

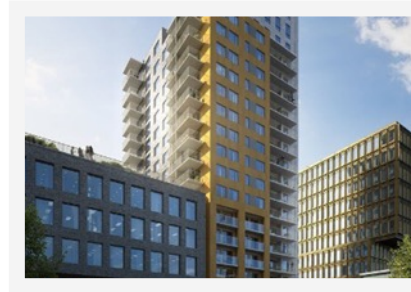


EKOVENT®

WE LEAD THE AIR

A wide product range

Our range includes many well-known products, but we often launch new innovations that we know our customers need. In our wide ventilation program you will find, among other things, fire dampers, roof hoods, louvres, dampers, fans, VAV, and control and monitoring systems



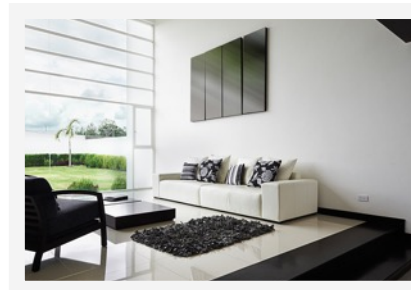
Fire Protection



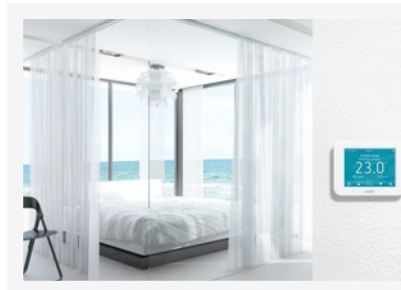
Roof hoods



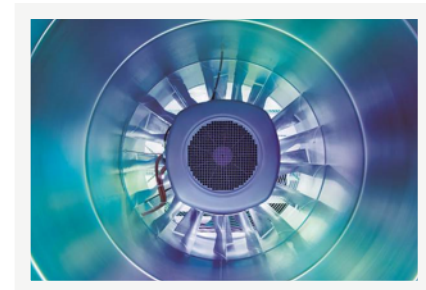
Louvres



Dampers



VAV-/CAV
system



Fans

EKO SafeEvac Pressurization system

2020-11-18

Agenda

EKO-SafeEvac

