

**zehnder**

always the  
best climate

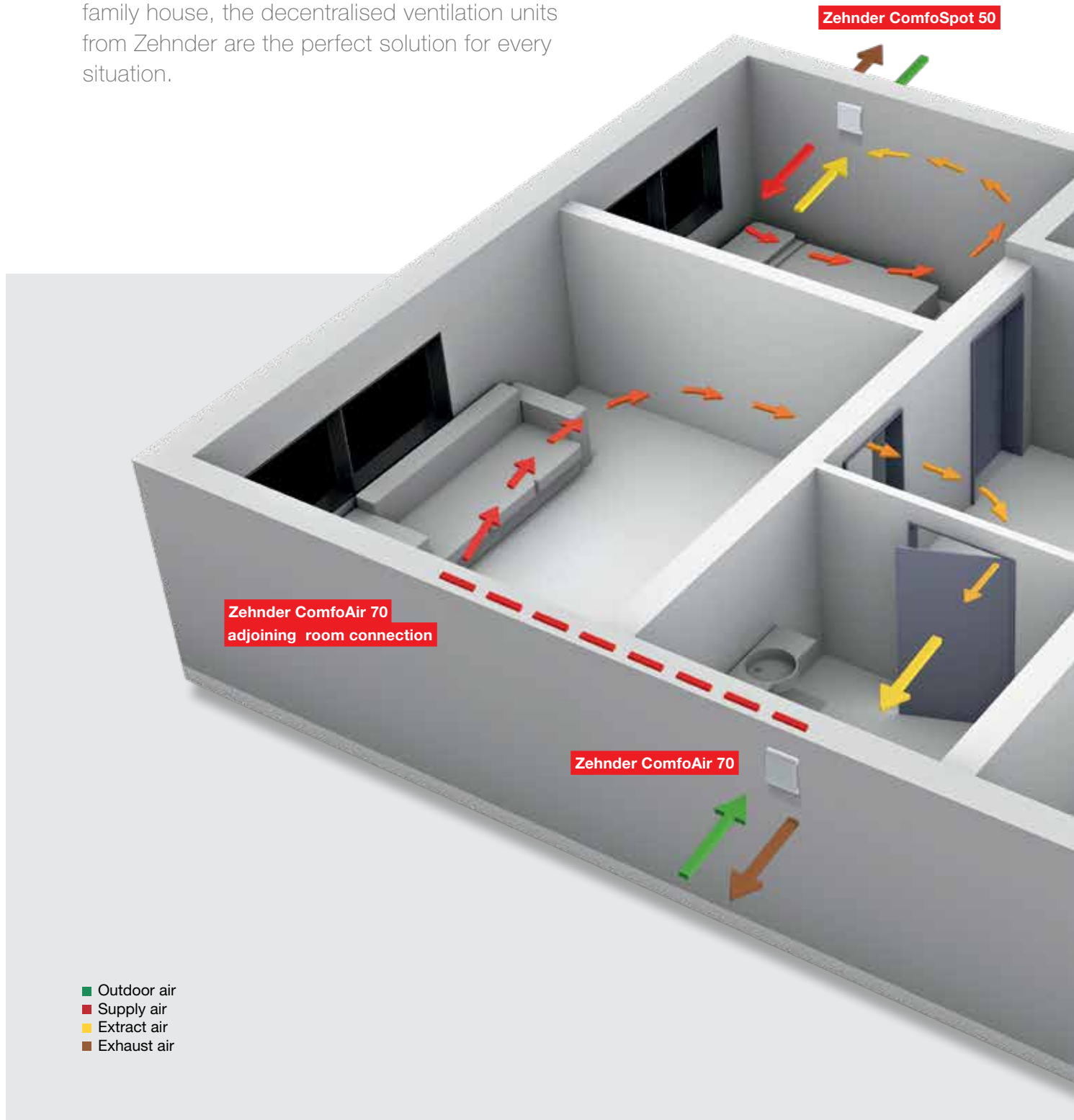
Always the best climate for

# EVERY SITUATION

Comfortable indoor ventilation with decentralised ventilation solutions from Zehnder

# The perfect solution for any building situation

Regardless of whether you're building apartments in a new construction project, renovating apartments or creating an extension for a single-family house, the decentralised ventilation units from Zehnder are the perfect solution for every situation.

