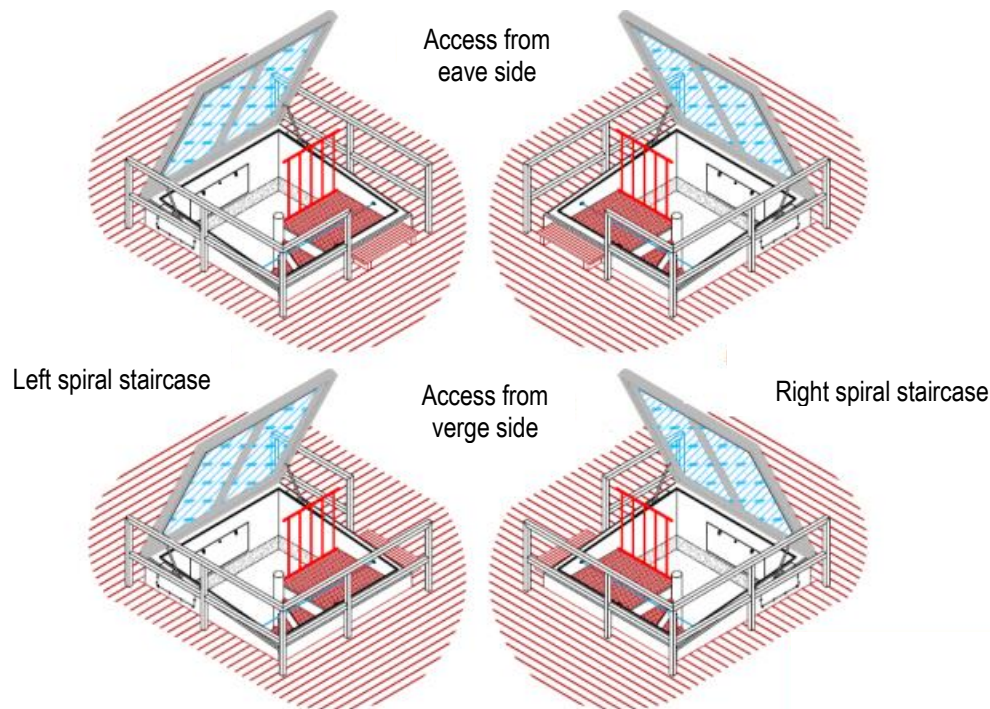


LAMILUX Flat Roof Access Square.

Technical data sheet.



The space-saving 230v hydraulically opening Square variant of the Comfort range swiftly opens its two meter by two meter opening to 70 degrees in just 45 seconds. The Square features unrestricted use as a natural ventilation device whilst supporting convenient access to the roof terrace. The 5° inclined geometry encourages a self-cleaning effect, ensuring natural water and dirt drainage from both glass panes and the indoor climate also benefits from the high energy efficiency of the Square thanks to triple glazing as standard and the thermally broken frame alongside excellent air tightness values.

Technical info.

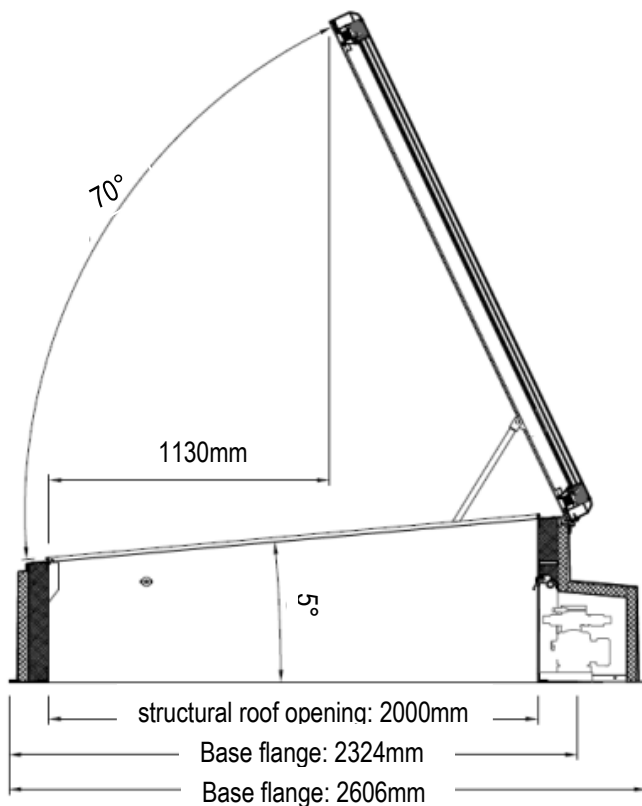
- Available in structural roof opening size: 2000 x 2000mm (weight: 500 Kg)
- Access can be achieved via the eave or verge side either with spiral or platform staircases. Please consult LAMILUX to discuss stair positioning when ordering (Changes to the opening direction at site are not possible.) The stairs and fall protection (guardrails) are not part of the access and must be provided by the customer. The platform railing (marked in red) must be designed to swivel or be plugged in. Is it essential to remove this railing before closing the access hatch
- Triple glazing as standard, separated into two fields by a crossbar. Further glazing options are available (see page 2)
- Concealed 230v or 24v hydraulic drives silently open the 4m² glass element of the skylight by 70 degrees in 45 seconds
- Closing edge protection via sensor

Glazing options.

The LAMILUX Flat Roof Access Square offers triple glazing as standard. Further solar control glazing options are available. Please call us to discuss specific project specification requirements if they are not included in the below table.

