

Frequently Asked Questions (FAQ's) – 01.04.2010

What size skylight do I need for adequate natural light?

Approved Document G7: Natural Light states that the daylight area should equate to 10% of the floor area. NOTE: 10% of floor area gives 30 lux for 75% of the standard year. Required Lux per m² of workplane by area/usage are shown below:

Hallways	30 lux
Relaxation/Conversation	30 lux
Toilet/Washroom	50 lux
Dining	50 lux
Dressing/Grooming	300 lux
Reading/Deskwork	300 lux
Handcrafts/Hobbies	300 – 1000 lux (standard, difficult, critical tasks)

What size skylight do I need for adequate natural ventilation?

Approved Document G4: Ventilation states that the natural ventilation requirement is 5% of floor area. To give the approximate room size for which the unit will be adequate as the only ventilation source multiply the ventilation areas in by 20.

How close to the ridge can I fit a VELUX unit?

We suggest no closer than 400mm to allow the top flashing to be clear of the ridge cap and to allow adequate fixing for the roofing material above the skylight without puncturing the VELUX flashing. If the unit is closer than 400mm to the ridge the flashing could run under the ridge capping as long as it is not nailed or screwed through.

What dimensions for the light-shaft?

The length of shaft is determined by the position of the skylight in the roof - the longer the shaft the bigger the skylight should be to allow for sufficient light and ease of construction. The light-shaft should be splayed out from the bottom and top of the skylight. At the top of skylight the shaft is typically returned to the ceiling at a right angle to the roof pitch (depending on roof pitch and length of shaft) the sides of the shaft are typically vertical as splayed sides can interfere with the trusses.

What is the minimum clear opening required for a VELUX unit?

The VELUX frame has a rebated jamb that accepts up to 12mm lining materials. The backside of the lining rebate is 15mm in from the external frame. Based on this dimension a FS 304 can have a minimum clear opening of 750x950mm.

How close to the eaves can I fit a VELUX unit?

Depending on roofing material being used:

Concrete tile	1 complete tile course below skylight plus 80mm from skylight frame to top of tile
Pressed metal tile	1 complete course below skylight plus 140mm from bottom of batten supporting top of tile
Metal sheets	300mm plus 80mm from roofing to bottom of skylight frame
Shingle	2 courses of shingles

How close together can VELUX units be fitted?

If using EDW flashing – no closer than 600mm to ensure that flashings do not touch
If using EKW combi-flashing or EDL flashing a gap of 100mm is required between external frames.

What wiring do I need when pre-wiring for a VELUX control system?

The KLC500 control system is the central unit and all cabling must run to its central location. The KLC500 must not be located in a ceiling, roof or wall cavity. It should be located on a wall surface where adequate ventilation is available. The KLC500 requires an adjacent 3-pin plug socket.

The following are the standard cables supplied and suggested cables to use for pre-wiring:

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	<i>Standard</i>	<i>Pre-wiring</i>
KMG 100	2x 0.75mm ² core flex	< 20m 2x 0.75mm ² < 40m 2x 1.50mm ² < 60m 2x 2.50mm ²

All cables are colour coded to match the terminal connections. The GGL is “pre-drilled” at the top frame for KMG. In all cases the cable must be run before the flashing is installed.

How do I fit the VELUX unit?

Refer to the instructions supplied. Work your way through the appropriate section slowly and step by step.

What is the Insulated Glazing Unit (IGU) construction?

VELUX IGU's are a combination of toughened/tempered/safety glass in FS, FCM and VS units and laminated glass in VSE, GGL and GGU as shown below. All IGU's use a stainless steel spacer with “warm-edge” technology”:

		<i>inside glass</i>	<i>cavity</i>	<i>exterior glass</i>
VSE	--04	5mm laminated	11mm argon	3mm toughened LowE ³
VS & FS	--05	3mm toughened	11mm argon	3mm toughened LowE ³
GGL & GGU	--73	6mm laminated	14mm argon	4mm toughened LowE ²
VCM & FCM	--05	3mm toughened	11mm argon	3mm toughened LowE ³

Snow loading (NZ has 2 zones 0.5 Kpa and 1.0 Kpa)

The Roof Window GGL/GGU with --73 glazing can withstand evenly distributed loads up to 2.75 Kn/m² (2.75 Kpa).

We strongly recommend to remove the snow from the Roof Window/Skylight at least once a day during heavy snow periods otherwise the topcasing and coverings can be deformed. For use in very heavy snow areas we also recommend to use insulating glass units with laminated glass towards the inside because if the glass should break for other reasons, the interior laminated glass will be kept together by the PVB interlayer so that glass or objects coming from outside cannot fall through the window (GGL/GGU with --73 glazing or VSE with --04 glazing).

Can VELUX units be sandblasted?

All VELUX the above units can be sandblasted. On units with 0075 glazing the sandblasting must not be on the glass with the LowE² coating (the outside glass).

Previous size codes?

Current size codes	Previous size codes	Older size codes	Always supply model code and size code to allow for correct identification. Following models were available in these sizes.
C01	101	9	GGL, FS, FSF
C02	102		GGL
C04	104	6	GGL, VSE, VS, FS, FSF
M04	304	1	GGL, VSE, VS, FS, FSF
M06	306	14	GGL
M08	308	2	GGL, VSE, VS, FS, FSF
S01	601	49	GGL, VSE, VS, FS, FSF
S06	606	4	GGL, VSE, VS, FS, FSF
S08	608	10	GGL