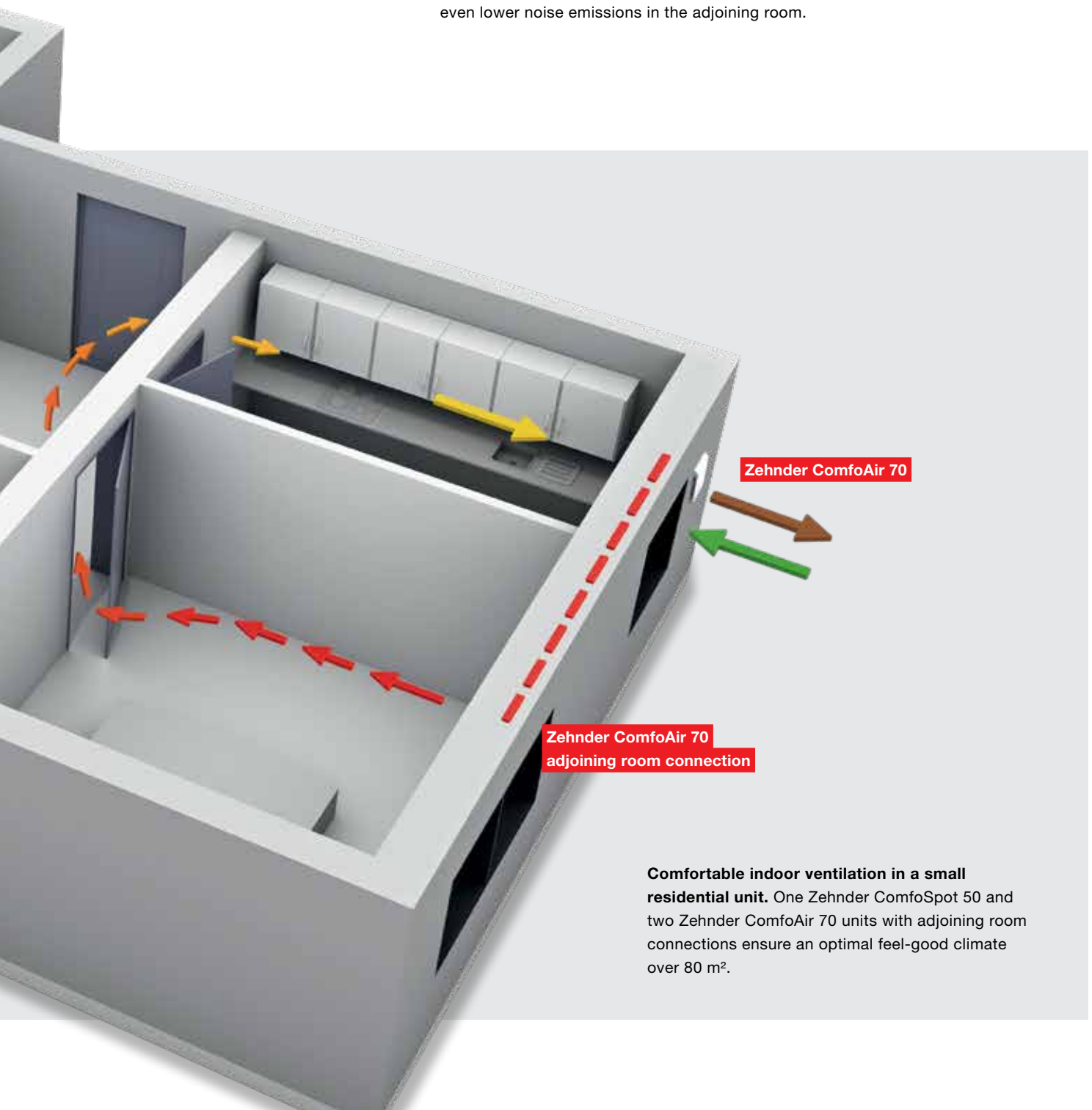


- Outdoor air
- Supply air
- Extract air
- Exhaust air

## Functional principle

With decentralised ventilation units, a living space is ventilated without a centralised air distribution system being used. Thanks to synchronous supply and extract air operation, Zehnder's compact ventilation units enjoy the advantages of indoor ventilation: optimum ventilation and extraction, heat recovery, maximum energy efficiency and – with the two units Zehnder ComfoSpot 50 and ComfoAir 70 – also humidity recovery.

Due to the integrated adjoining room connection in Zehnder ComfoAir 70, two rooms can be ventilated with one unit. This enables flexible planning and even lower noise emissions in the adjoining room.



**Comfortable indoor ventilation in a small residential unit.** One Zehnder ComfoSpot 50 and two Zehnder ComfoAir 70 units with adjoining room connections ensure an optimal feel-good climate over 80 m<sup>2</sup>.


# Zehnder ComfoAir 70: Flexible and expandable.

The decentralised ventilation unit Zehnder ComfoAir 70 is easy to design and install. Only a single core hole and a 230 V mains power supply are required for installation. The integrated adjoining room connection saves space and provides more flexibility in planning and installation. Thanks to this, two rooms can be ventilated with just one unit.


The controller has been integrated into the unit for easier operation. An external control panel and demand-based, sensor-controlled ventilation provide even more comfort.

A new feature means the option is now available to duct the outside air and exhaust air via a window reveal module. This is installed almost invisibly inside the window reveal and ensures excellent sound attenuation values. The resulting noise protection reduces stress and has a positive effect on the well-being and quality of life of the occupants.


