



Kingspan Ecolux Premium Alu Fixed Data Sheet

Thermally broken fixed skylight for flat roof



Daylighting Solutions
Natural Ventilation Solutions
Smoke Management Solutions
Service & Maintenance
Building Automation



Premium Range

Thermal regulations

In order to meet the requirements of energy performance standards applied to new buildings and the increasing need for saving energy, Kingspan Light + Air brings different solutions for you, with the Premium range.

This range of new-generation skylights removes thermal breaks and limits heat losses while providing natural daylighting and ventilation.



Kingspan Ecolux Premium Alu Fixed

Description

Thermally broken flat roof skylight, $U_{rc} = 1.3 \text{ W/m}^2 \cdot \text{K}^*$, intended to be installed in the waterproofing of flat roofs up to a slope of 25°, providing free natural light.

- Dimensions: from 80 x 80 cm to 200 x 300 cm depending upon the type of lid.
- Upstand intended for renovation: made of aluminium sheet metal with thermal break.
- Upstand: height 150 mm, 100 mm insulated flange.



Premium Range



$U_{rc} = 1.3 \text{ W/m}^2 \cdot \text{K}^*$

Advantages

- 100 % thermally broken skylight, with frames made of aluminium profiles with double thermal breaks made of polyamide and insulating air spaces for minimising heat losses by transmission: 70% less energy loss compared with a poorly insulated skylight.
- Ecolux Premium Alu Fixed is directly integrated into the roof, for optimum energy efficiency.
- Wide choice of double-glazing, multiwall polycarbonate and aluminium panel (see page 5).

Standard description

Roof lighting is provided by the flat roof skylights Ecolux Premium Alu Fixed of Kingspan Light + Air. Skylight with strong heat insulation $U_{rc} = 1.3 \text{ W/m}^2 \cdot \text{K}^*$: straight kerb or upstand insulated by 50 mm of rock-wool insulation. The kerb (upstand), the hatch and the fixed frame have thermal breaks.



* U_{rc} as obtained with the best combination (kerb / upstand / lid and glazing / dimensions) .

Description

Thermally broken lid

Choice of:

See details on the next page

- Multiwall polycarbonate lid
- Aluminium lid
- Double-glazing lid

Insulated metal kerb or upstand

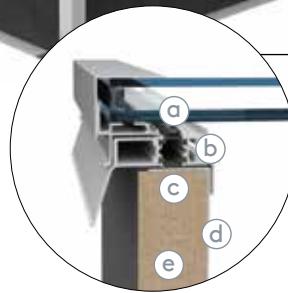
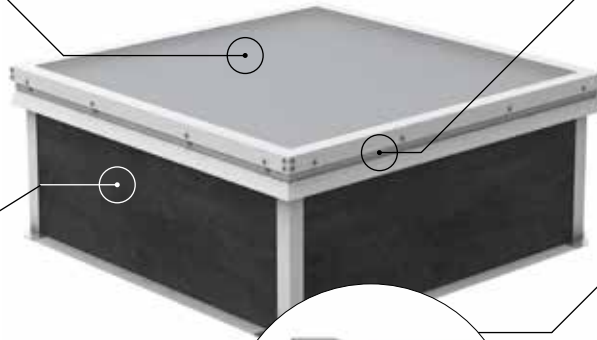
The thermally broken kerb is made of galvanised steel, as standard.

Height 400 mm. Thermal insulation is provided by a 50 mm thick rock-wool insulation for waterproofed flat roof.

Thermally broken aluminium frame

Double sealing

- a. 1 x EPDM rubber gasket: lid sealing and thermal break.
- b. 2 x contact breakers: thermal break on the fixed frame.
- c. EPDM strip: thermal separation fixed frame (lid) / kerb.
- d. Metal kerb.
- e. 50 mm insulation.



Glazing

- Multiwall Polycarbonate 32 mm lid, double-glazing lid: Recommendation for 5° minimum slope to enhance water drainage.
- Is your roof at a slope < 5°? Upon request, Kingspan Light + Air can manufacture a kerb for you with the creation of a slope.

1. Multiwall polycarbonate (thermally broken) lid Advantages

- Lid with the best insulation/price ratio.
- Possible glazing filling with AeroTech®.

