



# Special skylight dome darkening flap Data sheet

SHE and ventilation solution for applications with daylight exclusion



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

# Application

The darkening flap is the perfect solution for rooms requiring natural smoke extraction and ventilation but without daylight incidence. In addition to this, it can be adjusted to the on-site thermal transmission requirements and is therefore best suited for areas which have special requirements for reduced heat loss. The darkening flap is compatible with all classic skylight dome accessories.

## Application areas

- industrial new builds
- new builds, renovations and repairs

## Material

- aluminium, mineral wool, multi-wall polycarbonate  
PVC border frame, EPDM seals

## Features and benefits

- opaque aeration and smoke and heat extraction system (similar to classic skylight dome)
- fall-through protection to GS-Bau-18 (to maximum opening width of 300 mm)
- meets "hard roofing" requirement (DIN EN 13501)
- meets requirement to DIN 18234 when combined with metal skylight base (min. 25 cm extension above water-bearing level)
- safety frame allows simple assembly on existing skylight bases
- can be retrofitted to skylight bases and substructures from other manufacturers when combined with safety frames
- additional EPDM seal for increased sealing properties in the support area
- range of heat insulation heights available (30, 60, 90, 120 mm)
- optimised heat insulation properties due to combination of internal multi-wall PC sheet and mineral wool overlay
- thermally separated system design
- RAL coating available on request
- meets hard roofing specification to EN 13501



Darkening flap with M3 linear drive in ventilation position



Darkening flap with M3 linear drive  
-view from below



Darkening flap with M3 linear drive in ventilation position  
-view from below

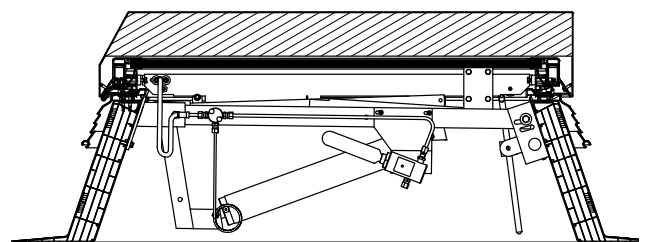
# Technical specifications

Size L x W [cm]	Av (geometric free area) [m <sup>2</sup> ]
50 x 100	0.50
50 x 150	0.75
60 x 60	0.36
60 x 90	0.54
60 x 120	0.72
62.5 x 150	0.94
70 x 137	0.96
70 x 141	0.99
80 x 80	0.64
90 x 90	0.81
90 x 120	1.08
100 x 100	1.00
100 x 150	1.50
100 x 200	2.00
100 x 250	2.50
100 x 300	3.00
120 x 120	1.44
120 x 150	1.80
120 x 180	2.16
120 x 240	2.88

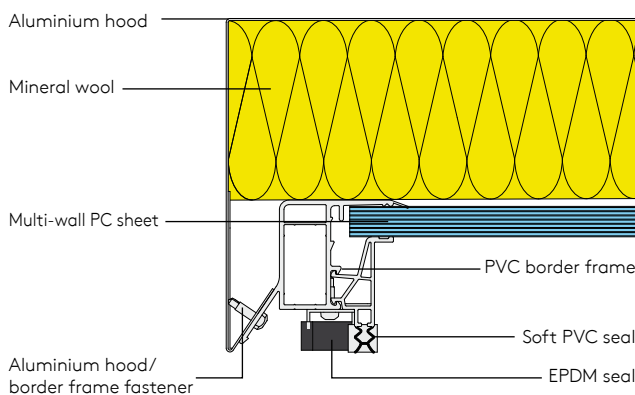
Size L x W [cm]	Av (geometric free area) [m <sup>2</sup> ]
120 x 270	3.24
120 x 300	3.60
125 x 125	1.56
125 x 250	3.12
125 x 300	3.75
141 x 231	3.26
150 x 150	2.25
150 x 180	2.70
150 x 210	3.15
150 x 240	3.60
150 x 250	3.75
150 x 270	4.05
150 x 300	4.50
180 x 180	3.24
180 x 240	4.32
180 x 250	4.50
180 x 270	4.86
180 x 300	5.40
200 x 200	4.00
200 x 300	6.00

Checked Aa values as per classic skylight dome system

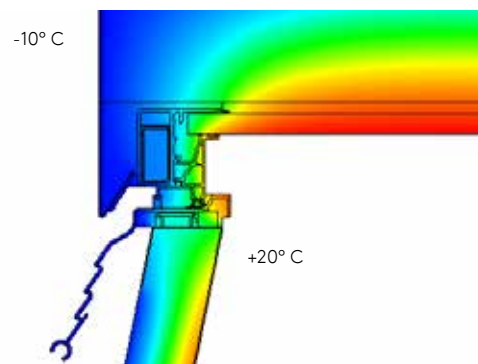
Insulation thickness [mm]	Heat insulation value U <sub>D</sub> [W/m <sup>2</sup> K]	Soundproofing quality R <sub>w</sub> [dB]
30	0.68	30
60	0.42	32
90	0.30	34
120	0.26	35



Darkening flap with pneumatic NSHE F6 in cross-section



Cross section of darkening flap with heat insulation



Darkening flap isothermal diagram

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## INTERNATIONAL

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As at 07/2019; item no. 11000690793

Subject to technical alterations.

Illustrations are not binding.