**Control options**




Zehnder ComfoLED external control panel



Humidity sensor board




Humidity and VOC\* sensor board

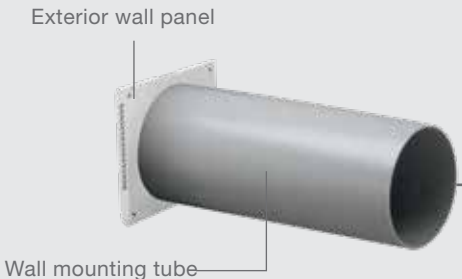


Humidity and CO<sub>2</sub> sensor board

**Exterior wall panel**



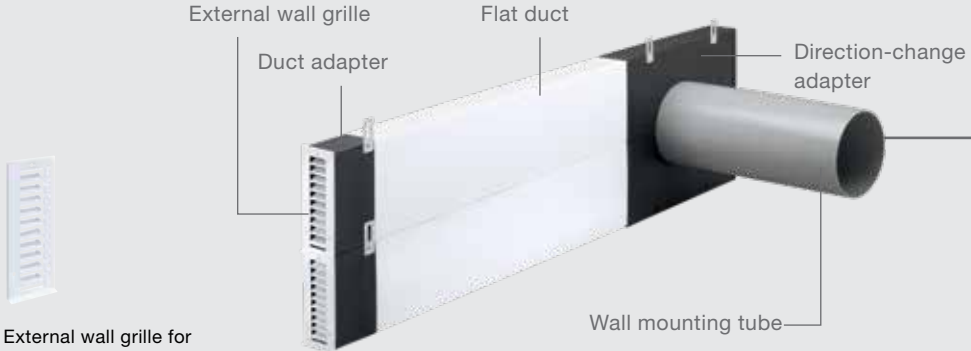
The exterior wall panel is available in a choice of stainless steel, white-coated aluminium or plastic



Exterior wall panel

Wall mounting tube

**Window reveal module (optional)**



External wall grille

Duct adapter

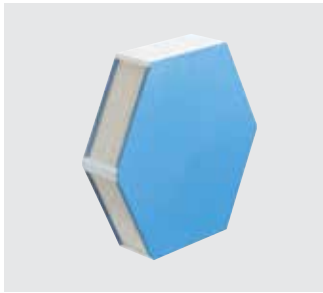
Flat duct

Direction-change adapter

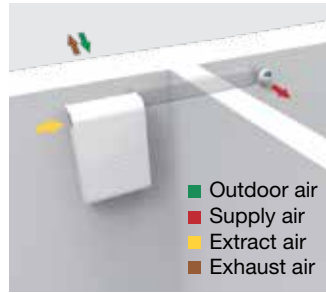
Wall mounting tube

External wall grille for window reveal module in white

**Easy to install. Expandable function.**



**More comfort.** The large dimensions of the enthalpy exchanger ensure optimal heat recovery and humidity recovery. The polymer membrane is resistant to mould and bacteria and is also easy to clean.



**Expandable for even more flexibility.** Adjoining rooms can also be integrated into the ventilation system as a result of the adjoining room connection. Large residential units can use several units to supply and extract air.