Air Supply

Smoke Control Damper

Smoke hatch

Pressure relief damper

Summary

EKO SafeEvac

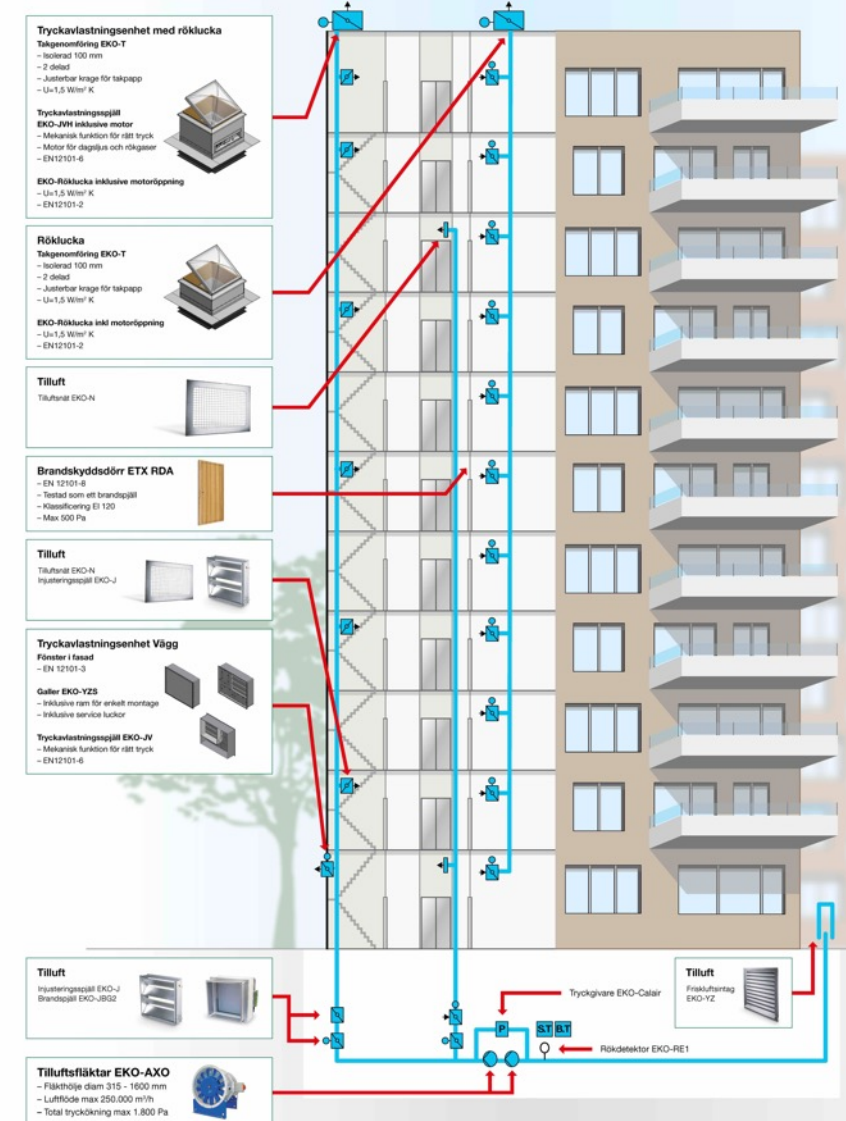
Pressurization system that saves lives

EKO-SafeEvac

Pressurization system that saves lives

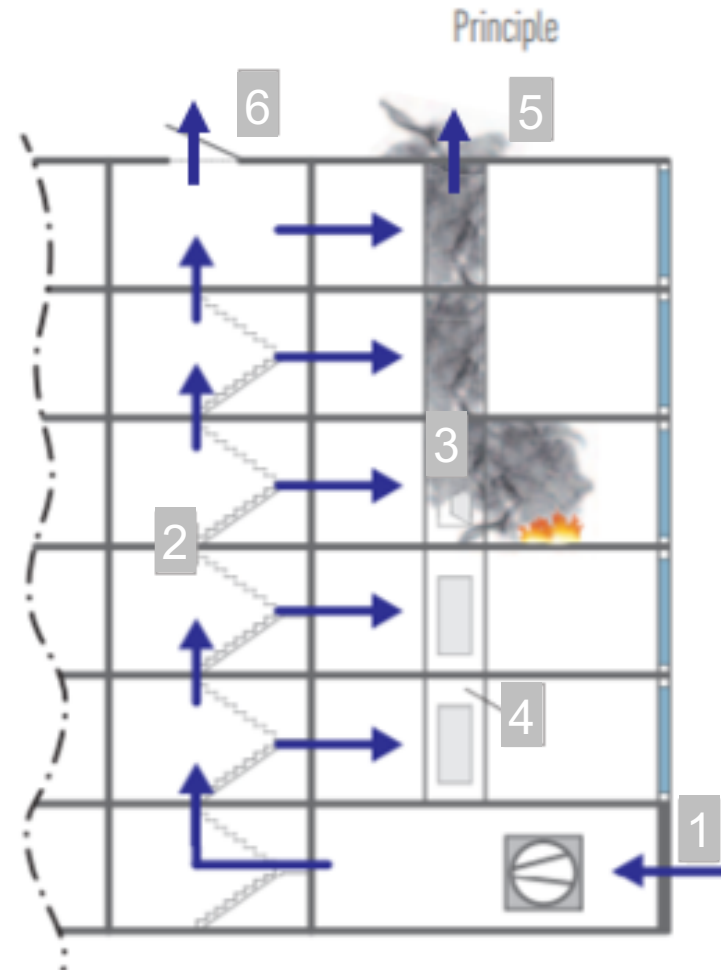
System that provides safe escape routes in stairwells, elevator shafts and intrusion routes for the rescue service in the event of fire.

- The system complies with EU Standard 12101-6.
- EKO SafeEvac is flexible and can be adapted to all types of buildings.
- The system ensures that escape routes are safe and the evacuation of the building can be performed safely.



