

FCM Fixed Skylight Flat Roof

Main features

Smooth profile grey aluminium capping

Heavy duty seal used to suit low roof pitch applications

Smooth exterior for a lower profile on the roof

Laminated double glazing as standard

NEAT™ coating on outer pane

10 sizes available



The brilliantly simple fixed, FCM skylight incorporates the VELUX High Performance glazing unit and an all metal exterior frame.

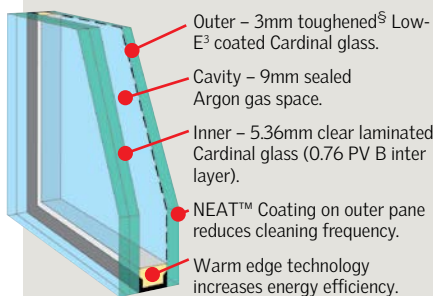
The smooth exterior gives not only a lower profile on the roof, but also provides a "cool" daylighting solution by effectively blocking heat build up and UV rays.

- Maintenance-free PVDF lacquered aluminium frame withstands the extremes of the Australian climate.
- Versatile positioning: most sizes can be used in portrait, landscape or even "diamond shape" orientation.
- Ideal replacement solution for Acrylic Domes.

High Performance Double Glazing as standard

2004

High Performance laminated glazing



Outer – 3mm toughened[§] Low-E³ coated Cardinal glass.

Cavity – 9mm sealed Argon gas space.

Inner – 5.36mm clear laminated Cardinal glass (0.76 PV B inter layer).

NEAT™ Coating on outer pane reduces cleaning frequency.

Warm edge technology increases energy efficiency.

[§]FCM 4646 outer pane is 3.9mm.

Benefits:

- Radiant heat block: Complete window Glass only **approx 70%**
- UV Harmful rays block **approx 99%**
- Noise reduction factor[#] **32 decibels**
- 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 must be used for skylights installed 3m or more above floor level (standard with FCM).

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.



* VELUX recommends FCM is installed with a slight pitch (e.g. 3°-5°) to help prevent condensation build-up and water ponding on the glass.
Based on STC value tested to ISO/IEC 17025:2005.

10 YEAR WARRANTY
on skylights and glazing

FCM technical performance

Australian Standards

All 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: 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 in roof pitch 0°-60°. Skylight only. Custom-made flashing required.

^{^^} Skylight cannot be closer than 3m unless the boundary is adjoining a road or public place. Consult BCA 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.

Energy rating

FCM 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
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U-value (W/m ² K)	
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Complete skylight	2.9 [‡]
Glass only	1.93

Solar Heat Gain Co-efficient	
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Complete skylight	0.28
Glass only	0.28

Visible Light Transmittance	
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Complete skylight	0.61
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Luminous Efficacy (Ke = VT/SHGC)	
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Complete skylight	2.18
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All figures generated by AFRC accredited simulators. Figures based on complete skylight: nominal size 1275mm (W) x 1275mm (H).

[‡] See required installation method overleaf.

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Important considerations

- VELUX FCM Skylights can be used for flat and low sloping roofs. The low profile external covering and glazing seal prevents water infiltration even at 0°. To help prevent water 'ponding' on the glass a slight pitch (e.g. 3°-5°) is recommended.
- VELUX FCM does not come with a flashing kit but can be used with a variety of curb flashings. Contact VELUX or a local flashing manufacturer for more information.
- Blinds are not available for FCM skylights.

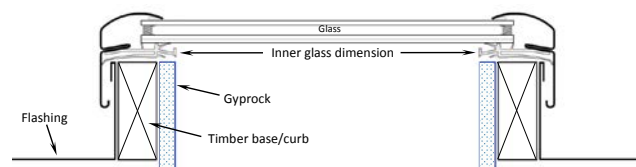
Custom-made flashing required

The VELUX FCM flat roof skylight requires custom-made flashing (not supplied). VELUX can assist with technical advice and drawings for this type of flashing.

Dome replacement sizes

3 sizes can be used as ideal replacements[^] for acrylic domes (FCM 1430 fits standard 400x800mm dome, FCM 2230 for 600x800mm dome and FCM 3434 for 900x900mm dome).

Preparation guide for custom-made flashing



Throat on custom-made flashing must not exceed 35mm – otherwise Gyprock, when installed, will encroach upon glass area.

‡Skylight must be installed with timber hob and Gyprock, as shown (typical installation), to achieve 2.9 U-value rating.

FCM – frame and glazing dimensions

2004 High Performance double glazing as standard

Product/size code ▶	1430	2222	2230	2234	2246	2270 [†]	3030	3046	3434	4646
Inner glass dimension wxh – mm	368x775	572x572	572x775	572x876	572x1181	572x1790	775x775	775x1181	876x876	1181x1181
Throat dimension wxh – mm	460x870	665x665	665x870	665x970	665x1275	665x1885	870x870	870x1275	970x970	1275x1275
Daylight area (M ²)	0.29	0.33	0.44	0.50	0.68	1.02	0.60	0.92	0.77	1.39
2004 High Performance glazing sizes available	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Weight in kg*	10.0	11.0	14.0	15.3	19.8	33.4	17.6	25.0	21.7	39.1

[†] FCM Skylights can be positioned in portrait, landscape or even 'diamond-shape' orientation, except for FCM 2270 which is recommended only for portrait applications.

[^] Custom-made collar adaptor (not supplied) required to fit.

* Weights do not include flashing.