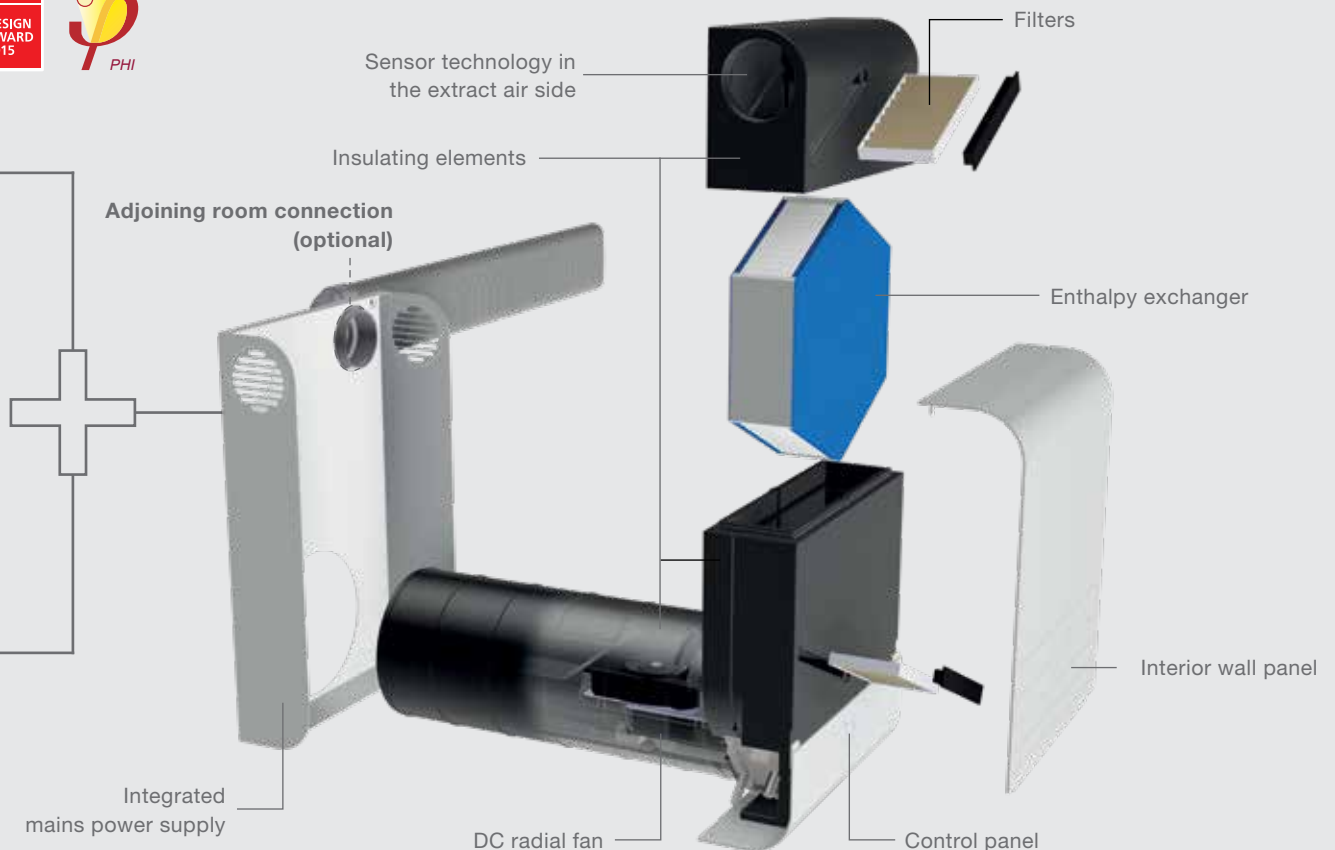


**Optimum ease of use based on demand.** Demand-controlled ventilation for an even higher level of comfort and energy efficiency, available with optional humidity, CO<sub>2</sub> and VOC\* sensor control. In addition, the integrated and external control units ensure simple and intuitive control.



**Quiet living and a beautiful facade.** Even with the optional window reveal module, Zehnder ComfoAir 70 has excellent sound attenuation values. The air is almost invisibly transported in and out via discreet outside and exhaust air grilles in the window reveal. This preserves the appearance of the facade and guarantees a peaceful night's sleep.

**Zehnder ComfoAir 70**



\* Volatile organic compounds in the room air from plastics or construction materials, for example




# Zehnder ComfoSpot 50: Compact and powerful.

The decentralised ventilation unit Zehnder ComfoSpot 50 impresses with its compact size and good performance values. Zehnder ComfoSpot 50 is easy to install without any extensive conversion work required. The installation options are also extended by the window reveal module for almost invisible ducting of the outside air and exhaust air in the window reveal.


The big advantage is the unique enthalpy exchanger, which extracts moisture as well as heat from the extract air. When used properly, this prevents a build-up of condensate, the facade remains clean and you save time during installation since an additional condensate drain is not required.

The control unit is integrated into the appliance for the simplest of handling, although the option is also available to use the electronic control panel or sensors.


**Control options**




Zehnder ComfoLED external control panel



Humidity sensor board

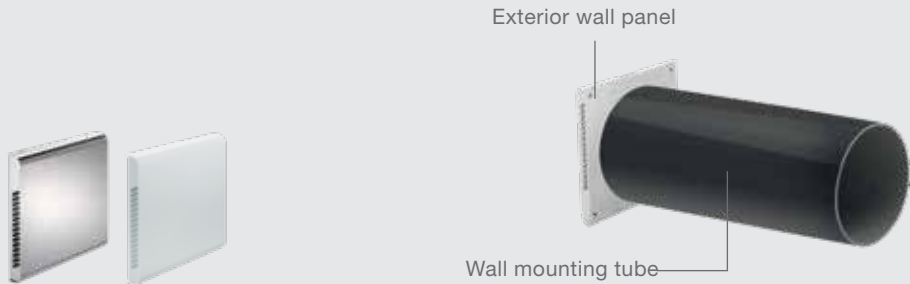


Humidity and VOC\* sensor board



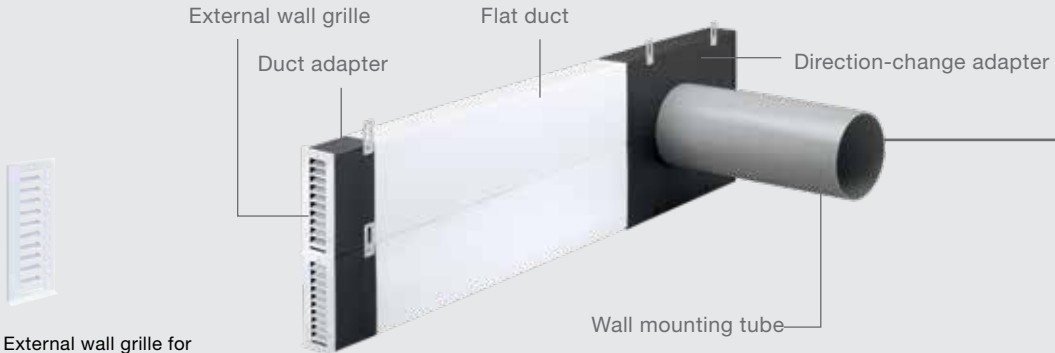
Humidity and CO<sub>2</sub> sensor board

**Exterior wall panel**



Exterior wall panel available in a choice of stainless steel or plastic. Exterior and interior wall panels can be painted over in the desired colour.