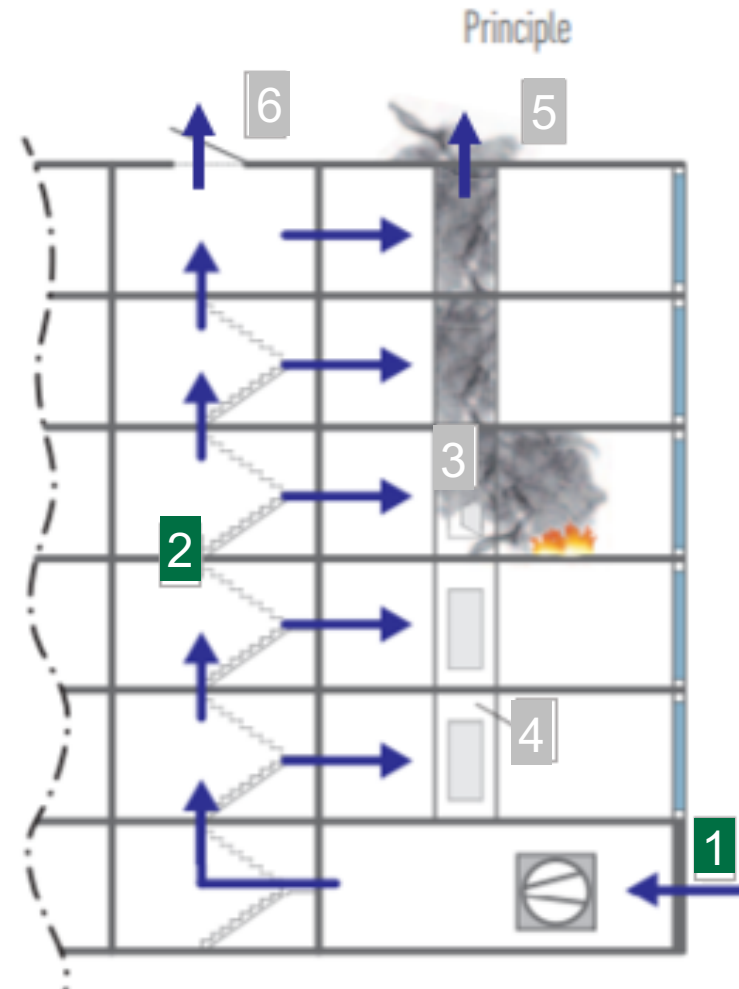
The principle

- 1 Air supply operating in case of fire
- 2 Excess pressure in staircase (safety staircase) ensures there is no smoke
- 3 Smoke gases flow through controlled flow openings EKO-ETX RDA
- 4 Internally located flow shaft
- 5 Smoke extraction unit
Smoke gas is evacuated through smoke hatch EKO-BRL with roof duct EKO-T
- 6 Pressure relief unit
The overpressure in the stairwell evacuates smoke gases through the smoke hatch EKO-BRL, pressure relief damper EKO-JVH and roof duct EKO-T
If a door to the stairwell is opened, the overpressure prevents fire gases to enter.



Air Supply

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Air Supply

For Pressurization system EKO SafeEvac

- Air supply via external louvres (Air supply can also be done from the roof, but note that then it must be done from two separate sides 5.0 m from the collection duct, ie a total of 10.0 m between air intakes).
- Supply air fans with frequency converter and pressure sensor. By default, it should be redundancy and for this two fans are proposed in series.
- Min. overpressure in stairwells 50 Pa, Max overpressure 100 Pa (Max overpressure is controlled by the force required to open a door, approx. 150 Nm).
- Air velocity in door to stairwell 0.75 m / s - 2.0 m / s (Depending on the number of doors that must be open at the same time, the standard states class A-F).



Air Supply

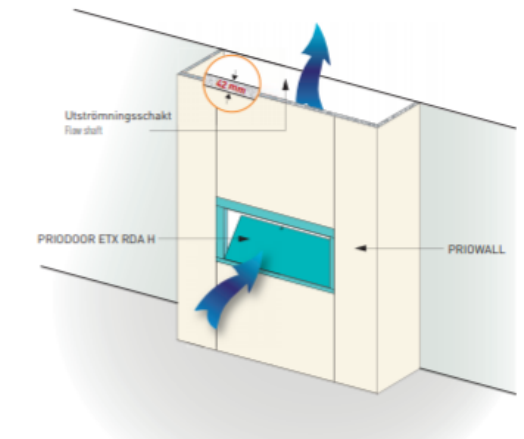
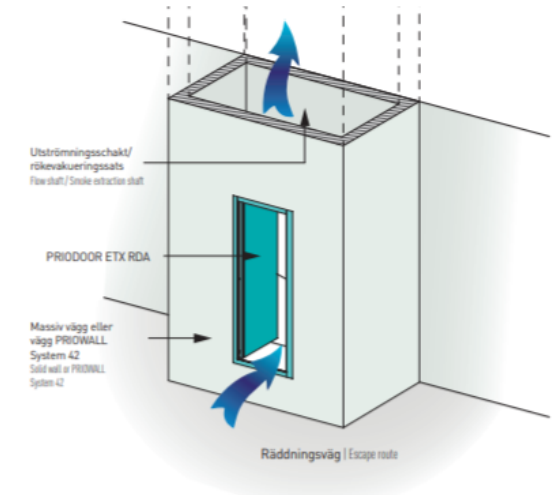
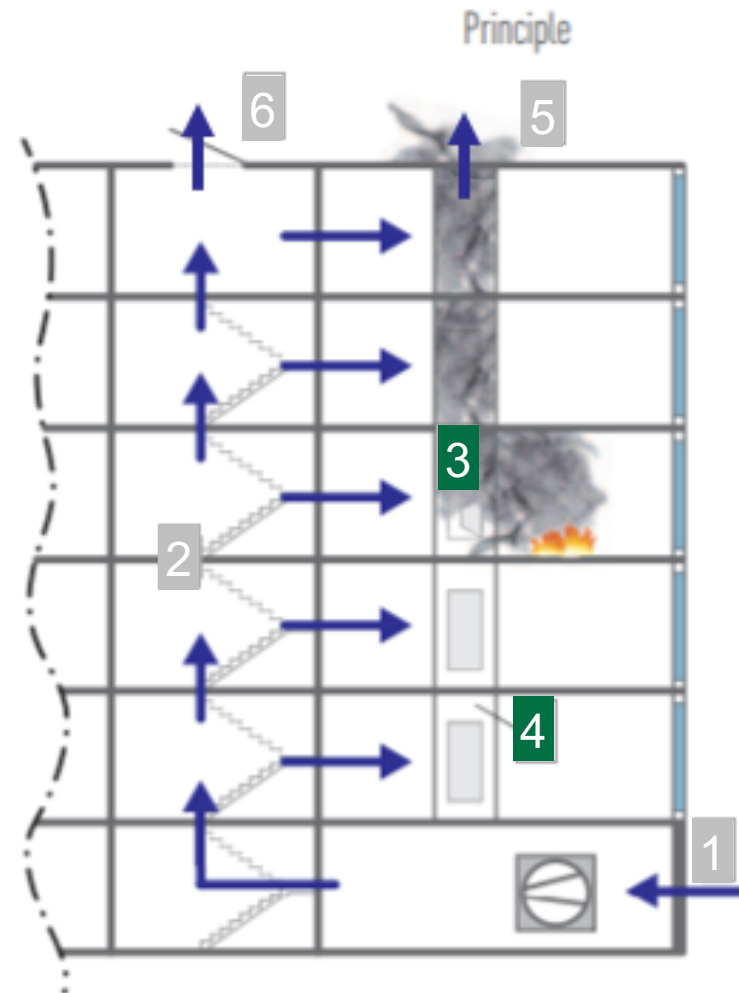
For Pressurization system EKO SafeEvac

