



**mcr PROLIGHT**  
Continuous rooflights



In the case of large areas for warehousing, production or shopping malls, i.e. premises temporarily occupied by people, an adequate daylight system in compliance with legal regulations is a significant component.

To meet the above requirements, Mercor has been offering a comprehensive range of various daylight solutions for over 25 years, including mrc PROLIGHT barrel vaulted continuous sectional rooflights or spot skylights designated especially to supply daylight to the interiors. Our rooflights can be also used in the natural smoke and heat exhaust systems due to installed smoke exhaust vents, ventilation flaps or a combination of the former two types.

Mercor wants to satisfy its customers to the highest extent and therefore continuously works on new solutions to reach the enhanced thermal parameters of the offered products.





## KEY ADVANTAGES OF CONTINUOUS ROOFLIGHTS

### Application in a whole range of buildings

A wide range of shapes and dimensions of Mercor daylight solutions enables their application among others in production-warehousing halls, public facility premises, shopping malls, commercial zones and sports centres.

### Supply of daylight

The application of roof skylight systems is the most efficient lighting solution to supply enough daylight to premises, which increases the comfort of the building users; it can also largely affect the energy cost-saving.

### Low heat transfer coefficient

The structure of mrc PROLIGHT rooflight systems allows an exceptionally good value of heat transfer coefficient (U)

### Smoke exhaust and ventilation functions

Continuous rooflights equipped with flaps can provide daylight as well as smoke exhaust and ventilation functions at the same time.

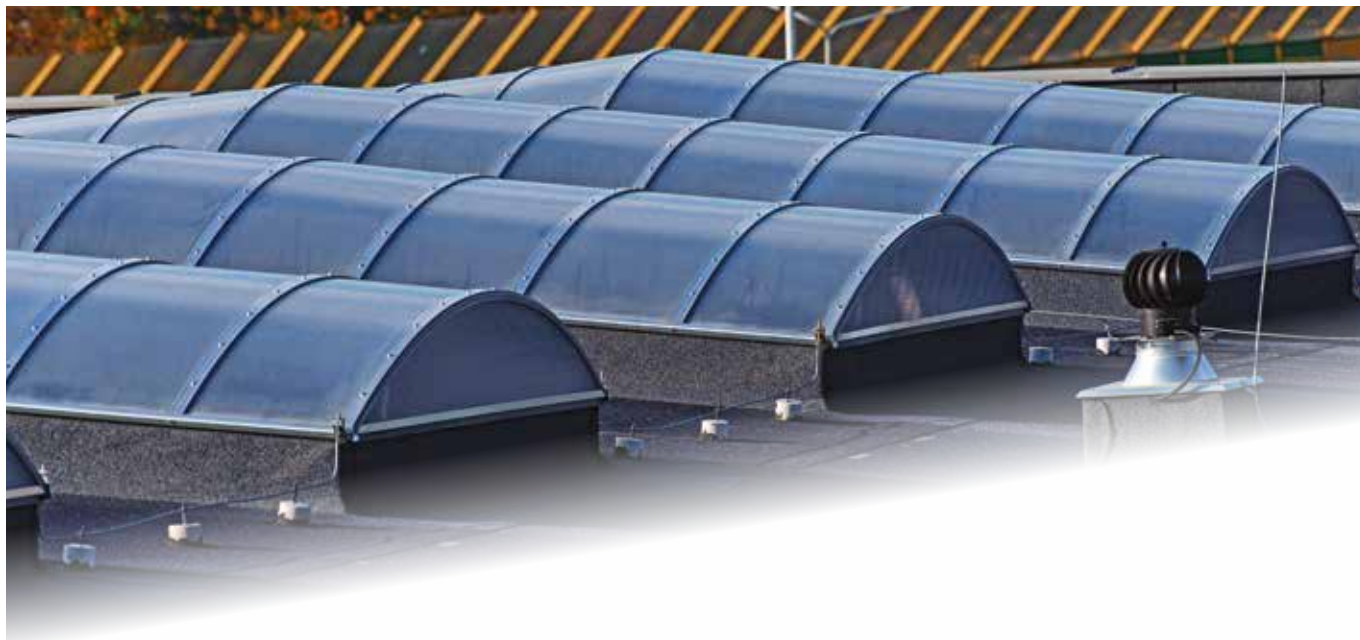
### Compliance with EU standards

A whole range of roof skylight solutions produced by Mercor can be designated with the CE mark for compliance with EN 14963 standard. The reliability and user safety of smoke exhaust vents integrated with barrel vaulted rooflights are guaranteed with tests compliant with the EN 12101-2 standard. Smoke vents integrated in continuous barrel vaulted rooflights systems are designated with the CE mark in compliance with certificate no. 1396-CPR-0039.