**Window reveal module (optional)**



External wall grille for window reveal module in white

## Better performance. Flexible installation.



**More comfort.** The enthalpy exchanger can be cleaned and ensures excellent heat and humidity recovery. No condensation under normal conditions thanks to enthalpy exchanger. As a result, the external facade stays clean.



**Quick and easy installation.** Only one core hole and a 230 V power supply are required. No condensate drain is required and there is no need to slope the core hole due to the integrated enthalpy exchanger.



**Optimum ease of use.** The control panel is integrated into the unit panel and can be fitted at the top or bottom as required. The optional humidity, CO<sub>2</sub> and VOC\* sensor control provides greater comfort and energy efficiency. This eliminates the need for manual adjustment of the fan speeds.



**Flexible installation and very good values.** The outdoor and exhaust air ducts of the window reveal module, which can be installed separately to the left, right or even in both directions, allow great planning freedom. Operation data such as volume flow, temperature and humidity recovery remain unchanged compared to the standard exterior wall panel, and the sound attenuation values are even improved.

### Zehnder ComfoSpot 50



\* Volatile organic compounds in the room air from plastics or construction materials, for example



## ZEHNDER +

### ■ Always on the safe side with high-quality components

- ebm-papst fans integrated as standard for optimised flow properties and reliable, quiet and energy-saving operation ensure the highest level of customer satisfaction
- Insulated interior lining material for even quieter ventilation and sound insulation

### ■ Added value through the innovative cross-counterflow enthalpy exchanger

- Highest level of operational reliability and ideal frost protection. If the outside temperature is cold, the supply of air is restricted (disbalance)
- Time savings during installation (when used as intended, no condensate drain or incline needed)
- Added value for your customers: even more comfort owing to optimal humidity recovery. Ideal for dry air in winter. Furthermore, you can save energy due to the heat recovery efficiency

### ■ More comfort owing to demand control and operation options

- Both ventilation units enable even more comfort and energy efficiency for your customers owing to the demand control, no manual adjustment necessary
- Humidity, CO<sub>2</sub> and VOC sensor control possible as an option
- External Zehnder ComfoLED control panel for optimum ease of use even outside the unit

### ■ Simple servicing

- Components are easily accessible and spare parts are easy to replace
- A fault analysis is possible using a PC





	Zehnder ComfoAir 70	Zehnder ComfoSpot 50
Max. airflow volume	60 m³/h	50 m³/h
Electrical connection	230 VAC / 50 – 60 Hz	230 VAC / 50 – 60 Hz
Protection class	II (protective insulation)	II (protective insulation)
Degree of protection	IP 20	IP 11
Casing	Unit core: Expanded polypropylene (EPP) Interior wall panel: Aluminium powder coating	Interior and exterior wall panel: plastic, unit core can be painted over: Expanded polypropylene (EPP)
Control	4 fan speeds; standby mode; filter message; fault message; optional sensor control by means of humidity, VOC and CO <sub>2</sub> sensor; automatic damper closure in standby mode	4 fan speeds, standby, supply air or extract air operation, filter message, fault message, optional sensor control by means of humidity, VOC and CO <sub>2</sub> sensor
Installation	In outside wall	In outside wall
Filters	ISO Coarse ≥ 70% (G4) for supply and extract air, optionally for supply air pollen filter ISO ePM10 ≥ 60% (F7)	ISO Coarse ≥ 70% (G4) for supply and extract air, optionally for supply air pollen filter ISO ePM10 ≥ 60% (F7)
Fans	DC radial fan	DC radial fan
Heat emitter	Cross-counterflow enthalpy exchanger	Cross-counterflow enthalpy exchanger
Shutters	Motor-driven flaps for supply and extract air (close automatically)	Manually operated shutters for supply and extract air
Max. current draw	0.07 A	0.07 A
Application	-20 °C to 40 °C	-20 °C to 40 °C
Frost protection	from -3 to -15 °C	from -3 to -15 °C
Volume flow	15 – 25 – 40 – 60 m³/h	15 – 25 – 40 – 50 m³/h
Energy efficiency class	A**	A**
Energy efficiency	Up to 90% heat recovery, up to 84% humidity recovery	Up to 85% heat recovery, up to 74% humidity recovery
Performance of acoustic	11 – 23.6 – 29.4 – 36.4 dB(A) unit emission measured at a distance of 3 m, free field	5.2 – 14.7 – 23.2 – 29 dB(A) unit emission measured at a distance of 3 m, free field

### Dimensions and weight

Interior and exterior wall panel	Interior wall panel: W 440 x H 660 x D 145 mm Exterior wall panel: W 380 x H 376 x D 50 mm	W 380 x H 376 x D 50 mm
Outside wall thickness	min. 280 to 900 mm (with extension set)	min. 335 to 885 mm (with extension set)
Wall mounting tube, not shortened	250 mm Ø, 600 mm long (optionally 900 mm)	315 mm Ø 600 mm long (optionally 900 mm)
Core hole drilling	Approx. 270 mm diameter	Approx. 340 mm diameter
Weight	22 kg (ventilation unit), 3.3 kg (reveal)	6 kg (ventilation unit), 5 kg (reveal)