2. Aluminium lid (thermally broken and insulated) Advantages

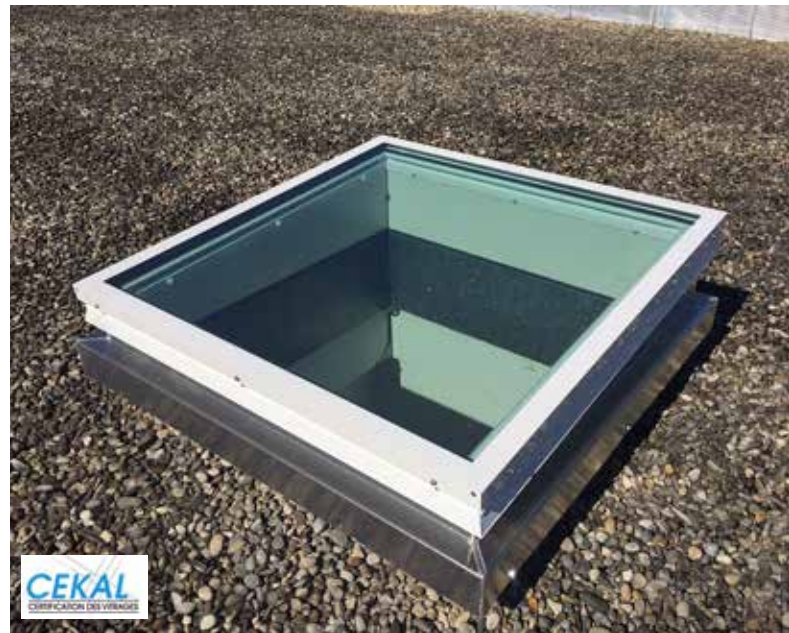
Version	No.	Ug(W/m².K) value Façade
Aluminium lid	8	1.3

- Full opacity with excellent thermal insulation.

3. Double-glazing lid (thermally broken) Advantages

- Excellent thermal, light transmission and acoustic performances.
- Very good resistance over time.
- Wide choice of standard double glazing.
- Any other glazing (either with or without CEKAL marking) available upon request so as to meet all your needs.

Model	16 / 32 mm	Version	No.
Multiwall polycarbonate	16 mm	Opal	1
		Transparent	2
		Heat reduction	3
		AeroTech®	4
	32 mm	Opal	5
		Transparent	6
		Heat reduction	7



Version	Double-glazing name	No.	Ug value (W/m².K) Façade	Ug value (W/m².K) Roof	Light Transmission (%)	Solar Factor g (%)
Low-emissivity double glazing	Planitherm Ultra N II 6 mm / Argon 16 mm / Stadip 44.2	9	1.1	1.8	77	57
Solar-control double glazing 1	Cool-Lite SKN 154 II 6 mm / Argon 16 mm / Stadip 44.2	10	1.0	1.7	49	28
Solar-control double glazing 2	Cool-Lite SKN 165 II 6 mm / Argon 16 mm / Stadip 44.2	11	1.0	1.7	59	33
Solar-control double glazing 3	Cool-Lite SKN 176 II 6 mm / Argon 16 mm / Stadip 44.2	12	1.0	1.7	69	33
Solar-control double glazing 4	Cool-Lite Xtrem 60/28 II 6 mm / Argon 16 mm / Stadip 44.2	13	1.0	1.7	59	29
Solar-control acoustic double glazing 1	Cool-Lite SKN 154 II 6 mm / Argon 16 mm / Stadip Silence 44.2	14	1.0	1.7	49	28
Solar-control acoustic double glazing 2	Cool-Lite SKN 165 II 6 mm / Argon 16 mm / Stadip Silence 44.2	15	1.0	1.7	59	33

* Minimum slope required for a guaranteed self-cleaning effect: 15°
Summary of materials and most representative glazing thickness - contact us for any other request.



The options

1. 1200 Joules bar system

Fall-prevention and burglar-resistant bar system 15 x 15 mm with 155 mm separations, attached to the kerb.



2. Frame lacquering

The frames of your skylights can be lacquered with your choice of RAL colour. Ideal for blending your skylight into your building.



3. Kerb equipped for PVC waterproofing

Ecolux Premium Alu Fixed is also suitable for PVC waterproofing membranes: without any modification of the kerb, we propose a non-coated insulation and a mounting kit.

4. Kingspan Light + Air AeroTech® insulation

The Kingspan Light + Air AeroTech® solution is a technology relying on an insulating aerogel injected into the polycarbonate walls, which improves the diffusion of natural light while reinforcing thermal and acoustic insulation.



5. Solar protection - External Sunshade cover

The Kingspan Light + Air Sunshade cover is a sustainable, economic solution to the problem of building overheating.

It is an innovative system made of perforated aluminium, exclusively associated with the multiwall polycarbonate glazing of our skylights. CSTB testing proved that the solar heat gain factor is only 15%.

6. Solar protection - Ecostore Matic

The sun blind for Ecolux Premium Alu Fixed is the ideal solution for optimising the entry of natural light. It prevents blinding and reduces electrical consumption for lighting.



7. Solar protection - Exterior blind

The exterior blind for Ecolux Premium Alu Fixed prevents heat from entering the building. This blind is electrically controlled, and totally dissociated from the skylight which can be lacquered with the RAL colour of your choice.



Certifications



INTERNATIONAL

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For the product offering in other markets please contact your local sales representative or visit www.kingspanlightandairinternational.com

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