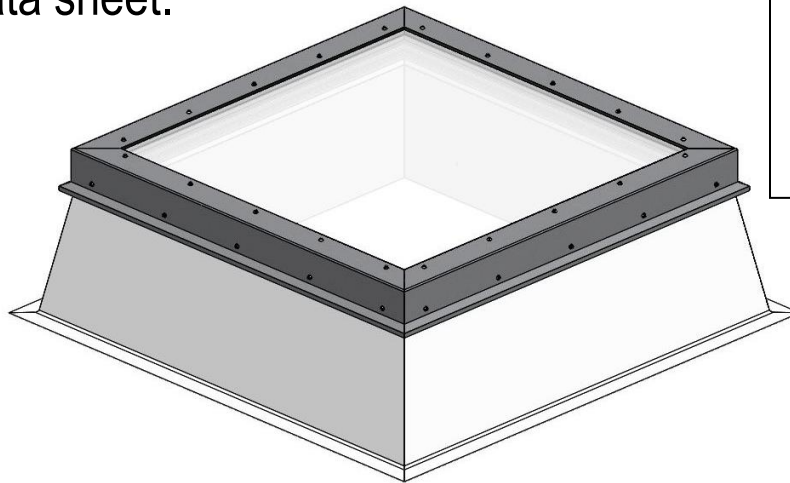


LAMILUX Glass Skylight FE Passivhaus.

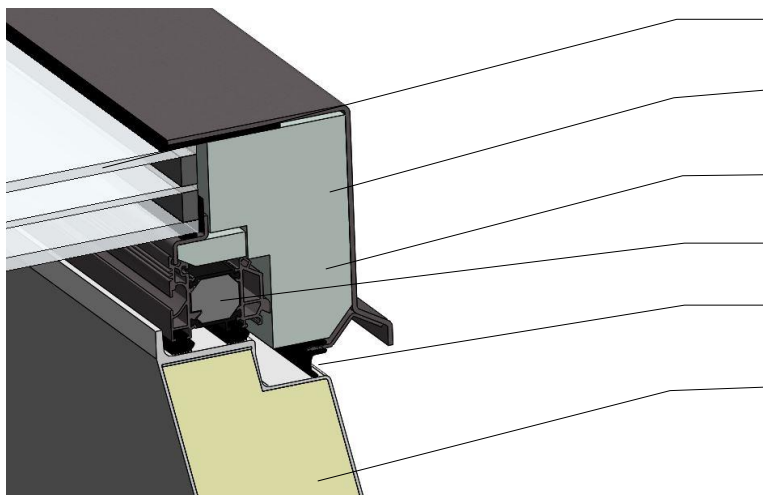
Technical data sheet.



We recommend installation onto a substructure/support plane, or appropriate wedges with a min. pitch of 5° when the roof is completely flat to prevent water ponding on the glass.

The Glass Skylight FE Passivhaus has been certified by the Passive House Institute in Darmstadt, Germany as a “*pha Advanced Component*”, the highest Passive House efficiency class. This skylight therefore meets the criteria for one of the most sustainable trends in contemporary construction and is suitable for the most demanding type of energy-efficient construction. The Passive House efficiency classes take into account heat loss and solar energy gain. Minimum heat loss is achieved due to the frame system design have excellent U values and low glass edge Ψ -values. In addition, the narrow frame profiles maximise solar gain.

Materials.



Glazing: Triple glazing as standard with toughened outer and laminated safety inner

Frame: Thermally broken aluminium frame (your choice of RAL colour)

Insulation core: Thermally optimised insulation core

PU foam insulation core

Triple layered airtight sealing system

Upstand: Thermally insulated GRP with seamless silk-white interior finish (RAL 9016)

Dimensions.