### Functions

Heat recovery	✓	✓
Humidity recovery	✓	✓
Sensor control:		
Humidity	✓	✓
Humidity & CO <sub>2</sub>	✓	✓
Humidity & VOC	✓	✓
Adjoining room connection	✓	–

\* without power supply unit

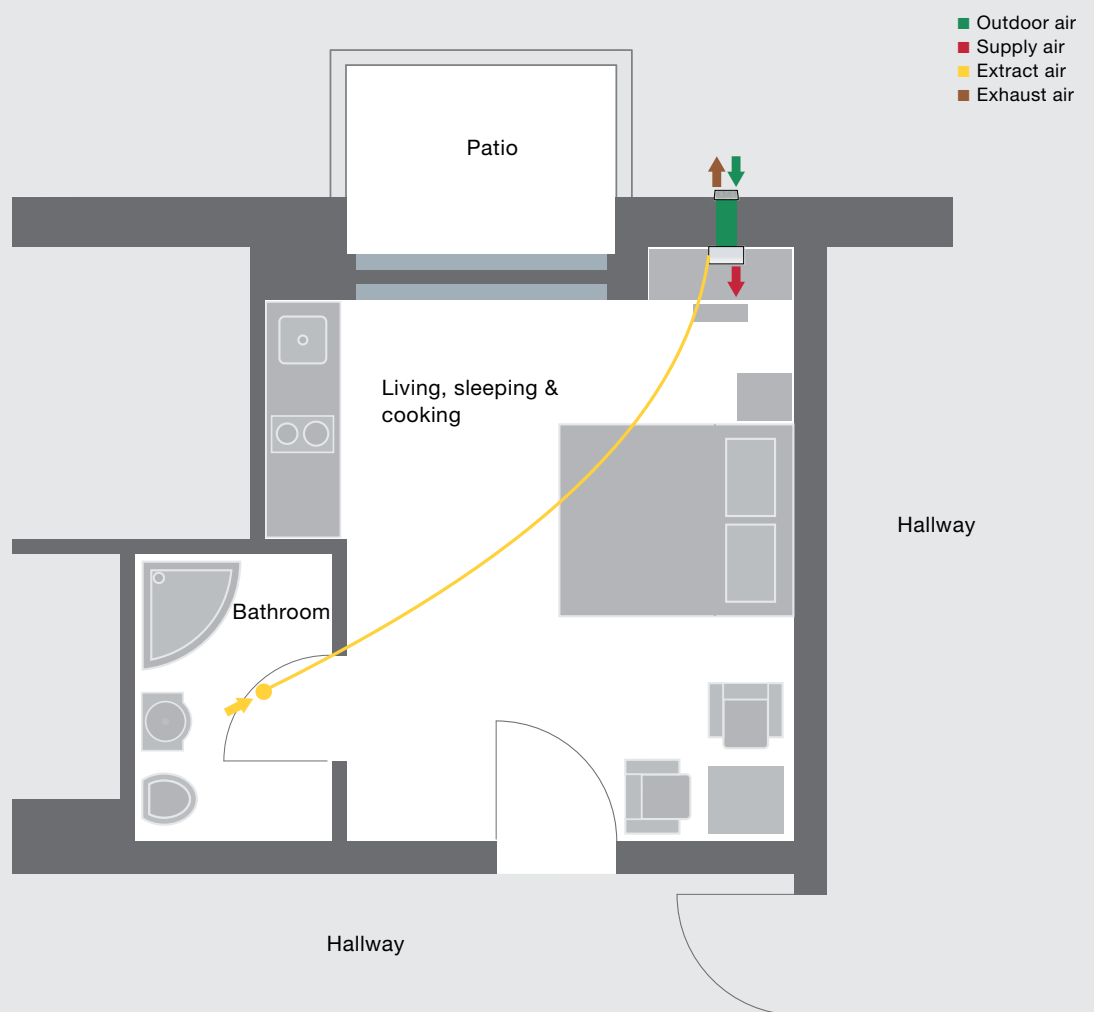
\*\* Depending on the control unit/sensor technology chosen

You can find further information at: [www.international.zehnder-systems.com](http://www.international.zehnder-systems.com)

Example system 1

# Mini apartment with maximum comfort

Floor plan



### Flexible and expandable

**Zehnder ComfoAir 70:** The decentralised ventilation unit is easy to design and install. Thanks to the optional adjoining room connection, two rooms can be ventilated at the same time.

**Notes:**

Not to scale  
Representation of the floor plans.

Fire and smoke protection measures must be checked and, if necessary, provided on-site. An exhaust hood provided by the customer is required in the kitchen.

**Student apartment, 22 m<sup>2</sup>, new build.** Microliving stands for a modern lifestyle in an urban location. Where living space is becoming increasingly scarce and sought-after, innovative solutions are in demand. No wonder that the concept has long been established: central living in a small space with maximum comfort expectations. Especially for single people, commuters, career starters and students, fewer square meters are always a good solution, as long as they do not

have to do without comfort. With Zehnder ComfoAir 70, the entire apartment can be supplied with fresh, clean air with just one ventilation unit. Thanks to the optional adjoining room connection, the interior bathroom can be ventilated at the same time. This eliminates the need for a central exhaust air duct in the supply shaft, which can be made smaller to leave more living space for “smart living”.

