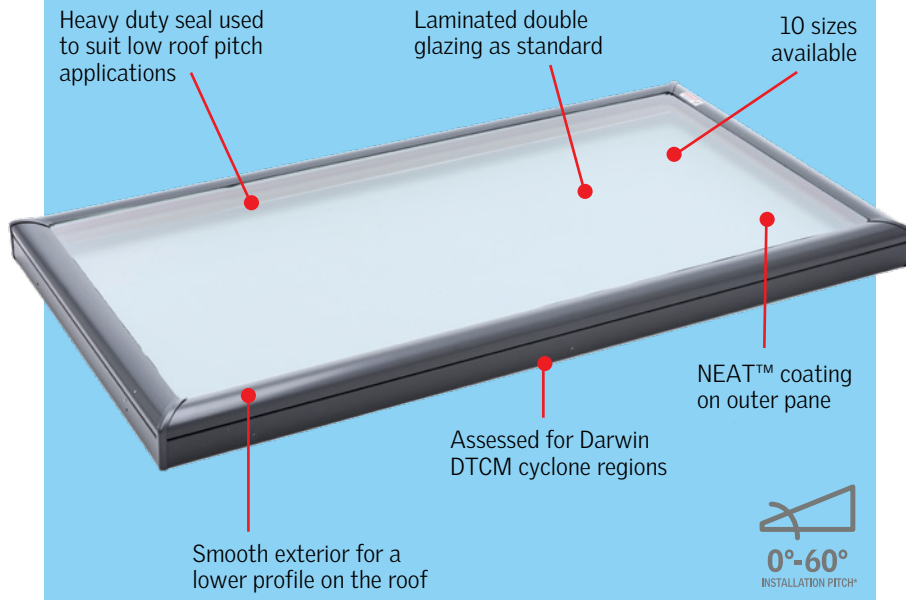


# FCM Fixed Skylight Flat Roof

## Main features



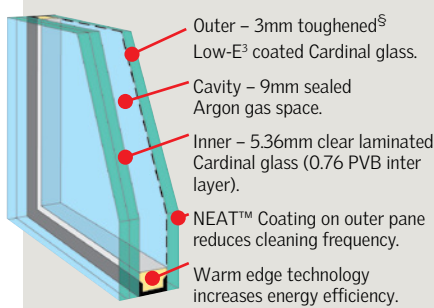
## Construction

The brilliantly simple fixed, FCM skylight incorporates the VELUX High Performance double 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



<sup>§</sup>FCM 4646 outer pane is 3.9mm.

### Benefits:

- Radiant heat block: Complete window Glass only **approx 70%**
- UV Harmful rays block **approx 99%**
- WERS rating **5 stars**
- 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 FCM) 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.



\* 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.

**10 YEAR WARRANTY**  
on skylights and glazing

## FCM technical performance

CodeMark is a voluntary certification scheme owned by the Commonwealth of Australia that provides legally binding evidence of compliance to the Building 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

**AS1288 OVERHEAD GLAZING**  
Laminated inner pane

**AS3959 BUSHFIRE**  
Attack Level 40<sup>^</sup>

**AS1530.8.1: 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<sup>^^</sup>

**Darwin Deemed to comply Manual.**  
Each size with individual pressure rating.

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

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

<sup>^</sup> Bushfire testing applicable in roof pitch 0°-60°. Skylight only. Custom-made flashing required.

<sup>^^</sup> 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<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

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.

## Technical Values

### U-value (W/m<sup>2</sup>K)

Complete skylight	2.9 <sup>‡</sup>
Glass only	1.93

### Solar Heat Gain Co-efficient

Complete skylight	0.28
Glass only	0.28

### Visible Light Transmittance

Complete skylight	0.61
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### Luminous Efficacy (Ke = VT/SHGC)

Complete skylight	2.18
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### Acoustic performance

Complete skylight	29dB <sup>#</sup>
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Figures generated by AFRC accredited simulators. Figures based on complete skylight: nominal size 1275mm (W) x 1275mm (H).

<sup>‡</sup> See required installation method overleaf.

<sup>#</sup> Based on RW value tested to AS1276.1.

# FCM Fixed Skylight Flat Roof



## 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.
- Contact VELUX for information on blinds for FCM.

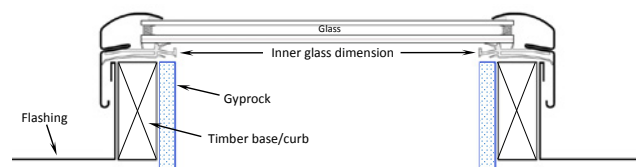
## Custom-made flashing required

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.

## Ideal Dome replacement

FCM SKYLIGHTS ARE IDEAL REPLACEMENTS FOR ACRYLIC DOMES.<sup>^</sup>  
10 sizes are available to replace common acrylic dome sizes.

## Preparation guide for custom-made flashing



Throat on custom-made flashing must not exceed 38mm – 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

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

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

<sup>^</sup> Custom-made collar adaptor (not supplied) required to fit.

\* Weight does not include flashing.