### A wide portfolio of optional elements

The offer of optional elements completes the portfolio and enables the most efficient use of mcr PROLIGHT roof skylight functions





## BARREL VAULTED AND DOUBLE-PITCHED ROOFLIGHTS

mcr PROLIGHT rooflights are products that ensure adequate levels of natural daylight in the building characterised at the same time by excellent thermal properties.

The declaration of performance for mcr PROLIGHT rooflights according to EN 14963 confirms compliance with the safety requirements of EU standards with respect to load or impact resistance.

### ▶ SPAN

- barrel vaulted rooflights – 1.2 m ÷ 6.0 m width and unlimited length
- double-pitched rooflights – 1.2 m ÷ 5.0 m width and unlimited length at the pitch angle from 30° to 60°

### ▶ STRUCTURE

- made of extruded aluminium sections, the module length of 1060 mm or 710 mm

### ▶ CONSTRUCTION OPTIONS

- the rooflight system type matching the requirements and roof structure – can be installed in the flat roof.
- Along the roof ridge or perpendicular to roof ridge
- option of rooflights with built-in smoke exhaust or ventilation flaps

### ▶ GLAZING

- polycarbonate sheet glazing of 10 mm to 25 mm thickness
- available glazings compliant with B<sub>ROOF</sub> (t1) classification

**NEW! For selected dimensions of rooflights double glazing solution is available (two layers of structured polycarbonate sheets, available thickness combinations of 10 mm + 10 mm, 10 mm + 16 mm or 16 mm + 16 mm), which improves U coefficient for the rooflights glazing up to U= 1.0 W/m<sup>2</sup>K**





## PYRAMID AND DOME ROOFLIGHTS

This type of Mercor rooflights is characterised by excellent insulation coefficient and light transfer parameters. Pyramid and dome rooflights are installed especially in such places where the building construction does not allow the installation of large-span and long roof skylight systems while the building interior lighting is very important.

Additionally, pyramid rooflights can be equipped with ventilation flaps, which enable a combination of several functions.

### ▶ GLAZING

- polycarbonate sheet of 10 mm ÷ 25 mm width
- glazing compliant with B<sub>ROOF</sub> (t1) classification

### ▶ SHAPE

- the rooflight shapes allow small spaces to be used in the roof for supplying daylight to the interiors

### ▶ SPAN

- for pyramid rooflight 1.2 m ÷ 5.0 m at the pitch angle from 30° to 60°
- for dome rooflights 1.2 m ÷ 6.0 m