#### List of materials

Item	Article no.	Description	Quantity	Unit price in €	Total in €
<b>Ventilation unit with accessories</b>					
1	527 007 240	ComfoAir 70 comfort ventilation unit with plastic exterior wall panel, energy efficiency class A*	1	1,180.20	1,180.20
2	527 005 200	Round wall mounting tube, Ø 200 mm, length = 600 mm	1	74.20	74.20
<b>Air distribution</b>					
<b>Pipes/Moulded parts</b>					
3	521 000 580	Sealing tape for ComfoAir 70, 1x for an adjoining room connection	1	5.90	5.90
4	990 322 153	ComfoTube 90° elbow for ComfoTube 90	1	21.10	21.10
5	990 328 082	ComfoTube 90 ventilation tube, 2 m	3	15.00	45.00
6	990 326 126	TVA-P 90 grille housing, DN 125, 1 x 90, H 400	1	46.80	46.80
7	705 512 521	STB-1-125 extract air valve, DN 125, Ø 142 mm	1	29.50	29.50
<b>optional</b>					
8	527 007 290	ComfoLED control panel for ComfoSpot 50 or ComfoAir 70	1	81.80	optional
9	527 007 260	Humidity sensor board for ComfoSpot 50 or ComfoAir 70	1	64.40	optional
10	527 007 270	Humidity and VOC sensor board for ComfoSpot 50 or ComfoAir 70	1	169.20	optional
11	527 007 280	Humidity and CO <sub>2</sub> sensor board for ComfoSpot 50 and ComfoAir 70	1	260.50	optional
12	527 008 670	Window reveal module (in conjunction with ComfoAir 70 ventilation unit without exterior wall panel 527 008 590)	1	395.00	optional
13	527 009 140	Extension set for ComfoAir 70	1	143.00	optional
				<b>Total</b>	<b>1,402.70</b>

Note: All articles excluding installation. Last updated: 2019 price list.

\* Depending on the control unit/sensor technology chosen.

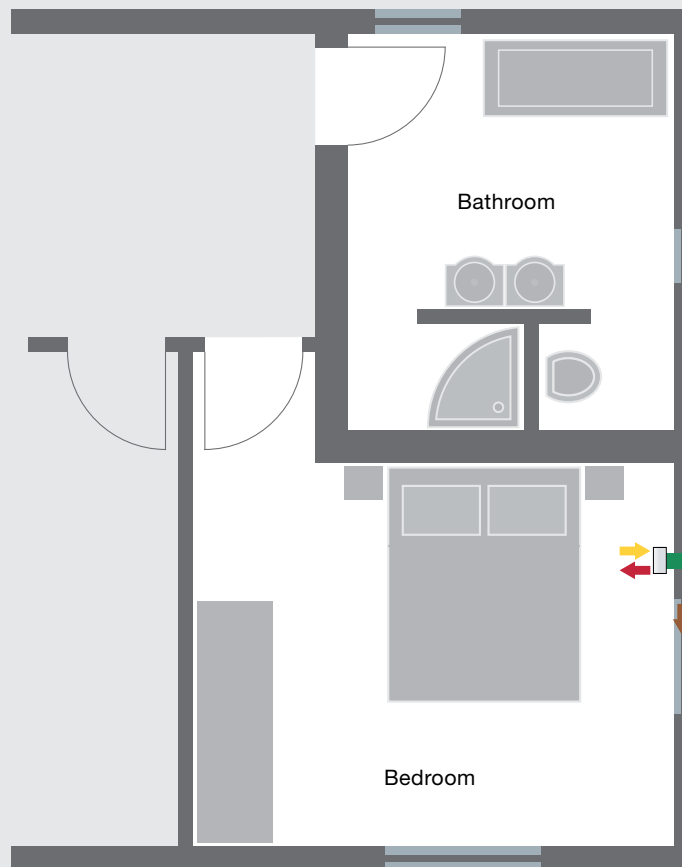
Watch the installation video for Zehnder ComfoSpot 70:  
[www.international.zehnder-systems.com/zehnder-comfoair-70](http://www.international.zehnder-systems.com/zehnder-comfoair-70)

Example system 2

# A simple retrofitting method for a room

Floor plan

- Outdoor air
- Supply air
- Extract air
- Exhaust air



## Compact and powerful

**Zehnder ComfoSpot 50:** The decentralised ventilation unit is particularly quiet in operation. The ventilation unit can be installed with minimal intervention in the living space and without a slope towards the outside. This makes the installation and, in particular, the drilling very easy.

**Notes:**

Not to scale  
Representation of the floor plans.

Fire and smoke protection measures must be checked and, if necessary, provided on-site.

**Room, 15 m<sup>2</sup>, renovation.** Would you like to leave the street noise outside and still enjoy fresh air? Zehnder offers clever solutions for this, which can also be retrofitted. As here in our example, in which only one bedroom in a single-family home was retrofitted with a Zehnder ComfoSpot 50 ventilation unit. Without great effort, occupants can fully benefit from the advantages of indoor ventilation: restful sleep, energy savings, maintaining the

value of their property and a high level of living comfort are guaranteed. The extra-special feature is that the optional window reveal module offers even better sound attenuation values and the outside and exhaust air disappears almost invisibly into the window reveal, which also preserves the appearance of the facade.

