



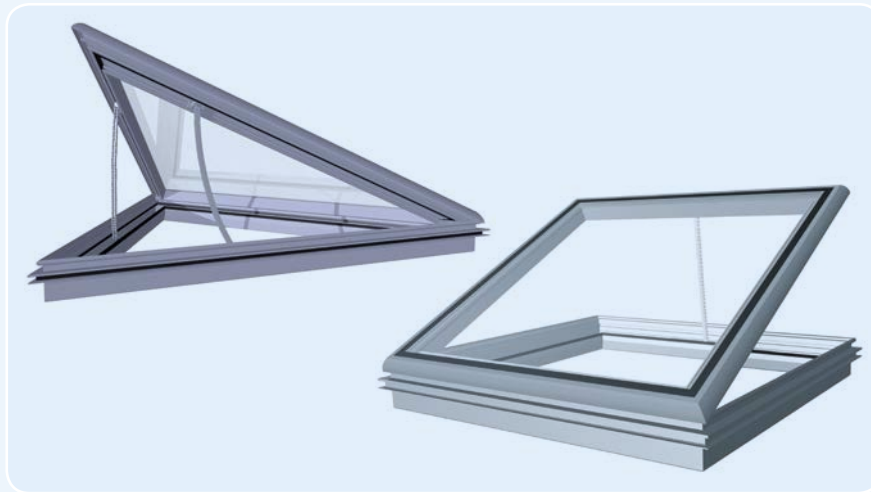
## Brakel® Lamera



### Aesthetic (smoke)ventilation window

Brakel® Lamera is a high-quality architectural (smoke) ventilation window with slim profiles and controls that are hidden in the frame. The Lamera is especially designed for structural glass roofs with a small incline.

The Lamera is often applied in atriums of airports, hospitals, shopping malls and museums.



### Designs

The Lamera is a ventlight that can be mounted at an angle of 0-30°. The opening angle of the window in relation to the base is variable up to a maximum of 70°. As a result the Lamera is suitable for both day-to-day ventilation and smoke ventilation. The Lamera consists of cold bridge-free aluminium profiles ensuring that a high insulation value is attained. Although the Lamera is usually supplied with insulated glass, uninsulated glass (or some alternative panel) is also possible on request. Delivery, installation and sealing of the (glazed) panel can be carried out by third-parties on site or by Brakel® in the factory. The Lamera is designed with an eye for detail and is therefore ideally suited for use in buildings with very stringent aesthetic requirements. Examples of this are the concealed controls and the glass fixing, which is not visible from the outside. If required, the Lamera can be anodised or powder-coated (in any RAL colour).

## Controls

For opening and closing the Lumera is fitted with one or two 24 Vdc chain motors. The controls can be designed to be fail-safe using batteries or via the control panel. A 230 Vac control is also possible. Gas springs can also be used to support the motors.

## Flanges

The standard flange thickness is 28 mm and can be increased as required. There are two standard flange widths, namely 30 mm or 50 mm. Various customised requirements with regard to flanges can be implemented on demand.

## External appearance

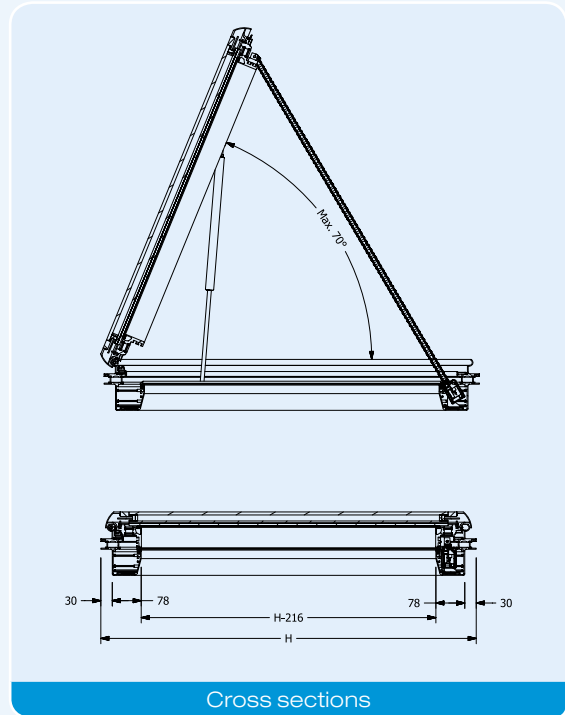
Other than in its standard rectangular shape the Lumera is also available in triangular or trapezium shapes.

Dimensions and specifications:

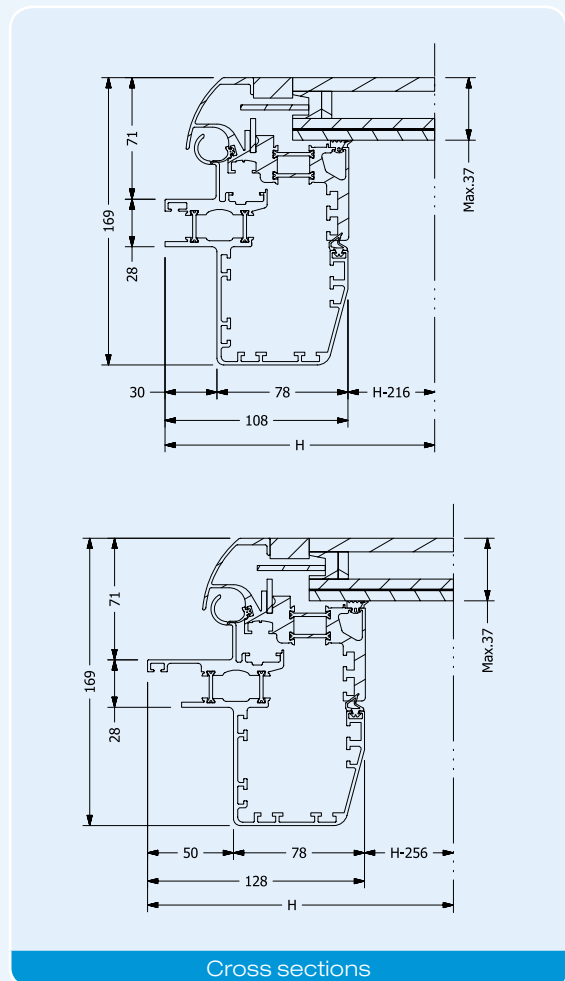
- height: 300 to 2000 mm
- width: 700 to 3000 mm
- surface area: maximum 3.5 m<sup>2</sup>
- glass thickness: maximum 37 mm
- glass: fitted with recessed frame
- glass weight: maximum 55 kg/m<sup>2</sup>
- glass seal: silicone sealant joint
- seals: two double seals around using EPDM rubbers
- total profile height: 169 mm

## Test results

- EN 12101-2 approved: B300<sub>30</sub>, Re1000, WL3000
  - Type M24V: SL500, T(00) ≤ 2.43 m<sup>2</sup>
    - : SL250, T(00) > 2.43 m<sup>2</sup> and ≤ 3.5 m<sup>2</sup>
    - : SL250, T(-15)
- U value system = 1.2 - 1.3 W/m<sup>2</sup>K according to EN 10077-2 (depending on dimensions and version)
- Air permeability: EN 1026: 600 Pa, EN 12207: class 3
- Watertightness: EN 1027: 600 Pa, EN 12208: class 9A
- Resistance to varying wind loads: class C4, 800 Pa (= P2), deflection < 1/300 in accordance with EN 12210 / EN 12211
- Lumera has been aerodynamically tested without a crosswind effect; the use of wind-dependent control is a condition



Cross sections



Cross sections

