

# Comfosystems Zehnder compact ventilation system for apartments

**zehnder**

always  
around you

Heating

Cooling

Fresh Air

Clean Air



With the new Zehnder  
ComfoAir 180 ventilation unit  
and air distribution system



# What to do when your space is restricted but you need a lot of fresh air.

Who doesn't want a healthy and comfortable indoor climate?  
That is why you plan your home with these needs in mind.

You find a responsible attitude towards energy to be just as important, which helps you save money.

It's natural for you to design your living space today to meet the demands of tomorrow, in compliance with future construction standards in terms of legislation and energy certificates, etc.

You take care to maintain the building structure in order to increase the resale value.

This is where fresh air plays an essential role. The Zehnder compact ventilation system for apartments ensures a consistent exchange of humid, stale air with fresh, clean air.

Your benefits:

- Comfortable and healthy indoor climate
- Permanent exchange of stale, humid air with clean, fresh air
- Prevents mildew formation
- Retains the value of the property
- Savings in heating costs of up to 50 %
- Quiet, energy-efficient operation
- High-level air performance with 180 m<sup>3</sup>/h at 170 Pa, ideal for apartments
- Compact unit, space-saving and intuitive to use
- Better energy certificate rating
- Simple to install in new builds and renovations

# You can't see it, but you'll feel the difference: fresh air – anytime, anywhere.

**Health:** fresh air promotes well-being, healthy sleep, concentration and productivity. When fine dust and pollen are captured by the optional fine filter, even allergy sufferers can breathe easily.

**Comfort:** the apartment receives a consistent supply of clean, fresh air. At the same time, humidity, kitchen odours and tobacco smoke are extracted automatically. There is no need to open windows each day for fresh air. This not only provides protection from outside noise; it also enhances security protection.

**Energy efficiency:** more than 70% of the energy required in homes is used for heating. When windows are opened to let in air, valuable heat is let out – bad for the energy balance and your wallet.



Installation solution for the kitchen – closed

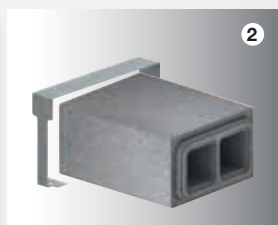
# Air distribution system: well designed and flexible.



1

Combined external wall grille

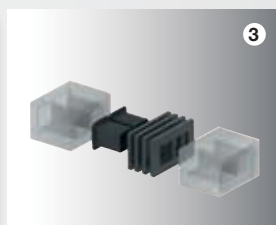
Only one element is required for outside and exhaust air, which integrates harmoniously into the façade. Thanks to intelligent construction, there is practically no odour transfer at all between outside and exhaust air.



2

ComfoPipe Plus Twin duct & clamp

Outside and exhaust air are separated hygienically in a compact unit 200x330 mm in size. The insulation thickness complies with statutory requirements. The corresponding clamps also serve to fasten the twin duct to the wall covering (e.g. plasterboard).



3

ComfoPipe Plus length compensation

Length compensation for routing the twin duct between two set points (unit and wall duct). Axial installation makes assembly easier and also helps to compensate for any uneven surfaces.



4

ComfoPipe Plus connection box

Available in different versions, either vertical or horizontal, they serve as a connection between the ventilation unit, attenuator and twin duct. Connections can be made even in very confined spaces.



5

Attenuator/distributor combination

The attenuator is fitted with a special insulation core. This highly-efficient attenuator prevents any noises that could occur in the supply and extract air. Intelligent: it also includes a direct connection for neighbouring rooms and valves.



6

CK 300 Flexible element

Where rigid components are no longer able to help: the flexible element is designed to enable jumps in height and create variable bends.



7

Flat 51 4-port manifold with single connection

The distribution manifold is now connected with only one CK 300 ventilation duct rather than two, as was previously the case. Thanks to savings in space, supply and extract air manifolds can be positioned next to each other, e.g. in a 90 cm wide passageway, without any need for additional installation width.



8

Refurbishment valve for supply and extract air

Since installation does not require any clearance to ceiling or wall, only a minimum ceiling suspension system is required. Core hole drilling produces the required openings quickly and easily. For draught-free air supply (round valve) and extraction (square valve).



# Maximum performance, all in a compact size.

**Compact:** the ventilation unit fits easily into a standard kitchen cabinet or wall niche. There is no need to dismount the entire ceiling to accommodate the air distribution system. Your living space and the feeling of spaciousness remains intact.