Type	Glass outside (Toughened)	Spacer	Glass Centre	Spacer	Glass inside (Laminated)	Light Trans- mission	Total energy transmit- tance	Sound insulation value $R_{w,p}$	Ug- Value
Triple glazed – standard	6mm	16	4 Float	16	9.5mm - clear	72%	0.51	C. 39dB	0.6 (W/m ² k)
	6mm	16	4 Float	16	9.5mm - matt	49%	0.50		
Triple glazed – 60/30 solar control coating	6mm	16	4 Float	16	9.5mm - clear	55%	0.30		
	6mm	16	4 Float	16	9.5mm - matt	37%	0.27		

Section drawing / dimensions.



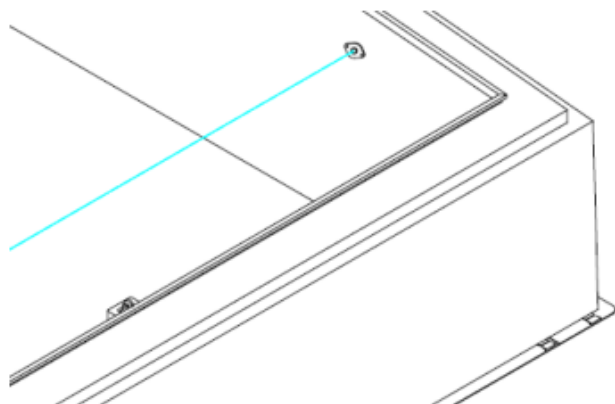
The thermally insulated upstand consists of a vertical steel base frame and has a 5° inclined geometry at the top (rainwater drainage from the two glass panes).

The height of the upstand is 500 mm at the eaves end and 680 mm at the opposite side.

The outside is made of GRP, the inside is covered with aluminium sheet.

Due to the maximum opening angle of 70°, the projected opening width is approx. 1130 mm.

Limit switch and light barrier.



The comfort roof access hatch has a limit switch for opening monitoring on the opposite narrow side of the access hatch, as well as a light barrier for monitoring the access hatch area of the element.

To open the roof access hatch, the hydraulic unit is controlled via a key switch with dead man's control.

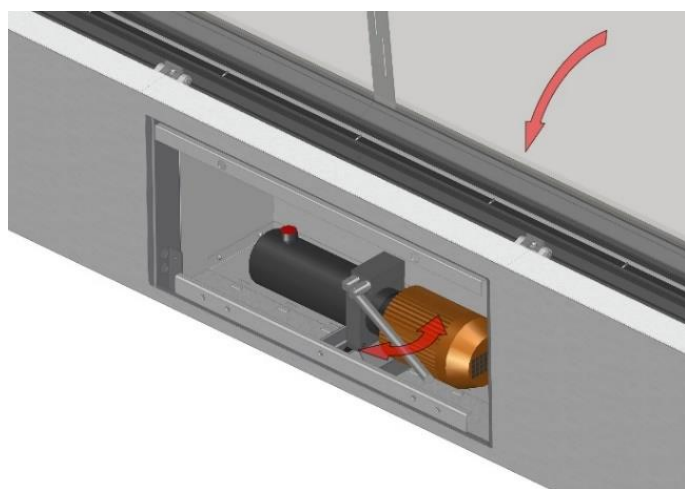
Functioning with 24V variant.

During standard operation, the power unit is supplied with a voltage of 24V by a power supply unit. The batteries are automatically charged if required.

In case of failure of the 230V line voltage, the power unit is automatically operated with the 24V voltage of the batteries. The capacity of the batteries is sufficient for approx. 20 openings of the roof access hatch.

The failure of the line voltage (battery operation) is indicated by a warning light in the limit switch case.

Safety:



Operation may only be carried out by means of a key switch mounted in the visible area and provided by the customer.

The access area is monitored by a light barrier. On the outside of the hinge a clamping protection is factory fitted.

An opening monitoring device is pre-assembled as a signalling contact for connection to a central control unit provided by the customer.

The complete hydraulic system is equipped with a leakage control and is partly accessible via internal inspection flaps.

Opening or closing in case of power failure is possible by manual operation by means of a hand lever located behind the cover:

Special use as emergency access hatch with 24V variant.

The access hatch can also be used for emergency access. In this case the opening can be done by an emergency button (included in the scope of delivery), which may only be pressed in case of danger. In the case of emergency opening, the light barrier is out of order and the sash opens fully automated after the emergency button is pressed. A reset is only possible after a predefined procedure. The emergency button must not be used as a daily opening possibility.

Performance.

For full product performance specification available on request.

- CE marked quality according to EN 1873.
- Life Cycle Assessment (LCA) to EN 15804.
- Airtight to Class 4, EN 12207.
- Water tightness to Class 4 according to BS EN 12208.
- Wind Load to Class C4, EN 12210.
- CWCT Class 2 Non-fragile
- Thermally broken: 10° isothermal line remains within the structure (see diagram)

Isothermal line diagram



Delivery, packing and storage.

All deliveries, unless otherwise agreed in writing, are by road transport and subject to our standard delivery terms, which are available within the document: 'Company overview and standard delivery and installation terms.' Off-loading is the responsibility of the buyer. A crane will be required (provided by customer) to lift the unit onto the roof. Details of packing and safe storage are also included in this document.

Interface and fitting.

Installation service, available on request. Subject to our standard installation terms, which are available within the document: 'Company overview and standard delivery and installation terms.' Installation guide available, please contact LAMILUX UK. Flat roofing membrane or roof covering to be sealed up the upstand by others to complete the weathertight assembly. Please call to discuss contract/site specific install requirements.