

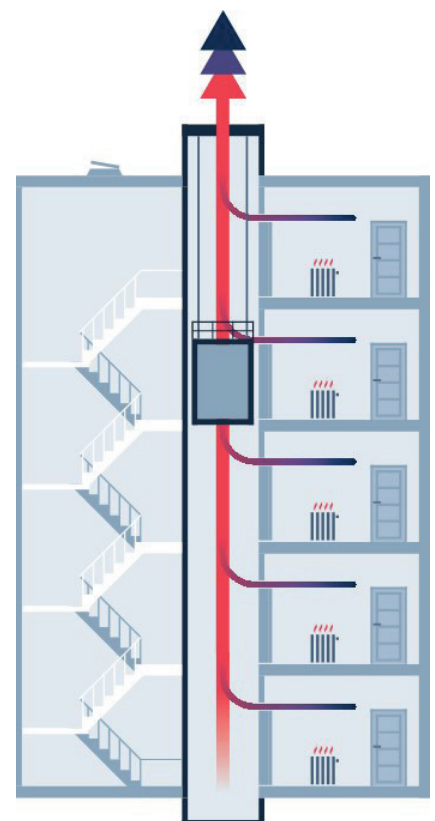
# SHAFT + ENERGY

## Opening at the top of shaft

- » Required by building regulations (smoke exhaust / ventilation)
- » Min. 0.1m<sup>2</sup> or 2.5% of the shaft floor area
- » Conventional: permanent opening into the open air
- » Closure with automatic opening possible
- » Heated or cooled air flows through the lift doors and the ventilation opening to the outside

## Considerable energy losses occur

- » Depending on building type, location, dimensions, indoor temperature, use, etc. average 15,000 kWh per year <sup>1)</sup>
- » Examples of power loss with 4 floors <sup>2)</sup>
  - Residential building: 10,300 kWh per year
  - Office building: 14,000 kWh per year
  - Hospital: 21,400 kWh per year
- » The lift shaft in an office building with a consumption of 135 kW/m<sup>2</sup>a, is responsible for 7.5% of the energy consumption of the building <sup>2)</sup>
- » Throughout Germany, approx. 600,000 open lift shafts generate an annual power loss of 7-11 TWh <sup>2)</sup>  
This corresponds to avoidable CO<sub>2</sub> emissions of approx. 2 Mt



<sup>1)</sup> ZVEI fact sheet 33017 (December 2021)

<sup>2)</sup> Figures according to IFEU  
(Institute for Energy and Environmental Research)

## Measure Closure of the permanent opening through a controlled shaft ventilation system

- » Closure by simple louvre flaps prevents energy leakage
- » Optionally thermally separated closing elements possible
- » Smoke detection and air quality sensor systems ensure safety in the in case of fire and a pleasant atmosphere in the lift

## Short payback periods

- » The investment in a shaft smoke extraction system comes with considerable cost savings
- » Depending on the building, such an attachment will pay for itself in 2-5 years
- » The BlueKit Simulator <https://www.bluekit.eu/services/simulation> calculates the individual savings with the most accurate model on the market <sup>2)</sup>
- » With BlueKit Lift Vision, the energy flows can also be made measurable. The measuring device is installed in front of the opening and offers remote access to the real-time data.



## About BlueKit

As a D+H Group brand, BlueKit is a market leader in the design, manufacture and sales of solutions for efficient smoke extraction, needs-optimised ventilation of lift and utility shafts as well as reliable weather protection covers. For more than ten years, BlueKit has been providing solutions for intelligent energy savings as well as safety and well-being in buildings.



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