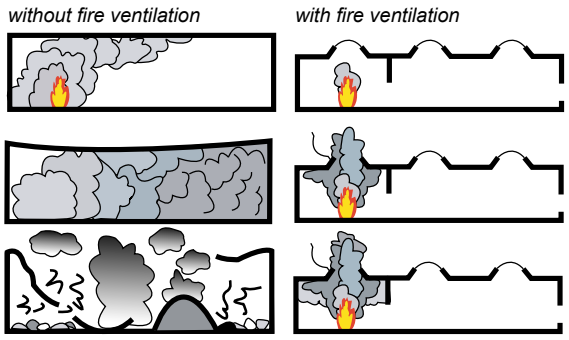
# GRILLODUR®-
# CONTINUOUS ROOFLIGHT FLAPS

## Create a pleasant room climate

### GRILLODUR®-continuous rooflight flaps overview

- arched and flat flaps
- single or double flap
- pneumatical or electrical operation
- flaps for rooflight widths up to 7,5 m
- approved according to DIN EN 12101-2
- CE-marking
- temperature class according to DIN EN 12101-2:
  (T-15) for pneumatical SHEV systems
  (T-25) for electrical SHEV systems

sample of the importance of SHEV
reaction to fire in a building




### GRILLODUR®-continuous rooflight flaps

The SHEV flaps for the arched daylight systems have been developed for combination with other control elements to ensure an automatic smoke and heat exhaust system for the preventive fire protection. They should be positioned at the highest point of a daylight system in order to fulfill the function of preventive fire protection in an optimal way.

According to the latest findings, the smoke that immediately develops in case of fire is responsible for the threat to human life and health.

More than 80 % of all fire victims die due to smoke poisoning. Moreover, a high percentage of material damage is caused by smoke.

**4.1.2**
GRILLODUR®-
arched continuous rooflights

**4.1.3**
GRILLODUR®-
saddle rooflights

What is fire prevention about?

By the use of smoke and heat exhaust systems it is possible to extract the life-threatening smoke, resp. to reduce its concentration due to dilution. This reduces the risk that the smoke spreads in the building so that emergency exits like e. g. corridors or staircases become impassable.

The protective aims are:

- personal protection
- environment protection
- property value protection

The for the aerodynamic of the SHEV flap needed wind baffles are a component of the flap system. The building physics as well as the photometric values correspond with the data of the respective daylight system.

All units are approved according to DIN EN 12101-2.

Prevention of smoke emission with SHEV openings

In case of fire the SHEV openings with their pneumatical or electrical drives in the upper part of the building and resp. also the air intake openings can be opened automatically within a very short time.

Due to these openings rising smoke, heat and fumes can escape to open air already in the early stage of fire. The air intake openings in the lower area ensure the necessary balance of mass flow and strengthen the effect of thermal lift.

The point in time when the opening procedure is initiated has a great influence of the optimal functioning of the “natural smoke exhaust”.

## OPENING DEVICES

| flap type | system G9 | system G19 | system G29 |
|---|---|---|---|
| single and double flap | cylinder Ø 32 mm 850 mm lifting height single pipe | double stroke cylinder Ø 32 mm 850/200 mm lifting height double pipe operating pressure max. 6 bar | cylinder Ø 32 mm 850 mm lifting height electrical motor 230 V - 50 HZ 300 mm lifting height single pipe |
| S-flap | cylinder Ø 50 mm 500–800 mm lifting height *<br><br>oil pressure locking cylinder Ø 40 mm single pipe | cylinder Ø 50 mm 500–800 mm lifting height * air cylinder Ø 32 mm 500 mm lifting height oil pressure locking cylinder Ø 40 mm double pipe operating pressure max. 6 bar | cylinder Ø 50 mm 500–800 mm lifting height * electrical motor 230 V - 50 HZ 300 mm lifting height oil pressure locking cylinder Ø 40 mm single pipe |

By upgrading with motor or cylinder the additional benefit for daily ventilation is fulfilled. The natural smoke exhaust flaps provide an optically uniform image to the geometry of the continuous rooflight. The construction is designed in a way that exchanges in any kind are not needed anymore.

Our G9 basic system is exclusively designed for the case of fire. The G19 and G29 systems on the other hand, are also designed for daily ventilation.