### List of materials

Item	Article no.	Description	Quantity	Unit price in €	Total in €
<b>Ventilation unit with accessories</b>					
1	527 008 580	Comfort ventilation unit ComfoSpot 50 for installation with window reveal module, without exterior wall panel, energy efficiency class A*	1	810.00	810.00
2	527 008 660	Window reveal module for ComfoSpot 50	1	395.00	395.00
<b>optional</b>					
3	527 007 290	ComfoLED control panel for ComfoSpot 50 or ComfoAir 70	1	81.80	optional
4	527 007 260	Humidity sensor board for ComfoSpot 50 or ComfoAir 70	1	64.40	optional
5	527 007 270	Humidity and VOC sensor board for ComfoSpot 50 or ComfoAir 70	1	169.20	optional
6	527 007 280	Humidity and CO <sub>2</sub> sensor board for ComfoSpot 50 or ComfoAir 70	1	260.50	optional
7	527 009 150	Extension set for ComfoSpot 50	1	111.00	optional
				<b>Total</b>	<b>1,205.00</b>

Note: All articles excluding installation. Last updated: 2019 price list.

\* Depending on the control unit/sensor technology chosen.

Watch the installation video for Zehnder ComfoSpot 50:  
[www.international.zehnder-systems.com/zehnder-comfospot-50](http://www.international.zehnder-systems.com/zehnder-comfospot-50)





# RELIABLE SUPPORT

Less stress at work, more time for your projects – with a strong partner by your side

## CONSTANT SUPPORT BEFORE, DURING AND AFTER COMPLETION OF A PROJECT

### ■ ADVICE

We support installers in person during the process of planning ventilation systems – even within time frames of less than five days:

- Determination of air volumes
- Selection of suitable units
- Compliance with requirements and regulations
- Production of quotations

### ■ SALES SUPPORT

We use appealing and informative measures to help ensure your success:

- Extensive range of documentation material to help you maintain a professional appearance
- Consistently keeping you informed about the latest topics, such as the energy efficiency label

### ■ TRAINING

At the Zehnder ACADEMY, we train you and help you become an indoor ventilation expert:

- Regular seminars at Zehnder
- Qualified trainers
- Fully equipped training centres

Enrol now at: [www.zehnderacademy.com](http://www.zehnderacademy.com)

### ■ SERVICE

When it comes to service too, we provide all the ingredients required to ensure a good partnership:

- Help with commissioning, maintenance and general service issues
- Customer service hotline provides direct access to our qualified service staff
- Simply order filters online

**ALWAYS THE BEST CLIMATE**

**“We strive to improve the quality of life by providing the finest indoor climate solutions.”**



**Excellent team**

Every day we combine passion, expert knowledge and commitment to give you the best results.



**Great solutions, products and services**

Great products and unique service for an energy-efficient, healthy and comfortable indoor climate.



**First choice for customers**

Always close to the needs of our customers, to grow with you and overcome all challenges together.

**WE ARE THE SPECIALISTS FOR A HEALTHY, COMFORTABLE AND ENERGY-EFFICIENT INDOOR CLIMATE**

The broad and clearly structured portfolio from the Zehnder Group is split into four product lines. Consequently, we can provide our customers with the right product, perfect system and matching service for all types of projects – from new build to renovations, single or multi-occupancy homes, as well as commercial projects. This variety ensures that our wealth of experience is continuously expanding, providing tangible added value to our customers on a daily basis.



**Decorative radiators**

Our individual decorative radiators for living and bathrooms make a home not only warmer but also more attractive. Created by renowned designers, they impress with excellent functionality.



**Comfortable indoor ventilation**

Our comfortable indoor ventilation is energy-efficient and provides a healthy indoor climate. It promotes the wellbeing of the occupants and increases the value of the property.



**Heating and cooling ceiling systems**

Zehnder ceiling systems are convenient and energy-efficient for heating and cooling. They are perfectly attuned to the relevant environment.



**Clean air solutions**

Clean air systems from Zehnder reduce the level of dust in the air, create a healthier working environment and reduce the amount of cleaning required.

**OUR BRANDS REPRESENT INNOVATION, QUALITY AND DESIGN**



The Zehnder brand offers excellent indoor climate solutions within the product lines of decorative radiators, comfortable indoor ventilation, heating and cooling ceiling systems and clean air solutions.



The Runtal brand develops and manufactures exclusive radiators combining innovative technologies with unique designs.

With Zehnder, you can make the perfect choice for an ideal indoor climate every time. With decades of experience in the development, production and distribution of ventilation units, as well as air distribution and system components, Zehnder is a pioneer on the market.

Come and see for yourself.

At **[www.international.zehnder-systems.com](http://www.international.zehnder-systems.com)**, you can find further important information about our indoor climate solutions.

Z-SJ-V0119-CSY-PBR-Decentralised units, en, subject to change without notice