**Flexible:** the twin ducts can be combined with flat oval tubes and round tubes. Suitable for both horizontal and vertical installation, they route easily over the kitchen cabinet to continue in the wall, ceiling or floor.

**Fit for the future:** Compliance with statutory requirements means that the system is eligible for government subsidies. The positive energy certificate rating upholds the value and continued marketability of the property.



Installation solution for the kitchen – open

Energy-saving refurbishments and the current standards for new buildings are making building envelopes and windows in homes increasingly airtight. This helps to save valuable energy but makes adequate ventilation essential: if stale, humid air is not extracted, mildew will develop, which attacks the building structure – and the property loses value. Conventional means of ventilation by opening windows enable pollutants to enter the house and valuable heat is lost. A ventilation system is a convenient and energy-efficient alternative.

**Value retention:** mildew results when humid air is not extracted. This, in turn, damages the building structure. A permanent exchange of air must be guaranteed to retain property value.

**Rent and sale:** an increasingly important factor when renting or selling a property is the building's energy certificate: Not only does insulation play an important role, ventilation does, too.

**Appearance:** it is good when the apartment design has no restrictions: The elements of the ventilation system are concealed, leaving only the control unit and the supply and extract air valves visible.



Installation solution for the bathroom – closed

The Zehnder compact ventilation system for apartments lets you create a pleasant and healthy indoor climate in a comfortable and energy-efficient way. Designed for integration in a kitchen unit or niche in the wall, the system comprises the powerful Zehnder ComfoAir 180 ventilation unit and a specially developed compact air distribution system. Rooms are permanently supplied with fresh air, while used air is reliably extracted. You will never feel the need to open the window. This prevents heat loss and cuts heating costs. And thanks to humidity recovery via the optional enthalpy exchanger, indoor air will not get too dry in periods when the heating is on.

**Efficient:** the excellent thermal insulation properties of the material bring down energy costs. In addition, humidity is recovered by the optional enthalpy exchanger, preventing excessively dry air when the heating is on.

**In harmony:** all of the system components match perfectly. Plug connections ensure simple connection of the air distribution elements. So everything fits and is quick and easy to install.

**Easy installation:** the compact ventilation system is quick and easy to install, both in new buildings and in renovation projects. Easy access to all components for servicing and maintenance.



Installation solution for the bathroom – open



# Zehnder ComfoAir 180 ventilation unit: compact and powerful.

**Flexible installation:** Zehnder ComfoAir 180 accommodates the supply air connection either on the left or on the right. On the top or on the bottom. Suits all circumstances.

**Compact:** the slim dimensions of the ventilation unit (680 × 560 × 280 mm) let it fit into standard kitchen cabinets or wall niches, without reducing your living space.

**All-in-one:** the Zehnder ComfoAir 180 is available with an optional integrated pre-heater and/or enthalpy exchanger. These options can also be retro-fitted.

**Intelligent:** the cross-counterflow heat exchanger saves valuable energy with heat recovery of up to 95 %. The 100% summer bypass is regulated automatically.

**Simple:** the hook-on system makes for quick and accurate wall-mounted installation.



**Comfortable:** Simple to operate via control panel.

**Efficient:** fitted with energy-saving fans, the unit can achieve electrical efficiency of 0.29 W/(m<sup>3</sup>/h). This keeps energy consumption down to a minimum.

