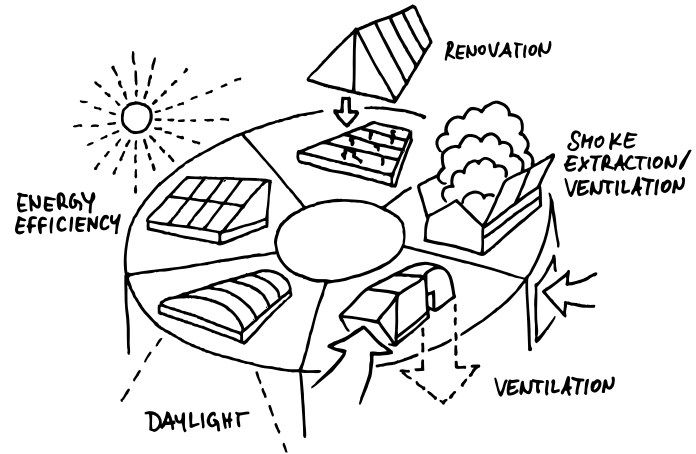


## ESSMANN hybrid ventilation offers the following comfortable features:

- Outdoor air is channelled draught-free into the work area
- The fresh air is distributed exactly as needed
- The good room climate improves work performance
- Better air temperature consistency reduces machine downtimes and the production of waste
- Lower investment and operating costs of the ventilation system
- The fresh air can be heated and cooled as required
- Heat recovery in accordance with EnEV 2009
- Heat reduction at night without the use of electrical energy
- Smoke and heat extraction systems are integrated into the hybrid ventilation system

Our specialist consultants can provide expert support ranging from professional advice and project design planning to execution. You will find your local representative at [www.essmann.de/ansprechpartner](http://www.essmann.de/ansprechpartner)

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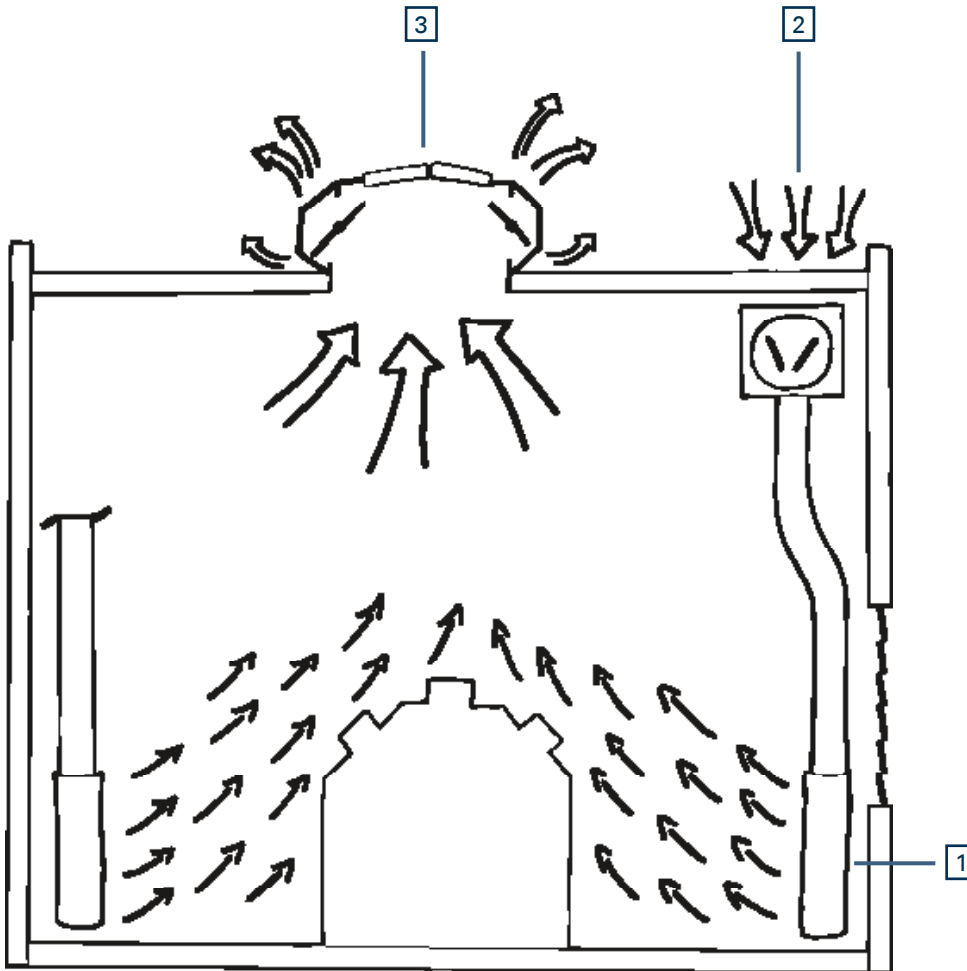
# ESSMANN

▲ LIGHT ● AIR ■ SAFETY



## **ESSMANN® Hybrid Ventilation:**

The energy efficient  
solution for the  
manufacturing industry.



## ESSMANN hybrid ventilation

The ESSMANN hybrid ventilation system combines natural and mechanical ventilation. The example shows how a ventilation system channels fresh air mechanically into the hall. Individually dimensioned air outlets, which are mostly hoses, ensure that the air is distributed draught-free and specifically to where the people are working in the room. Thermal lift – which is supported by the mechanical supply of fresh air – ensures that the waste air is extracted naturally and therefore without the use of energy. The ESSMANN all-weather double flap is a comfortable means of extraction that functions irrespective of the weather conditions and extracts the waste air through the inner flaps and out over the roof, even in bad weather. ESSMANN lamellae or fresh air flaps in the façade can support the ventilation function without the use of energy.

## Natural ventilation where possible – mechanical ventilation where necessary.



The mechanically imported fresh air is channelled to specific areas of the room through individually dimensioned air outlets, without creating a draught. The low speed at which the air exits from the outlets ensures that the quality of the fresh air is highly effective. The result is a pleasant room climate without any draughts.



The mechanical fresh air system suctions in air from the outside and processes it as required. The air is channelled straight to the work areas through a system of ducts with air outlets. The ventilation appliances can be installed in the building or outdoors if they are weatherproof.



ESSMANN all-weather double flaps ensure that the waste air is extracted naturally throughout the year, irrespective of the weather. A rain sensor system closes the outer flaps in bad weather, and the rainproof inner flaps open. The double flaps also ensure the efficient extraction of smoke and heat.