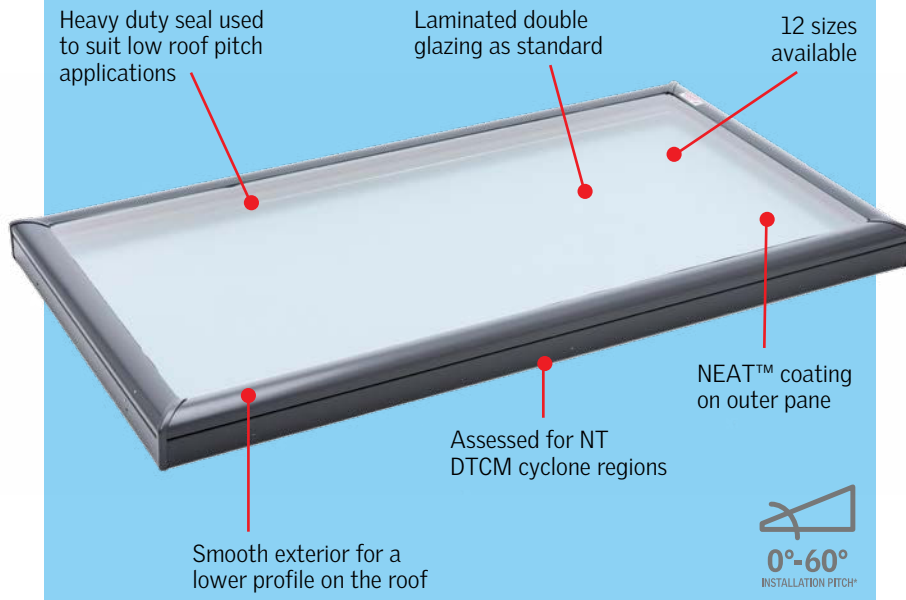


# FCM Fixed Skylight Flat Roof

## Main features



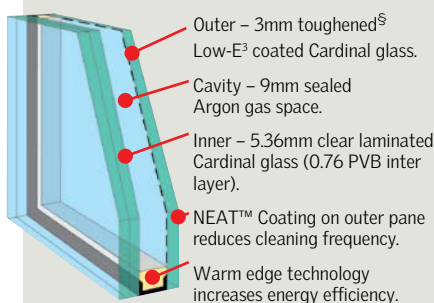
## Construction

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

### Benefits:

- Radiant heat block: Complete window **approx 70%**  
Glass only **approx 70%**  
**approx 99%**
  - 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.
- 5 stars**

### 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 reduce condensation build-up and water ponding on the glass.

**10 YEAR WARRANTY**  
on skylights and glazing

## FCM 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 SKYLIGHT- Cyclonic and Non-Cyclonic Tests

## NT DTCM Pressure Ratings\*\*

See individual size ratings overleaf.

## AS1288 OVERHEAD GLAZING Laminated inner pane

## AS3959 BUSHFIRE Attack Level 40^

## NCC BOUNDARY SEPARATION† Class 1 and 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.

† 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 NCC for further details.

\*\* Skylight must be installed in accordance with the engineering drawings, contact VELUX for more information.

## 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.

## 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‡
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#
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Figures generated by AFRC accredited simulators. Figures based on complete skylight nominal size 1275mm (W) x 1275mm (H).

‡ See required installation method overleaf.

# 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 reduce 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.

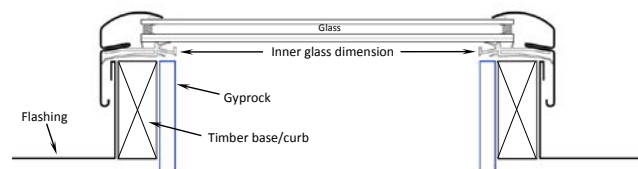
## Custom-made flashing required

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. ^  
11 sizes are available to replace common acrylic dome sizes.

## Preparation guide for custom-made flashing



Note: If timber hob is greater than 38mm the Gyprock will encroach on the glazing area.

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

## NT DTCM Pressure Rating – Maximum allowable ultimate design wind pressure for skylight support framing (kPa)

Size	1430	2222	2230	2234	2246	2270	3030	3046	3055	3434	3446	4646
Rating	10.00	9.70	9.70	9.41	9.70	8.60	7.27	7.27	7.27	6.53	6.67	5.00

## FCM – frame and glazing dimensions

Product/size code ▶	1430	2222	2230	2234	2246	2270 <sup>†</sup>	3030	3046	3055 <b>NEW</b>	3434	3446	4646
Throat dimension wxh – mm	460x870	665x665	665x870	665x970	665x1275	665x1885	870x870	870x1275	870x1505	970x970	970x1275	1275x1275
Inner glass dimension wxh – mm	368x775	572x572	572x775	572x876	572x1181	572x1790	775x775	775x1181	775x1410	876x876	876x1181	1181x1181
Daylight area (M <sup>2</sup> )	0.29	0.33	0.44	0.50	0.68	1.02	0.60	0.92	1.09	0.77	1.03	1.39
Weight in kg <sup>‡</sup>	10.0	11.0	14.0	15.3	19.8	33.4	17.6	25.0	29.9	21.7	27.2	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.

<sup>‡</sup> Weight does not include flashing.