduce heat by approx 60%.^
- Easy to install.

Blockout blinds



- Provides blockout from light.
- Colour: White on internal side. Silver coating on external side.
- Materials: Light-tight polyester with heat resistant coating. White powder-coated aluminium side channels and top cover.
- Provides near total light reduction.
- Reduce heat by approx 40%.^
- Easy to install.

Blinds sold separately.

Choice of flashing

EDW flashing

15°-90°

EDW flashing is used for skylights installed into tiled roofs and low profiled metal roofs (such as corrugated iron and spandek – not suitable for metal profiles such as Klip-Lok, Trimdek).

EDL flashing

15°-90°

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.

EKW combination flashing

15°-90°

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

NB: 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.)

VSS – frame and glazing dimensions

Profile height above batten 130mm Product/size code ▶	C01	C04	C06	C08	NEW M02	M04	M06	M08	S01	S06
Overall frame size wxh – mm	550x700	550x980	550x1180	550x1400	780x780	780x980	780x1180	780x1400	1140x700	1140x1180
Internal glass size wxh – mm	407x519	407x799	407x999	407x1219	637x599	637x799	637x999	637x1219	997x519	997x999
Daylight area (M^2)	0.21	0.33	0.41	0.50	0.38	0.51	0.64	0.78	0.52	1.00
Ventilation area (M^2)	0.31	0.44	0.54	0.64	0.51	0.65	0.79	0.95	0.68	1.20
Weight in kg‡	21.7	25.9	30.7	33.1	30.5	33.4	37.2	41.5	38.5	50.7

Skylights can only be installed as per orientation depicted above.
NB: Opening Restrictors: NCC Vol 1 & 2 regulations (Prevention of Falls from Windows – Balustrades & Barriers): contact VELUX for information relating to restrictor devices for within-reach opening skylights.
‡ Weight includes flashing.
† Above-below combination installations require relocation of solar panel using relocation kit (supplied with skylight).
^ Based on VELUX internal testing with 3076 model Roof Window.