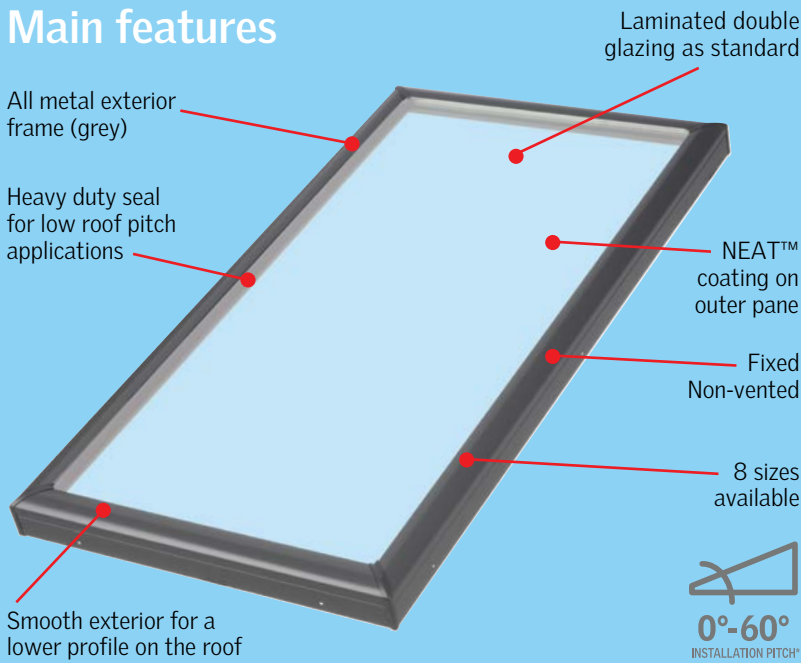


# FCM Fixed Skylight Flat/low-pitched roof

## Main features



**10 YEAR WARRANTY**  
on skylights  
and glazing

**1 YEAR WARRANTY**  
on blinds  
and accessories



BRANZ Appraised  
Appraisal No.958 [2017]

**WORLD-CLASS QUALITY**

## FCM technical performance

### New Zealand Standards

VELUX Skylights are tested and appraised to the appropriate New Zealand Standards.

### New Zealand Standard NZS4223

### 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.



**LOAD TESTED**  
(NZBC Clause B1)



**DURABILITY**  
(NZBC Clause B2)



**WEATHERTIGHTNESS**  
(NZBC Clause E2)



**SAFETY GLAZING**  
(NZBC Clause F2)



**ENERGY EFFICIENCY**  
(NZBC Clause H1)



**NATURAL LIGHT**  
(NZBC Clause G7)

**NB:** BRANZ appraised scope does not cover custom flashing or installations over 60°.

## Construction

The brilliantly simple fixed, non-vented, FCM flat roof 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

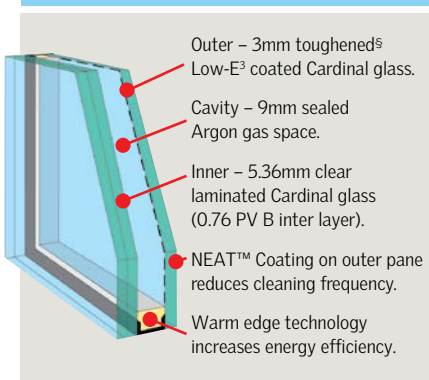
a "cool" daylighting solution by effectively blocking heat build up and UV rays.

Maintenance-free PVDF lacquered aluminium frame withstands the extremes of the New Zealand climate.

Frame is finished in a smooth grey colour, similar to 'COLORSTEEL® Grey Friars'.

Versatile positioning: most sizes can be used in portrait, landscape or even "diamond shape" orientation.†

## High Performance Double Glazing as standard



### Benefits and features:

- Radiant heat block: Complete window **approx 73%**
- Harmful UV rays block **approx 99%**
- Noise reduction factor **32 decibels\***
- WERS rating **5 stars**
- Low-E³ coated.
- 10 year warranty on insulated glass seal.
- Reduced cleaning frequency.

§FCM 4646 outer pane is 3.9mm.

## 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.



\* Recommend 3°-5° pitch to help prevent water 'ponding' on the glass.

Glazing type	04
--------------	----

R-value‡	
Complete skylight	0.44

Solar Heat Gain Co-efficient†	
Complete skylight	0.27

Visible Light Transmittance	
Complete skylight	0.64

Luminous Efficacy (Ke = VT/SHGC)	
Complete skylight	2.51

‡ R-value (m² K/W) and SHGC data based on NFRC simulations at 90° installation pitch (FCM nominal skylight size 1275mm x 1275mm).

† See preparation guide overleaf.

#Based on STC value tested to ISO/IEC 17025:2005.

# FCM Fixed Skylight Flat/low-pitched roof



### Important considerations

- VELUX FCM Skylights can be used for low sloping roofs. The low profile external covering and glazing seal prevents water infiltration even at 0°. To prevent water 'ponding' on the glass a slight pitch (e.g. 3°–5°) is recommended.

### Blinds for FCM

#### Blackout blind manual (DKC)

For complete room darkening. Colour – white. Accessory Tray ZZZ 199 required. For out of reach operation order telescopic rod ZXT 200.

#### Solar Blackout blind (DSC)

For complete room darkening. Colour – white. Includes a keypad and pre-charged solar battery. Accessory Tray ZZZ 199 required. Blinds, accessories and control rods sold separately.

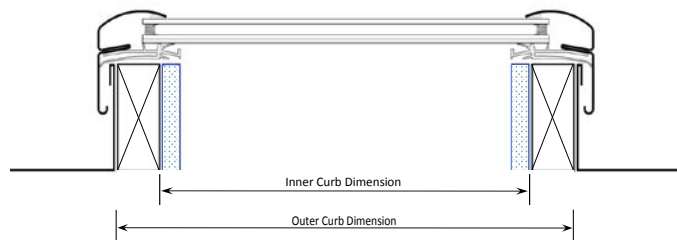
**NB:** Blinds not available for FCM 2270.

### Custom-made flashing required

FCM is a curb mounted skylight and requires a custom made flashing to be made by roofer. See below for curb dimensions. (No VELUX proprietary flashing available).

Timber used in construction of curb must not exceed 35mm to avoid interference with glass areas.

### Preparation guide for custom-made flashing



### FCM – frame and glazing dimensions

High Performance Double Glazing as standard

Product/size code ▶	2222	NEW 2234	2246	2270 <sup>†</sup>	3030	NEW 3046	3434	4646
External frame dimensions (wxh) mm	692x692	692x997	692x1302	692x1911	895x895	895x1302	997x997	1302x1302
Outer Curb dimensions (wxh) mm	648x648	648x952	648x1257	648x1867	851x851	851x1257	952x952	1257x1257
Inner Curb dimensions (wxh) mm	572x572	572x876	572x1181	572x1791	775x775	775x1181	876x876	1181x1181
Daylight area (m <sup>2</sup> )	0.33	0.50	0.68	1.02	0.60	0.92	0.77	1.39
Weight (kg) excluding flashing	11.0	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. Blinds are not available for FCM 2270.