

# **VSS** Solar Skylight Pitched Roof



#### 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 CO2 levels and open or close your skylights accordingly.

· Stay in control: Use the app to operate your skylights and blinds using your smartphone.

## 10 YEAR WARRANTY on skylights, flashings & glazing



#### 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<sup>4</sup>

# 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 <sup>††</sup>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 193

#### Solar Heat Gain Co-efficient

Complete skylight 0.21 0.28

#### Visible Light Transmittance

0.48 Complete skylight

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

Complete skylight 2.29

#### Acoustic performance

32dB# Complete skylight

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.

#### **High Performance Double Glazing**



• Radiant heat block: Complete window approx 80% Glass only approx 70%

5 stars

- · UV Harmful rays block
- WERS rating
- Double layer of Low-E<sup>3</sup> 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.

# VSS Solar Skylight Pitched Roof

## 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.

# **Choice of flashing**

#### **EDW** flashing

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 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.

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

Blinds sold separately.

#### VSS - frame and glazing dimensions Profile height above batten 130mm Product/size code ▶ C01 C<sub>0</sub>4 C06 M02 M06 S01 550x980 550x1180 550x1400 780x1400 1140x700 1140x1180 Overall frame size wxh - mm 550x700 780x780 780x980 780x1180 407x519 407x799 407x999 407x1219 637x599 637x799 637x999 637x1219 997x519 997x999 Internal glass size wxh - mm Daylight area (M2) 0.21 0.33 0.41 0.50 0.38 0.51 0.64 0.78 0.52 1.00 Ventilation area (M2) 0.44 0.54 0.64 0.51 0.65 0.79 0.95 0.68 1.20 0.31 Weight in kg‡ 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