- Fire damper to protect the system in the event of a fire in a technical room.
- Supply air in stairwells via control and shut-off damper EKO-J and wire mesh louvre EKO-N.
- If there are several spaces that are to pressurize e.g. rescue elevators etc. the same fans with branch ducts, control and shut-off damper EKO-J are used.
- Overpressure in stairwells ensures smoke-free escape routes.



EKO-ETX RDA

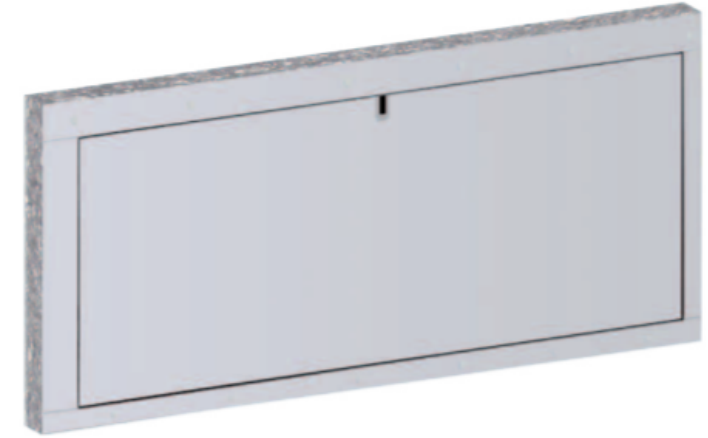
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EKO-ETX-RDA

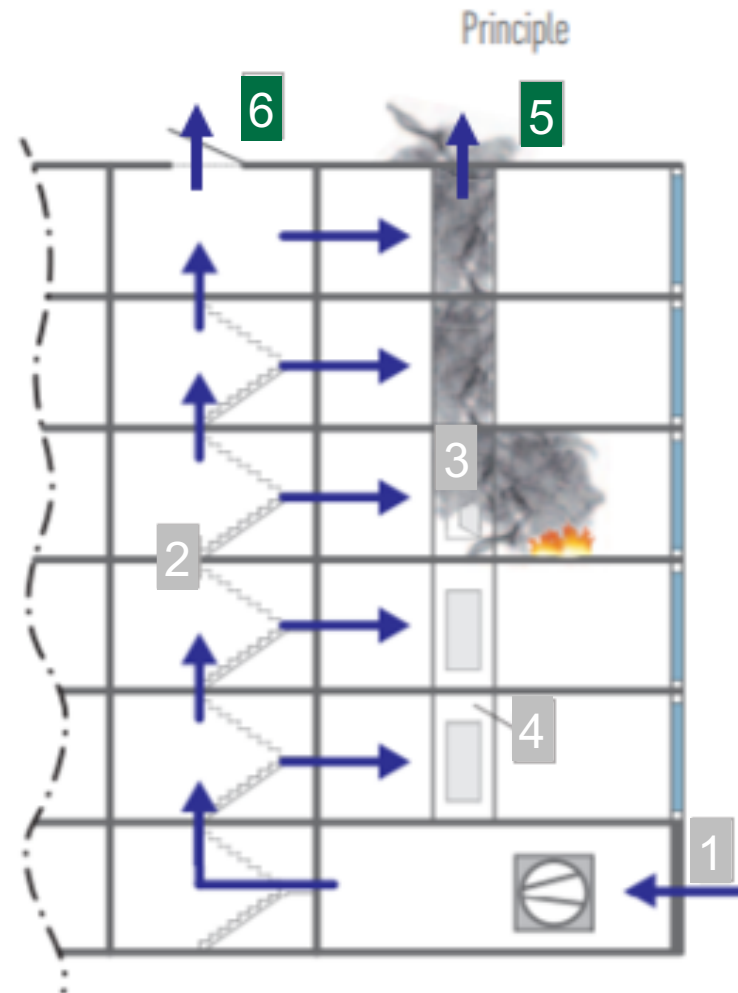
CE-marked smoke control damper for pressurization system EKO SafeEvac