### ▶ STRUCTURE

- made of aluminium profiles matched to the skylight span and polycarbonate type





### **SMOKE EXHAUST AND VENTILATION SYSTEMS IN CONTINUOUS ROOFLIGHT SYSTEMS**

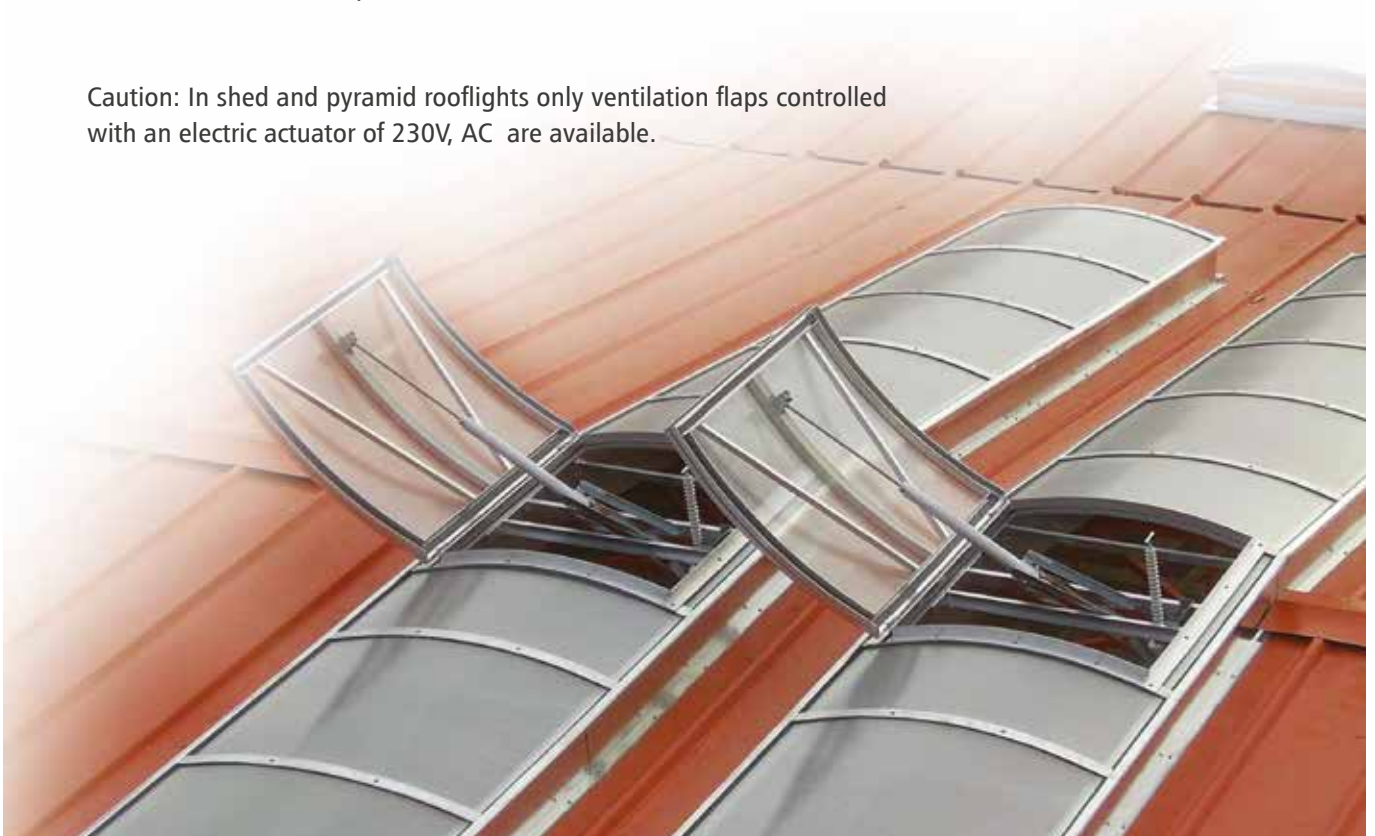
mcr PROLIGHT barrel vaulted rooflights are characterised by a structure that enables the installation of smoke and heat ventilators or ventilation flaps

Rooflights with integrated flaps combine the function of supplying daylight, smoke exhaust or ventilation of the building.

A wide range of mcr PROLIGHT rooflights enables the installation of a whole range of flaps of 100 x 100 cm to 200 x 250 cm (single leaf flaps) and 100 x 100 cm to 250 x 250 cm (double leaf flaps).

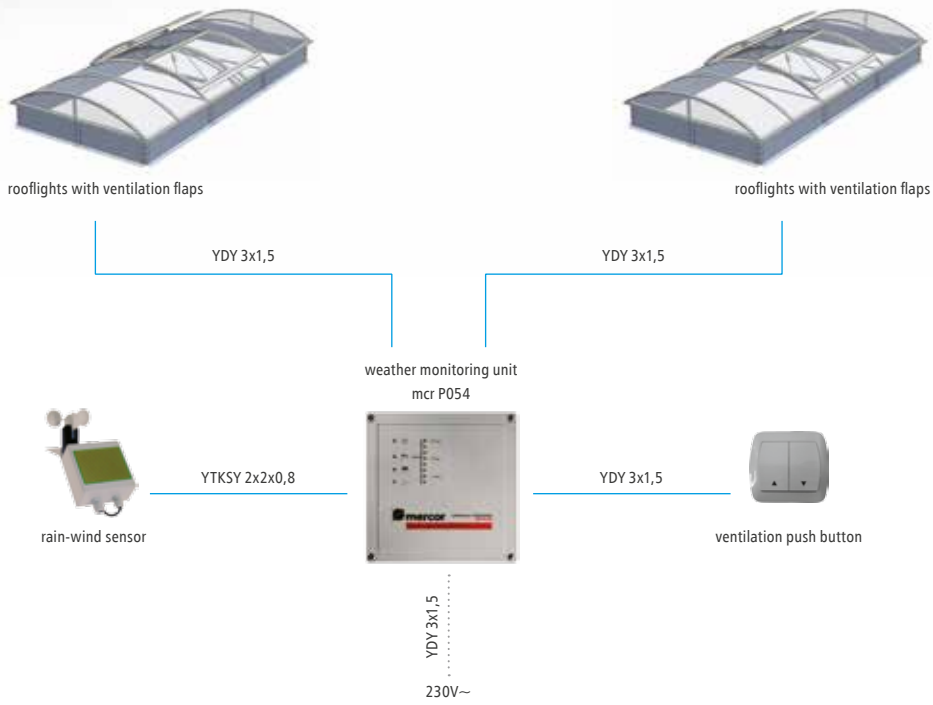
The flaps integrated in roof skylight systems in the case of smoke exhaustion function can be additionally assembled with wind deflectors, which increases the surface of active smoke exhausting. By implementing the smoke exhaust function, the flaps can be pneumatically or electrically controlled (24V-). In case of ventilation flaps, the electric actuator is used for their control (230V~).