**Practical:** no tools are needed to change the filter. This keeps things quick and easy.

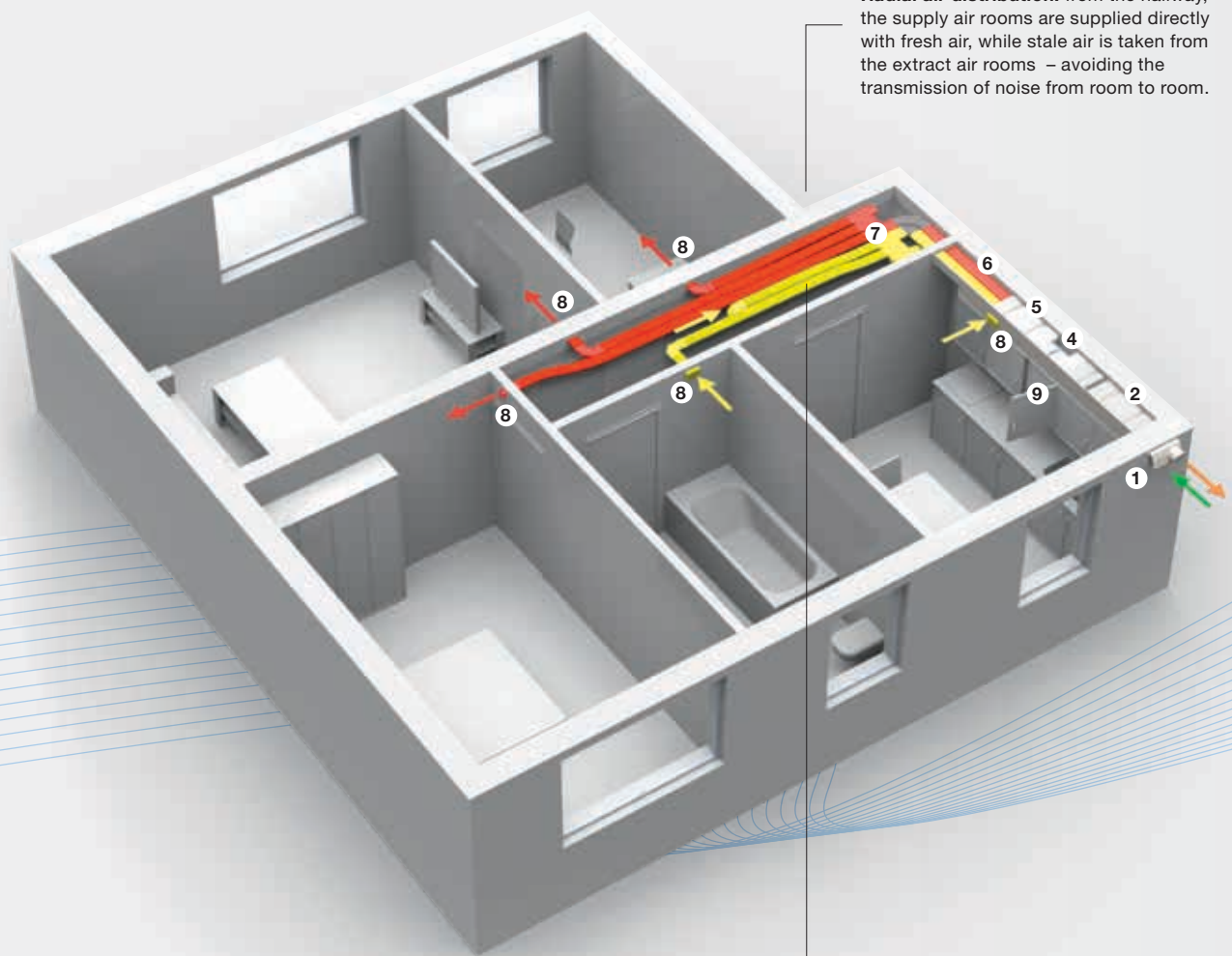
**Pleasant:** highly-efficient sound attenuation and extremely quiet EC fans make for practically silent operation.



**Flexible:** the optional bottom supply air connection enables air distribution on floor-level.

# A flexible solution for new buildings and renovation projects.

Installation options  
Kitchen



**Radial air distribution:** from the hallway, the supply air rooms are supplied directly with fresh air, while stale air is taken from the extract air rooms – avoiding the transmission of noise from room to room.

**Safe and hygienic:** air distribution with ComfoTube flat 51 and its smooth Clinside inner coating satisfies the highest demands for hygiene. It is SKZ certified and approved by the Hygiene Institute.