- CE-marked smoke control damper complete with automatic opening.
- Complies with EU Standard EN 12101-8.
- Available in vertical $h=1134-2100$ mm / $b=500-1000$ mm and horizontal $b=500-1000$ m / $h=379-1000$ mm. The design allows the system to be dimensioned with very low pressure drops.
- Recessed mounting with mounting frame.
- Opening and closing with chain drive.
- Classification EI90 with sound and optical signal when opening and closing.
- Standard color RAL 7035 but is also available with other finishes such as wood and metal.



EKO-BRL

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Smoke hatch EKO-BRL

CE-marked smoke hatch for Pressurization system EKO SafeEvac

- CE-marked Acrylic smoke hatch complete with opening unit (4-layer curved Acrylic, U-value $1.5 \text{ W/m}^2\text{°C}$).
- Complies with EU Standard EN 12101-2
- Smoke hatch is delivered with insulated frame.
- Adapted for pressure relief damper EKO-JVH and roof duct EKO-T.
- Effective opening area $0,62 \text{ m}^2$.
- EKO-BRL is delivered in dimension $1000 \times 1000 \text{ mm}$ (External frame $1090 \times 1090 \text{ mm}$).



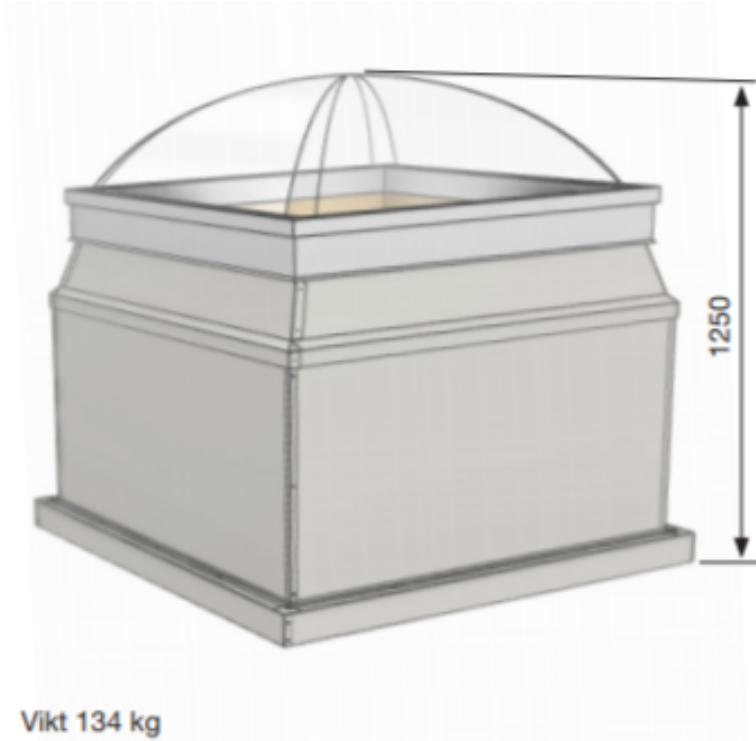
EKO-BRL

Electric opening system

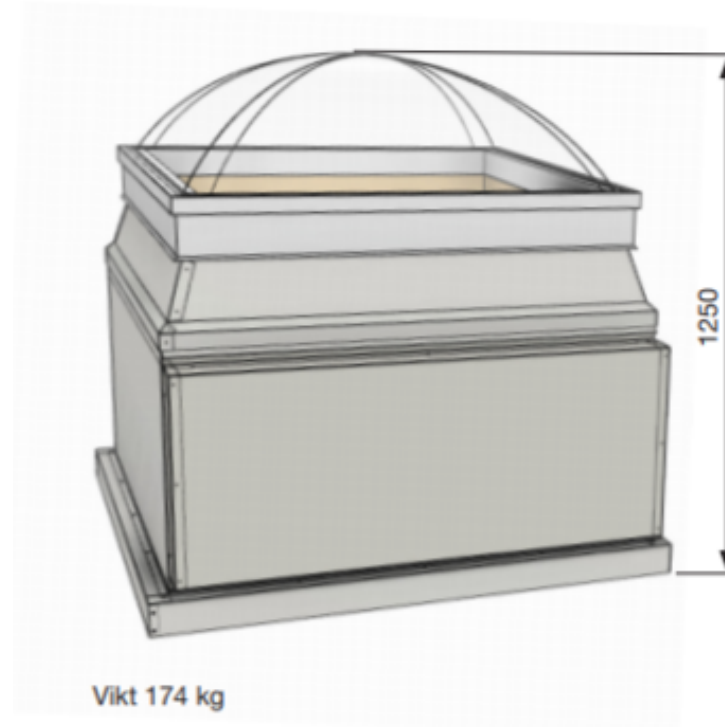
- Opening unit for 0-160 ° opening with actuator 24/48 V
- The opening system always mounted on delivery
- Opening speed 60 seconds
- Built-in electronic current limiter and acts as overload protection in end position and blocking