*) = *depending on the flap dimension*

SHEV flap for ridge turret

The building physics high-quality serial product of the JET-Group

Product advantages

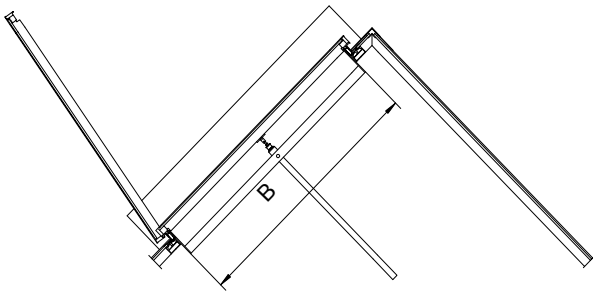
- high-quality appearance
- $U_g$-value up to 0,9 W/m²K
- devices can be chosen freely
- operates without exchange
- high level of safety
- easy to maintain

## SINGLE FLAP RIDGE TURRET 30°/45°

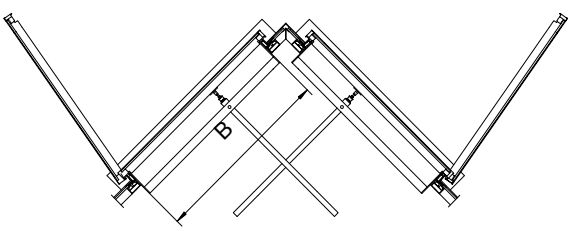
| width B (mm) | length A (mm) | smoke exhaust surface Ageo (m²) | effective smoke exhaust surface $A_a$ (m²) | clear opening from (mm) |
|---|---|---|---|---|
| 980 | 1880 | 1,84 | 1,20 | 1700 |
| 1100 | 1880 | 2,07 | 1,34 | 1800 |
| 1350 | 1880 | 2,54 | 1,65 | 2200 |

## DOUBLE FLAP RIDGE TURRET 30°/45°

| width B (mm) | length A (mm) | smoke exhaust surface Ageo (m²) | effective smoke exhaust surface $A_a$ (m²) | clear opening from (mm) |
|---|---|---|---|---|
| 980/980 | 1880 | 3,68 | 2,21 | 1700 |
| 1100/1100 | 1880 | 4,14 | 2,48 | 1800 |



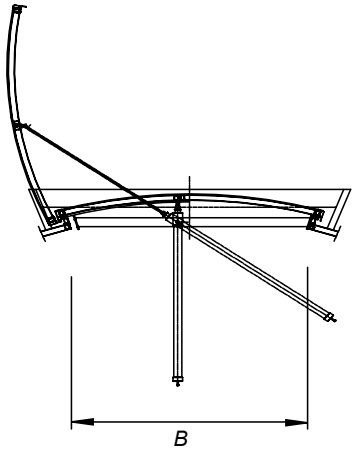

**NOTE:**
optional: electrical (G29) or pneumatical (G19) ventilation




**NOTE:**
optional: electrical (G29) or pneumatical (G19) ventilation
(one half of flap)

## SINGLE FLAP

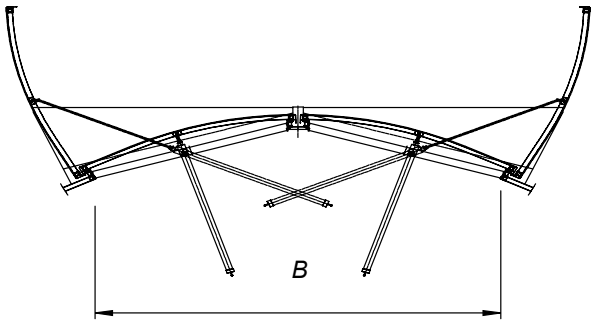
| width B (mm) | length A (mm) | smoke exhaust surface Ageo (m²) | effective smoke exhaust surface $A_a$ (m²) |
|---|---|---|---|
| 1100 | 1880 | 2,068 | up to 1,551 |
| clear opening: from 1300 mm | | | |




*optional: electrical (G29) or pneumatical (G19) ventilation*

## DOUBLE FLAP

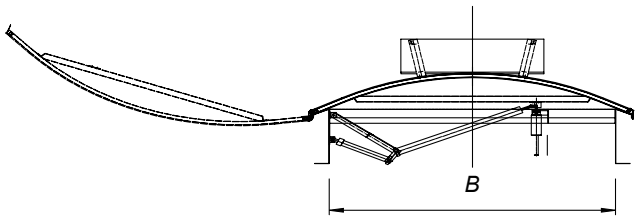
| width B (mm) | length A (mm) | smoke exhaust surface Ageo (m²) | effective smoke exhaust surface $A_a$ (m²) |
|---|---|---|---|
| 2300 | 1880 | 4,324 | 3,243 |
| clear opening: from 2500 mm | | | |




*optional: electrical (G29) or pneumatical (G19) ventilation (one half of flap)*

## S-FLAP

| width B (mm) | length A (mm) | smoke exhaust surface Ageo (m²) | effective smoke exhaust surface $A_a$ (m²) |
|---|---|---|---|
| up to 2000 | up to 2000 | up to 4,00 | up to 2,80 |
| clear opening: 2000 mm | | | |




*optional: electrical (G29) or pneumatical (G19) ventilation*



**PLEASE CONTACT:**
**JET Tageslicht & RWA GmbH** · Weidehorst 28 · D-32609 Hüllhorst
Tel. +49 (0) 57 44 / 503-0 · Fax +49 (0) 57 44 / 503-40