

Renovation-Ready

zehnder

Get to know each level

0



Level 0 - Window ventilation

There is no system in the house that supplies or extracts air. The air quality in the house is therefore strongly dependent on how frequently doors and windows are open.

Also known as: • Airing out • Natural ventilation • System A

Pros and cons:

- + No purchase costs or maintenance
- High energy costs
- Less than adequate indoor air quality
- Chance of noise, draught, vermin
- Hot air enters the house in summer and too cold air in winter

1



Level 1 - Mechanical ventilation

Mechanical ventilation extracts polluted air from the bathroom, toilet, kitchen and storage areas via ducts. The ventilation unit is often in the attic or on the roof. Fresh air is supplied via grilles near windows or doors.

Also known as: • System C • Pipe vent • Roof ven • Ventilation box • Residential ventilation unit

Pros and cons:

- + Low purchase costs, minimal maintenance, long product life
- + Takes up little space
- + Better air quality as long as window grilles are open
- High energy costs for heating or cooling
- May be less comfortable (e.g. lets in a draught)

2



Level 2 - Decentralised ventilation

Decentralised ventilation provides a single room in the house with fresh air. The ventilation unit is installed directly into the exterior wall of a bedroom, study etc. Existing heat or cold in the room is reused.

Also known as: • Localised ventilation • decentralised heat recovery

Pros and cons:

- + No complete duct system required
- + Lower energy costs thanks to heat recovery
- + Better air quality and increased comfort thanks to the air filter
- Restricted to one room
- Exterior component required in the façade

3



Level 3 - OverFlow ventilation

For OverFlow ventilation, the mechanical ventilation box is replaced with a heat recovery unit. This measures air quality and extracts polluted air via existing ducts. Fresh air is transported via supply ducts from the attic to the 1st floor and then to the ground floor via the landing.

Also known as: • OverFlow technology • overflow ventilation

Pros and cons:

- + Proven to deliver better air quality throughout the home
- + Fewer materials required
- + Lower energy bill compared to mechanical ventilation
- Somewhat slower effect compared to direct air supply
- Only works for renovation

4



Level 4 - Central heat recovery ventilation

A single unit ventilates the entire house. Air is supplied to and extracted from the right areas via an air distribution system. Existing heat or cold in the home is reused. This maintains a pleasant indoor temperature and saves energy.

Also known as: • System D • Heat recovery • Balanced ventilation

Pros and cons:

- + Direct supply, adequate fresh air everywhere in the house
- + Optimum comfort
- + Entirely automatic and works quickly
- + Suitable for new construction and area-focused ventilation
- No active cooling or heating

5



Level 5 - Central heat recovery ventilation

Climate control is ventilation, cooling and heating combined into one system. This is an expansion of a centralised heat recovery unit, which actively cools or heats the air supply. The system finds the balance between health, comfort and energy efficiency.

Also known as: • ClimateSwitch, Total system, Indoor climate solution

Pros and cons:

- + Sustainable, healthy way to prevent overheating in the home
- + Maximum energy efficiency in any season
- + Additional comfort due to balanced humidity
- A climate solution has to be added to the ventilation unit, taking up a bit more space
- Higher purchase costs