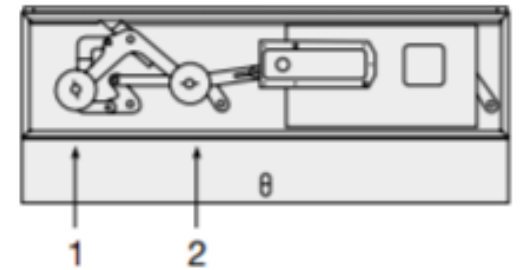
EKO-BRL



Mounting options 1
Smoke extraction unit

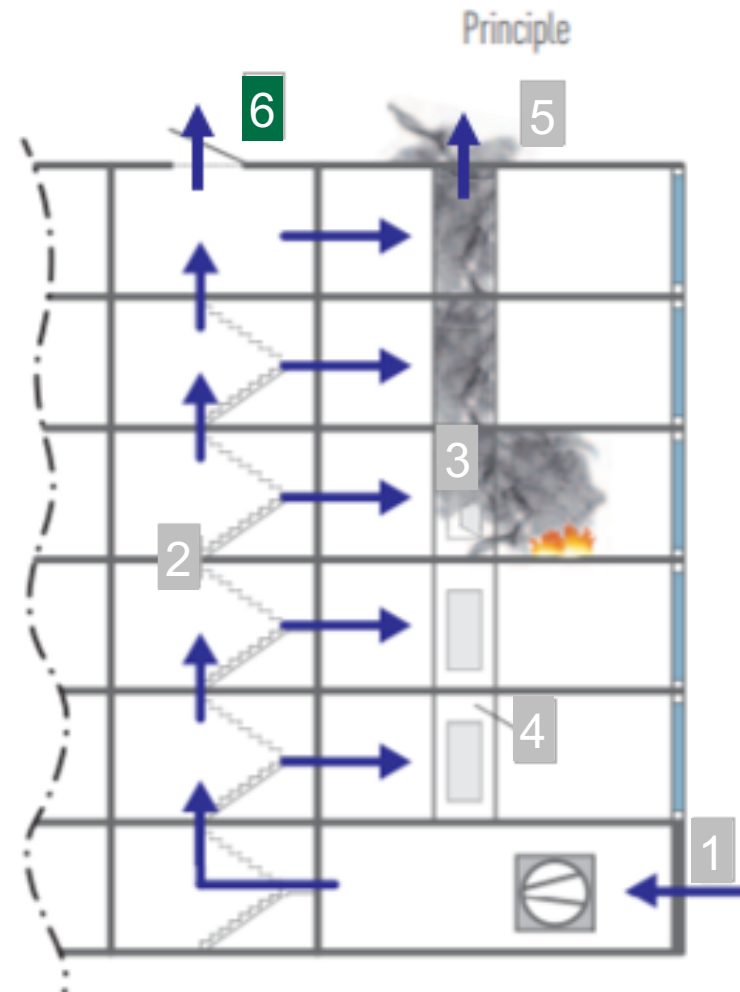


Mounting options 2
Pressure relief unit
(Smoke hatch mounted with pressure relief damper EKO-JVH)



EKO-JVH

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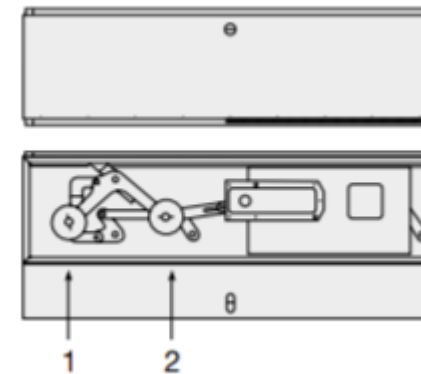
EKO-JVH

Pressure relief damper for Pressurization system

EKO SafeEvac

EKO-JVH is a mechanically self-acting damper that keeps the overpressure constant in escape routes such as stairwells and elevator shafts during pressurization activated in the event of fire. The system complies with EU Standard EN12101-6

- Adapted for smoke hatch EKO-BRL and roof duct EKO-T (Available in two variants, the picture shows JVH for mounting in a vertical duct)
- EKO-JVH can also be delivered with actuators for opening in case of inactive pressurization system. (For ventilation, lightning etc)
- EKO-JVH is manufactured in dimension 1000x1000 mm.