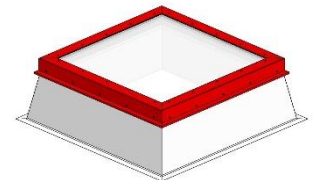
Available structural roof opening sizes (mm)	Clear internal opening size (mm)
800 x 800	620 x 620
900 x 900	720 x 720
900 x 1200	720 x 1020
1000 x 1000	820 x 820
1000 x 1500	820 x 1320
1000 x 2000	820 x 1820
1200 x 1200	1020 x 1020
1500 x 1500	1320 x 1320
1800 x 1800	1620 x 1620

Weights.

Structural roof opening size (mm)	Triple glazed	
	400mm upstand	500mm upstand
800 x 800	c. 64 kg	c. 69 kg
900 x 900	c. 76 kg	c. 82 kg
900 x 1200	c. 96 kg	c. 102 kg
1000 x 1000	c. 91 kg	c. 97 kg
1000 x 1500	c. 128 kg	c. 134 kg
1000 x 2000	c. 163 kg	c. 171 kg
1200 x 1200	c. 111 kg	c. 117 kg
1500 x 1500	c. 156 kg	c. 165 kg
1800 x 1800	c. 240 kg	c. 250 kg

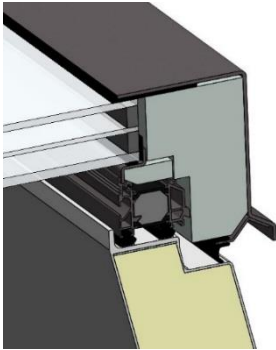
Upper part - framework.

The aluminium framework can be coated in any single RAL colour as standard. Optionally dual powder coating is available if different internal and external finishes are preferred.



Upper part - glazing.

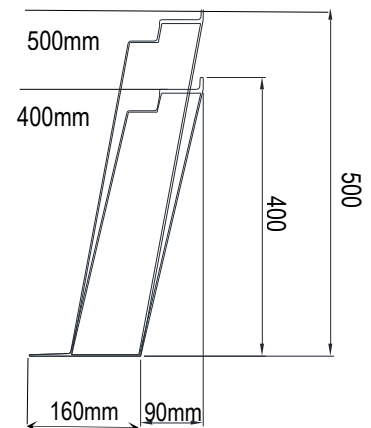
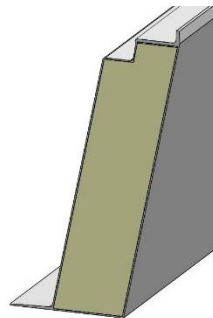
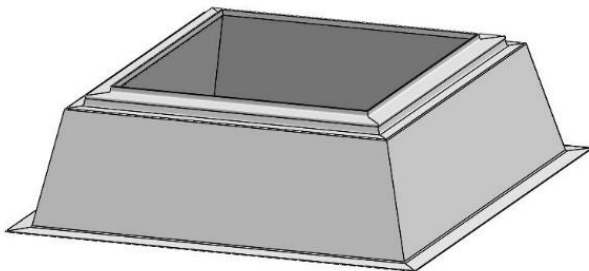
The LAMILUX FE Passivhaus offers triple glazing as standard to fulfil the highest Passive House efficiency class: pH advanced component. Further glazing options are available. Please call us to discuss specific project specification requirements if they are not included in the below table.



Type	Glass outside (Toughened)	Spacer	Glass Centre	Spacer	Glass inside (Laminated)	Light Transmission	Total energy transmittance	Sound insulation value $R_{w,p}$	Ug-Value (W/m ² k)
Triple glazed – standard	6mm	18	4 Float	18	8mm	72%	0.51	C. 39dB	0.53 (W/m ² k)
Triple glazed – Bioclean coating	6mm	18	4 Float	18	8mm	72%	0.51	C. 39dB	0.53 (W/m ² k)
Triple glazed – 60/30 solar control coating	6mm	18	4 Float	18	8mm	55%	0.28	C. 39dB	0.53 (W/m ² k)

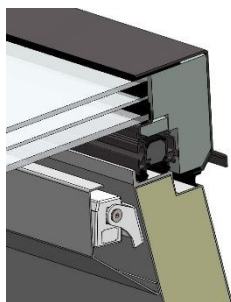
Upstand.