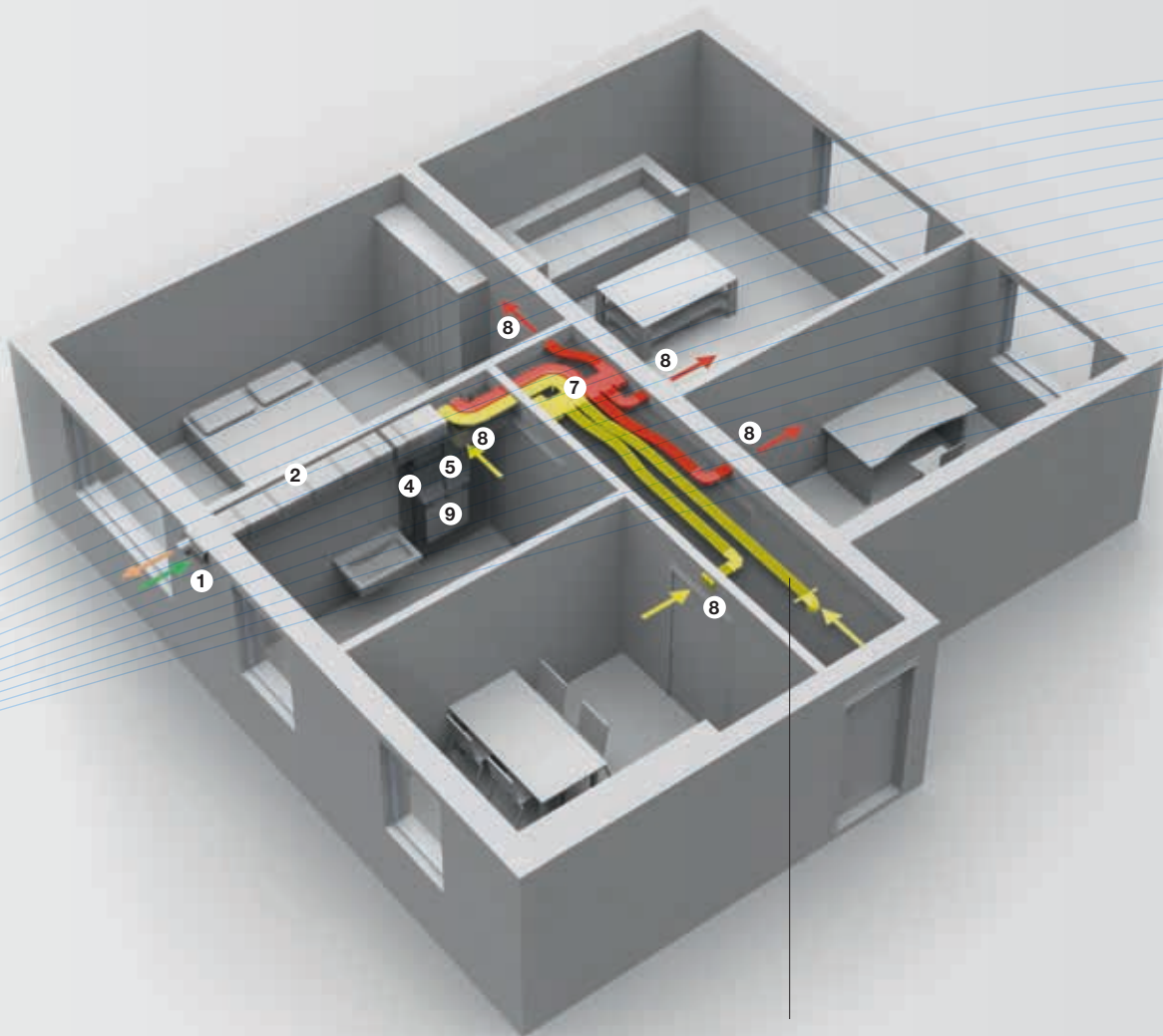
The Kunststoff-Zentrum has certified Zehnder ventilation tubes with the international SKZ seal of approval, thus confirming their high quality.



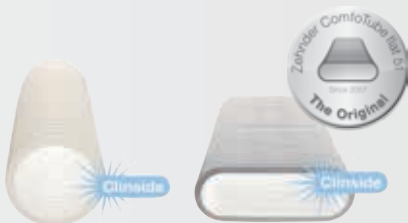
The Hygiene Institute for the Ruhrgebiet certifies the low dust build-up and good dust removal provided by Clinside.

From the hallway, tubes radiate out into the individual rooms. In this way, each room is supplied directly with fresh air and no noise is transmitted from room to room. To accommodate the ventilation tubes, the ceiling in the hallway need only be suspended by 10 cm – a space-saving installation that retains the aesthetics of the room. The extremely flat Zehnder ComfoTube flat 51 ventilation tubes, with a smooth inner Clinside coating, keep everything clean and hygienic – certified by the Hygiene Institute of the Ruhrgebiet.

Installation options  
Bathroom



**Low installation height:** thanks to the extremely flat ventilation tubes, the ceiling only needs to be suspended by 10 cm. This retains the aesthetics of the room.



A sophisticated system for any indoor situation – air distribution is possible in the ceiling, wall and floor by way of round tubes, flat oval tubes or a combination of both. The smooth Clinside inner coating prevents any collection of dust, and makes cleaning easy.

