



Information about PHOENIX



Large illustration: PHOENIX NSHEV fitted at the end of a EUROLIGHT skylight.



Double-flap PHOENIX in a DELTALIGHT



Single-flap PHOENIX in a DELTALIGHT



PHOENIX on a flat roof

Information about PHOENIX

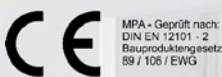
In addition to its function as a natural heat and smoke extractor, the PHOENIX can be used for everyday ventilation; even coping with extreme weather conditions. The PHOENIX is available in an insulated or a non-insulated versions depending on customer preference. The top flaps can be fitted with a choice of either 16 mm multiwall polycarbonate panels or an aluminium sandwich structure. Depending on the top flap infill, sound absorption levels of up to 33 dB RW are possible.

Depending on the design, the top flaps open via compressed air cylinders with end-position locking at both ends or via electric servomotors. Weathertightness is achieved by means of EPDM profile seals. On request, the PHOENIX can be supplied with fall-through-safety grids, thus helping to guarantee the required fall-through protection. The system modules are pre-assembled and tested ready for operation.

Advantages:

- Flexible sizing makes the system ideal for use on flat roofs for all roof openings up to 2.5 x 3 m²
- Suitable for everyday ventilation (full ventilation at 90° vent position)
- Endurance tests with 10,000 opening cycles have confirmed the robust, functional design and the high quality of the materials used
- Good aerodynamic efficiency
- Good U-value and low joint leakage
- Available with opaque flaps
- Efficient drainage of rainwater via central drainage channels
- Energy-saving natural lighting, which is glare-free when using opal polycarbonate or Lumira™-filled panels (light incidence from above is five times more effective than through side windows)
- Hail-and fall-through-proof depending on the specification
- Powder coating allows for individual choice of colours
- Plinth mounting using tension locks – no drill holes needed
- Fire-resistance rating A1 (depending on the specification)
- Maintenance-free hinges are aluminium castings with Teflon-coated bronze bushes and stainless steel shafts
- Easy mounting in all roof and wall constructions up to a 90° angle

The PHOENIX comply with DIN EN 12101-2 and VdS 2159 (depending on the specification).



In addition, the pneumatically controlled PX1 and PX2 units have been tested for explosion protection (ATEX) according to the EU Directive 94/9/EC with reference to EN 1127-1, EN13463-1 and EN 13463-5. The EC declaration of conformity for the product and the explosion proofing are delivered with the product.

Field of application:

- Flat roofs
- Northlight roofs
- Skylight systems
- Gable roof skylight systems

PHOENIX

The PHOENIX 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 PHOENIX 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 PHOENIX with pneumatic drives open:

- Automatically via a thermal priority valve connected to a CO₂ cartridge
- Via an emergency fire control unit with a CO₂ 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 CO₂ cartridge

Triggering for everyday ventilation

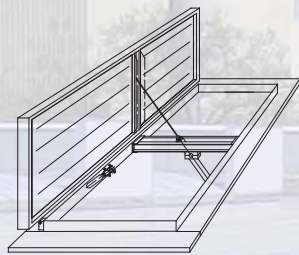
via the building's compressed-air network, a ventilation control cabinet (pneumatic control), or a smoke-and-heat-extraction-system control cabinet (24 V servomotors):

- Ventilation control cabinet
- Actuator buttons
- Timer for night cooling (optional)
- Wind and rain sensors for protection against bad weather (optional)

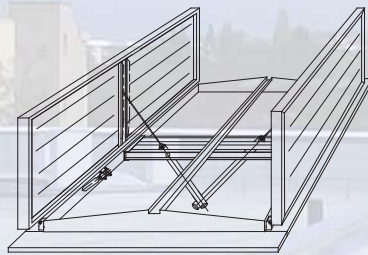


PHOENIX

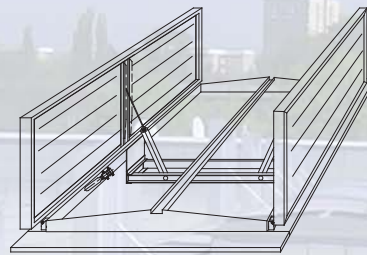
Versions:



PHOENIX PX1



PHOENIX PX2



PHOENIX PX2 MKII

PX1G – Single-flap in an opening or a non-opening version (only for skylights/Northlight roofs)

PX2D – Double flap in opening or non-opening versions

PX2MKII – Double-flap version with short cylinders

Design characteristics:

The unit is made of AlMg3 aluminium alloy with single- or double-skin insulation. The heat loss is reduced to a minimum by EPDM seals. 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. Mounting on the plinth is by means of tension locks or screw connections with sealing washers.

Top flap versions:

- PC – Clear or opal 16 mm polycarbonate panels (on request with Lumira™ 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 systems are made to order and can be produced in all lengths and widths up to 2,500 x 3,000 mm.