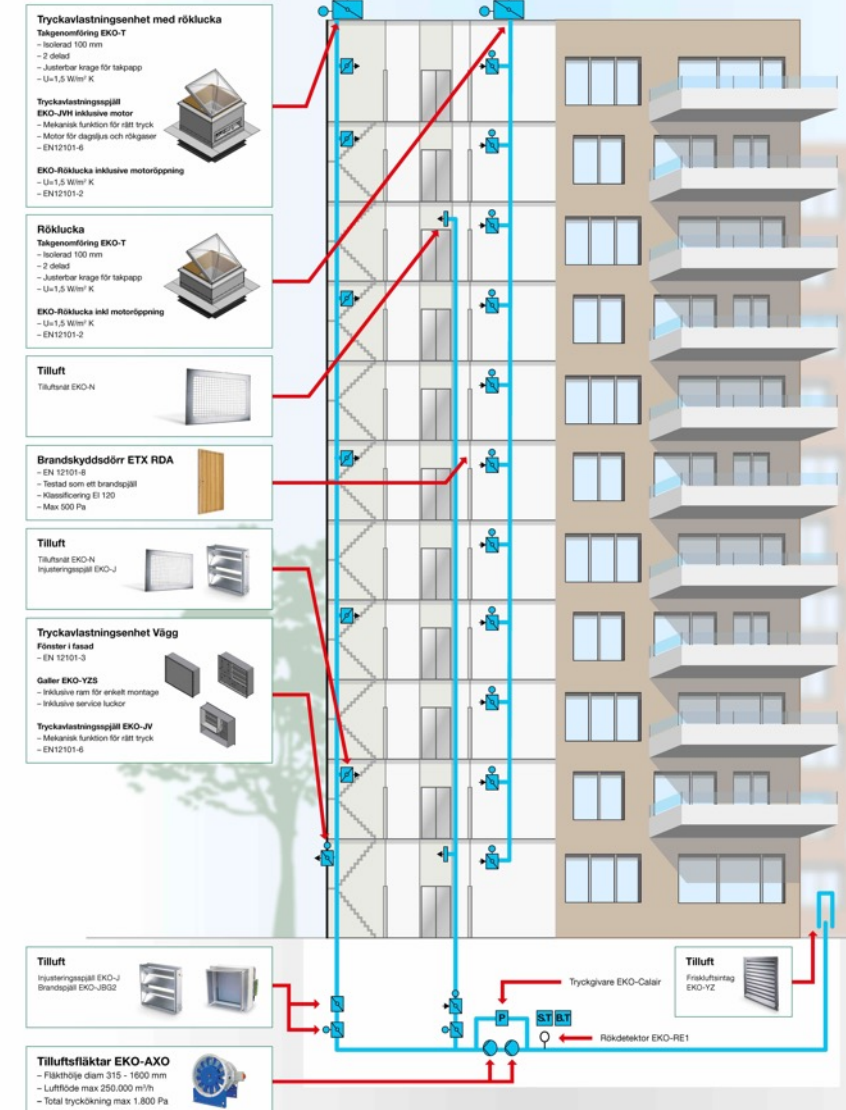


EKO SafeEvac

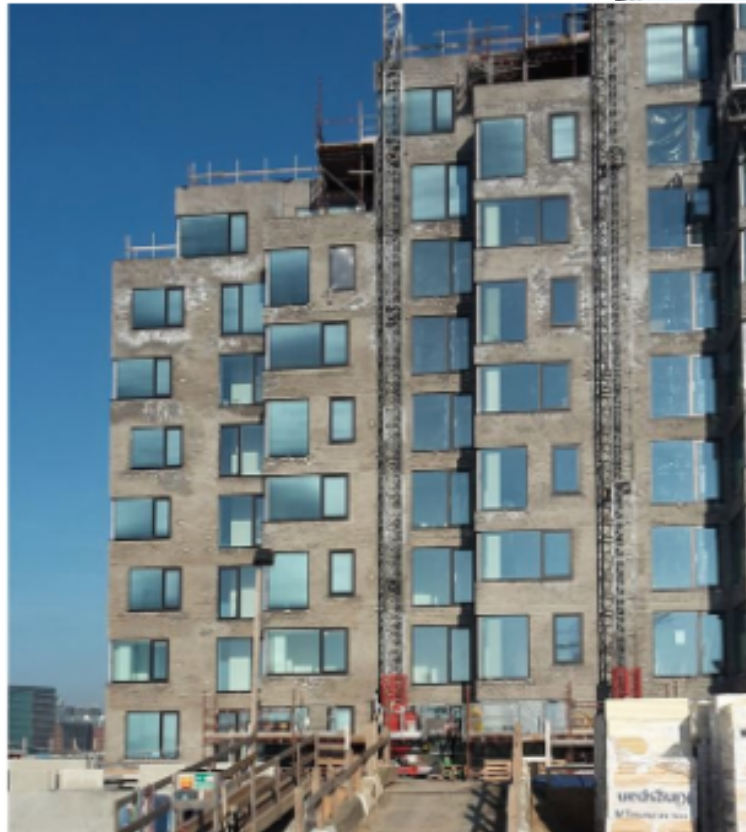
Pressurization system that saves lives

Summary

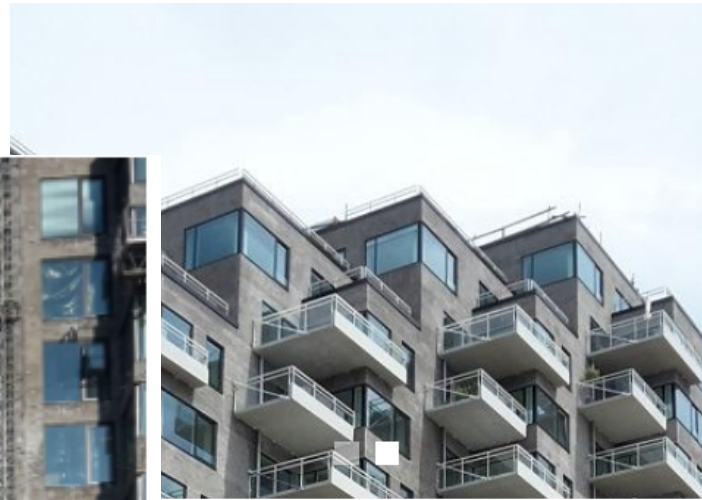
- The system complies with EU-standard 12101-6
- Adaptable to local regulatory requirements / solutions
- All required functional parts are delivered by EKOVENT
- The system is dimensioned by EKOVENT based on current Fire Protection documentation
- All components such as fans, smoke control dampers, louvres, decompression dampers, etc. are dimensioned by EKOVENT.
- If there is no fire protection documentation / construction, the entire system is designed and dimensioned by EKOVENT and the customer receives a report that the system meets current standards.



References

