Information about MEGAPHOENIX

Large illustration: MEGAPHOENIX as a stand-alone unit on a factory building.

MEGAPHOENIX in a sloped roof

MEGAPHOENIX on a skylight

The inside of a MEGAPHOENIX

Information about MEGAPHOENIX

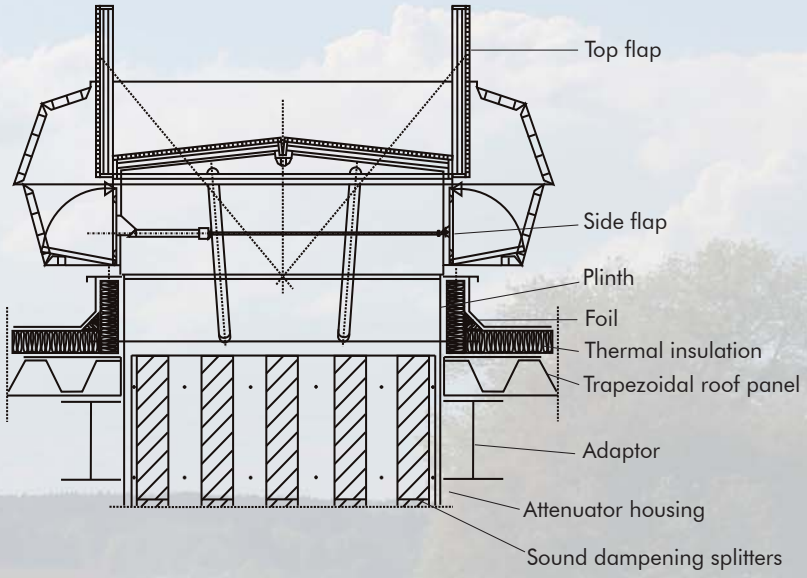
The multifunction ventilator MEGAPHOENIX extracts natural warm air via two independently working pairs of double flaps. Rainproof ventilation is achieved via pneumatically or electrically controlled lateral flaps. The top flaps are controlled by pneumatic cylinders with end-position locking and a remote unlocking system or by electric motors. An automatic (independent from any other control system) thermal release mechanism is integrated to open the top flaps in the event of a fire. The aerodynamically formed top flaps and the inner side flaps are equipped with rubber seals.

The MEGAPHOENIX complies with DIN EN 12101-2 and VdS 2159 (depending on the specification). The EC declaration of conformity is delivered with the product.

CE

Field of application:

- Flat roofs
- Arched skylights
- Northlight roofs



MEGAPHÖNIX with splitter attenuators and roof mounting.

Design characteristics:

The unit is made of AlMg3 aluminium alloy. Depending on the design, the top flaps are opened and closed by pneumatic cylinders with end-position locking at both ends or by electric servomotors. The pivot points on the cylinders or servomotors consist of cast aluminium parts with Teflon-coated bronze bushes and stainless steel shafts, and therefore require no maintenance. The internal side flaps ensure ventilation even in bad weather. They are opened by an additional pneumatic cylinder or servomotor and closed by two tension springs. EPDM seals reduce heat loss to a minimum. The units are mounted on the curb using tension locks or screw connections with sealing washers. On request, the MEGAPHOENIX can be supplied with fall-through-safety grids, thus helping to guarantee the required fall-through protection.

Top flap versions:

- PC – Clear or opal 16 mm polycarbonate panels (on request with LumiraTM insulation)
- A1 – Single-skin aluminium version
- A2 – Double-skin aluminium version (insulated)

The top-flap frames are made of aluminium alloy (AlMgSi05). They are inclined at 6° to the horizontal. The top flaps are attached using three hinges with carriage bolts. All versions are available up to the maximum frame size.

Sizes:

The MEGAPHOENIX can be produced in all lengths and widths up to 1,900 x 3,000 mm.

MEGAPHOENIX

The MEGAPHOENIX is tested and certified for:

- Functional reliability up to Re 1000*
- Functional reliability at wind loads up to WL 3000 (3000 Pa)
- Functional reliability at snow loads up to SL 1500 (1500 N/m. / VdS-certification min. 500 N/m²)*
- Functional reliability at low ambient temperatures down to T(-15) (-15 °C)*
- Sound insulation levels according to our specifications
- Functional reliability up to heat-exposure rating of B 300-E (300 °C / fire-resistance rating E)*
- Tested by the Material Testing Authorities of North Rhine-Westphalia*
- Tested by other independent testing institutes*
- Approved by VdS*

* depending on system size and model

The MEGAPHOENIX is also tested for:

- Correct operation during fatigue testing (10,000 opening cycles)
- Aerodynamically efficient opening surface
- Corrosion and aging resistance

In the event of fire, the MEGAPHOENIX with pneumatic drives open:

- Automatically via a thermal priority valve connected to a CO_2 cartridge
- Via an emergency fire control unit with a CO_2 cartridge
- Via a fire alarm control unit triggered by smoke detectors or actuator buttons (optional)

In the event of fire a smoke-and-heat-extraction-system control cabinet with backup batteries actuates the 24 V versions with servomotors:

- Via smoke detectors or actuator buttons
- Via an intermediate fire alarm control unit (both systems optional)

thermal priority valve connected to a CO_2 cartridge

Triggering for everyday ventilation

via the building's compressed-air network, a ventilation control cabinet (pneumatic control), or a smoke-and-heat-extraction-system control cabinet (24 V servomotors):

- Ventilation control cabinet
- Actuator buttons (only outer flaps open | only inner flaps open | all flaps closed)
- Timer for night cooling (optional)
- Wind and rain sensors for protection against bad weather (optional)

MPA NRW. Materialprüfungsamt Nordrhein-Westfalen geprüft + überwacht Nr.: 210004512

VdS • ISO 9001 • approved products • approved systems