Upstand is delivered pre-assembled to the upper part for quick and easy site installation. Standard upstand in a choice of heights: 400mm / 500mm.

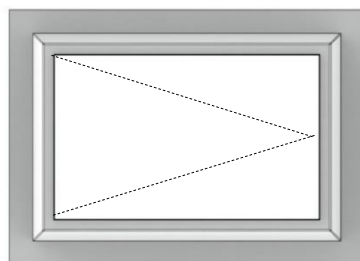


Ventilation details.

Chain drive (concealed within covering panel)

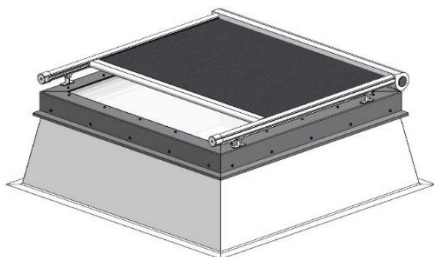


Chain drive KSA
230V or 24V
250mm/300mm/500mm/600mm Hub
Always with covering panel

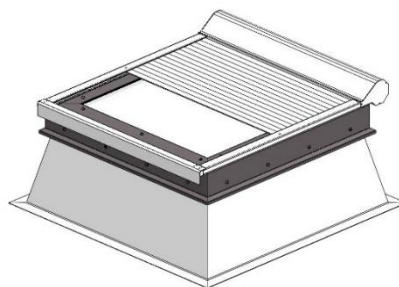


Hinged as standard on the short side

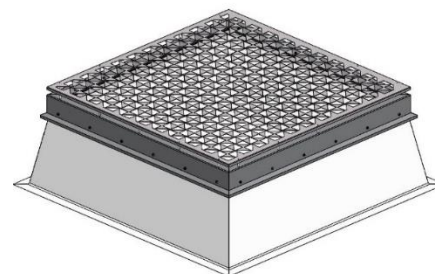
Shading options.



External shading - fabric blind

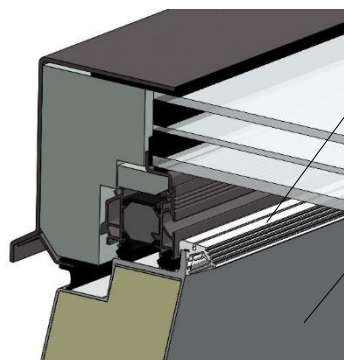


External shading – aluminium roller blind



Solar protection - deciduous tree effect

Lighting options.



LAMILUX PRISM LED strip fixed on the upper upstand point

- Excellent design with slim LED light strips
- Flicker-free light dimming
- Extremely low heat generation of the artificial light
- Low energy consumption

LAMILUX REFLECTIVE lining on the inside of the upstand

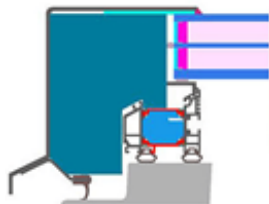
- Increasing the light transmission up to 50% by the protected principle of the lining with high reflective aluminium reflector material
- Up to 33% saving for artificial light energy
- High quality inside optic

Performance.

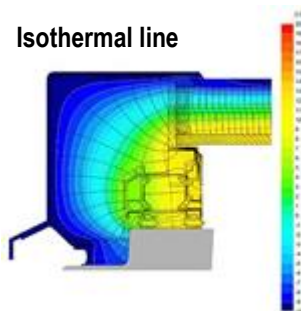
For full product performance specification available on request.

- CE marked quality according to EN 1873.
- Life Cycle Assessment (LCA) to EN 15804.
- Air permeability: Assembly to Passive House airtight with certification ≤ 0.6 @ 50Pa
- Water tightness to Class 4 according to BS EN 12208.
- Wind Load to Class C4, EN 12210.
- CWCT Class 2 Non-fragile
- Thermally broken: 12.6° isothermal line remains within the structure (see diagram)

Transom section



Isothermal line



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. 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.