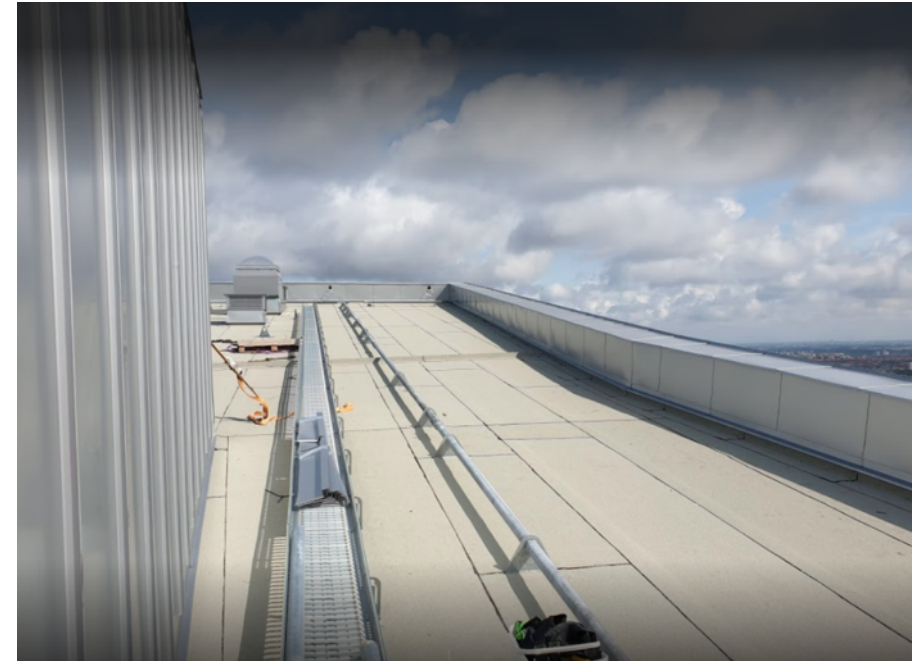


PDE FELT A, COPENHAGEN



AMAGER RESOURCE CENTRE,
COPENHAGEN

References



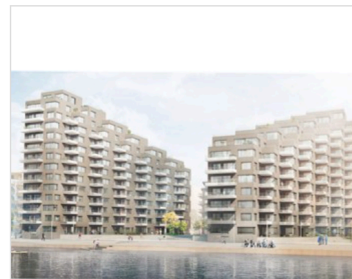
THE POINT, MALMÖ

Home / Products / Fire Protection / Pressurization system

Pressurization system

Filter:

- All in Fire Protection
- Fire / smoke dampers
- Pressure relief damper
- Decompression dampers
- Back-flow protectors
- Control and monitoring
- Pressurization system
- Actuators
- Smoke detectors



Pressurization system EKO SafeEvac
Pressurization system



EKO-JVH
Pressure relief damper



EKO-BRL
Smoke Hatch



EKO-ETX RDA
Smoke Control Damper

For decompression or pressurization, always contact EKOVENT and we will help you find the right solution

EKOVENT®

WE LEAD THE AIR

www.ekovent.com