Caution: In shed and pyramid rooflights only ventilation flaps controlled with an electric actuator of 230V, AC are available.

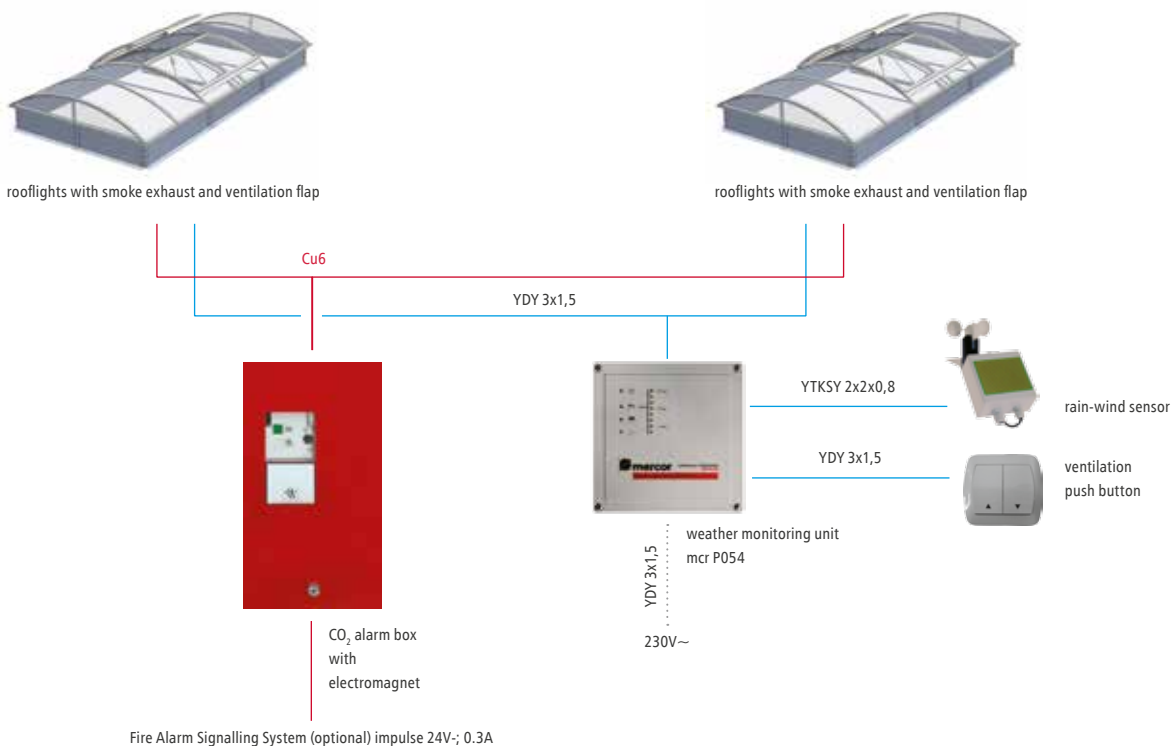




**TYPICAL CONFIGURATION OF ELECTRIC CONTROL SYSTEM FOR FLAPS IN ROOFLIGHT SYSTEMS**



**TYPICAL CONFIGURATION OF PNEUMATIC CONTROL SYSTEM FOR SMOKE AND HEAT VENTILATORS IN ROOFLIGHTS WITH ADDITIONAL DAILY VENTILATION FUNCTIONS**



## FIRE PROTECTION SYSTEMS

- ▶ smoke and heat exhaust systems
- ▶ fire ventilation systems
- ▶ fire protection of building structures

## NATURAL SMOKE AND HEAT EXHAUST SYSTEMS

- ▶ comprehensive solutions for smoke and heat exhausting
- ▶ protection of escape routes against smoke
- ▶ reduction of material losses caused by fire and smoke
- ▶ supply of light and fresh air to building interiors

**WE PROVIDE  
TAILOR-MADE SOLUTIONS**



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