

# DOMESTIC VENTILATION FOR THE FAMILY HOME

NEW BUILDS AND RENOVATION PROJECTS



COMFORT IN ITS PUREST FORM.



 **PICHLER**  
systematic ventilation

[www.pichlerluft.at](http://www.pichlerluft.at)



# COMFORT IN ITS PUREST FORM

It surrounds us every day, we can't see it, and yet it's vital for our wellbeing – we are of course talking about air. The level of comfort provided by interior spaces is largely dependent on the quality of the air found there. This is where our ventilation systems come in, ensuring the right balance between temperature, humidity, fresh air and hygiene so that you feel comfortable in your surroundings. Current studies show that awareness of good air quality both in the home and at work could be better, so part of our mission is to get across to people just how important clean and healthy air really is.

Our extra level of comfort and convenience makes us stand out from the crowd – by this we mean the general comfort in the home as much as ease of use and maintenance. Our customers appreciate how convenient it is to place an order with us and have it processed, and also how fast our delivery service is. Our company headquarters are in Klagenfurt, Austria, which, in addition to being a production site, is also where our research projects and new developments get off the ground. What started as a small family business more than 50 years ago is still going strong today with the second and third generation at the helm, continuing our passion for comfort in its purest form.



Mag. Gernot Pichler  
Managing Director of J. Pichler Gesellschaft m.b.H.

## INNOVATIONS FROM AUSTRIA FOR THE PUREST COMFORT

- | Complete systems
- | Matched components
- | Centralised or decentralised
- | High energy efficiency

## PICHLER AT A GLANCE

- | Founded in 1959
- | Headquarters in Klagenfurt
- | 5 branches in Austria and Southeast Europe
- | 170 employees at work for you each day
- | 30,000 certified articles in our range of products
- | Hundreds of quality tests each year in our laboratories
- | Everything as a sole source supplier for your purest comfort



# INNOVATION FOR WELLBEING

People are the focus of the development work we do.



## **AIR IS OUR MOST IMPORTANT COMMODITY**

Humans need air (or oxygen, to be more precise) in order to live. At rest, adults breathe in a volume of about 0.5 litres, while the volume of air inhaled and exhaled by a human being is between 10,000 and 15,000 litres each day on average.

## **INDOOR AIR QUALITY IS CRUCIAL TO OUR HEALTH**

We spend about two thirds of our time indoors. Healthy fresh air should be as much a matter of course as clean drinking water. The quality of air in the room depends on the outside air that is fed in, as well as the pollutants and impurities that are found inside the building. Poor quality air may result in tiredness, poor concentration, headaches and colds.

## **ENERGY-SAVING HOMES REQUIRE SPECIFIC VENTILATION**

Modern energy-efficient homes are dense constructions, with proper ventilation required to guarantee that moisture will be extracted and fresh air will be supplied. The ventilation provided by windows brings with it unpleasant aspects such as draughts, chills, and wasted energy. In winter, there is always a risk that mould will form if there is too little air change.

## **WHEN AIR IN THE ROOM IS TOO DRY**

Humidity below 30%, which is a possibility in heated rooms, makes the air feel dry and makes you more susceptible to coughs, sneezes and colds.





Why you should buy a PICHLER ventilation system:

## FRESH, CLEAN AIR 365 DAYS A YEAR – AIR THAT IS NEVER TOO DRY



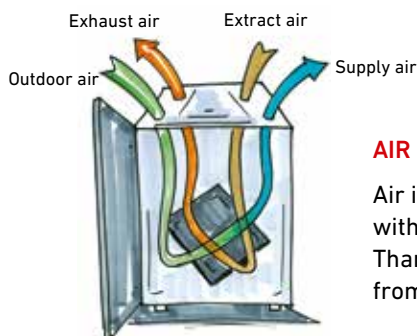
### COMFORTABLE, HEALTHY INDOOR CLIMATE

Our ventilation systems guarantee that the climate in your room will be both healthy and comfortable, without any draughts. Carbon dioxide and pollutants are removed. Whatever needs to remain outside, remains outside – that includes pollen, fine dust, pollutants, nuisance insects and noise pollution.



### OPTIMAL HUMIDITY AT THE TOUCH OF A BUTTON

Air in rooms is often too dry during the winter months. The primary cause of this is the low outside temperatures, which cause the humidity in the air to drop. Our active air humidification unit ensures permanent and optimal humidity all-year round. The unit can be adjusted with settings to provide relative humidity in the 40 % to 60 % range.

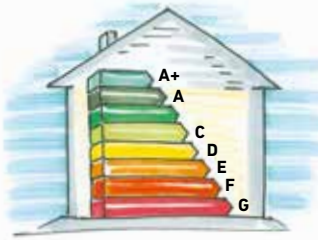


Comfort ventilation unit  
with heat recovery

### AIR IN AND OUT EQUALS EXCELLENT LIVING CONDITIONS

Air is removed from damp areas, while living spaces are supplied with clean conditioned air via a system of air pipes and vents. Thanks to highly efficient heat exchangers, we recover the heat from the extracted air.





### ENERGY EFFICIENCY

We make our parts highly efficient so that you save energy every day. These parts are routinely tested in our laboratory and as part of the production process. Our ventilation systems are fitted with energy-saving, low-noise high-performance radial fans. Compared with conventional drives, there is the potential to make energy savings of up to 60 %.



### WELL SOUND-PROOFED

Our ventilation systems are designed to have optimal acoustics and undergo extensive testing in soundproof cabins to verify their noise emissions and level of soundproofing. Further development of the sound absorbing technology has produced a ventilation system that is virtually silent when in use.



### EASE OF USE AND MAINTENANCE

All settings for the ventilation device are made using the control unit. The current operational statuses and system values, e.g. operating mode, fan speed, temperatures, etc., can be seen on the display. Operation (green), faults and filter change (flashing red) are displayed using signal lamps. You have the option of using either the automatic mode or the manual mode.



### WIDE VARIETY OF DESIGNS

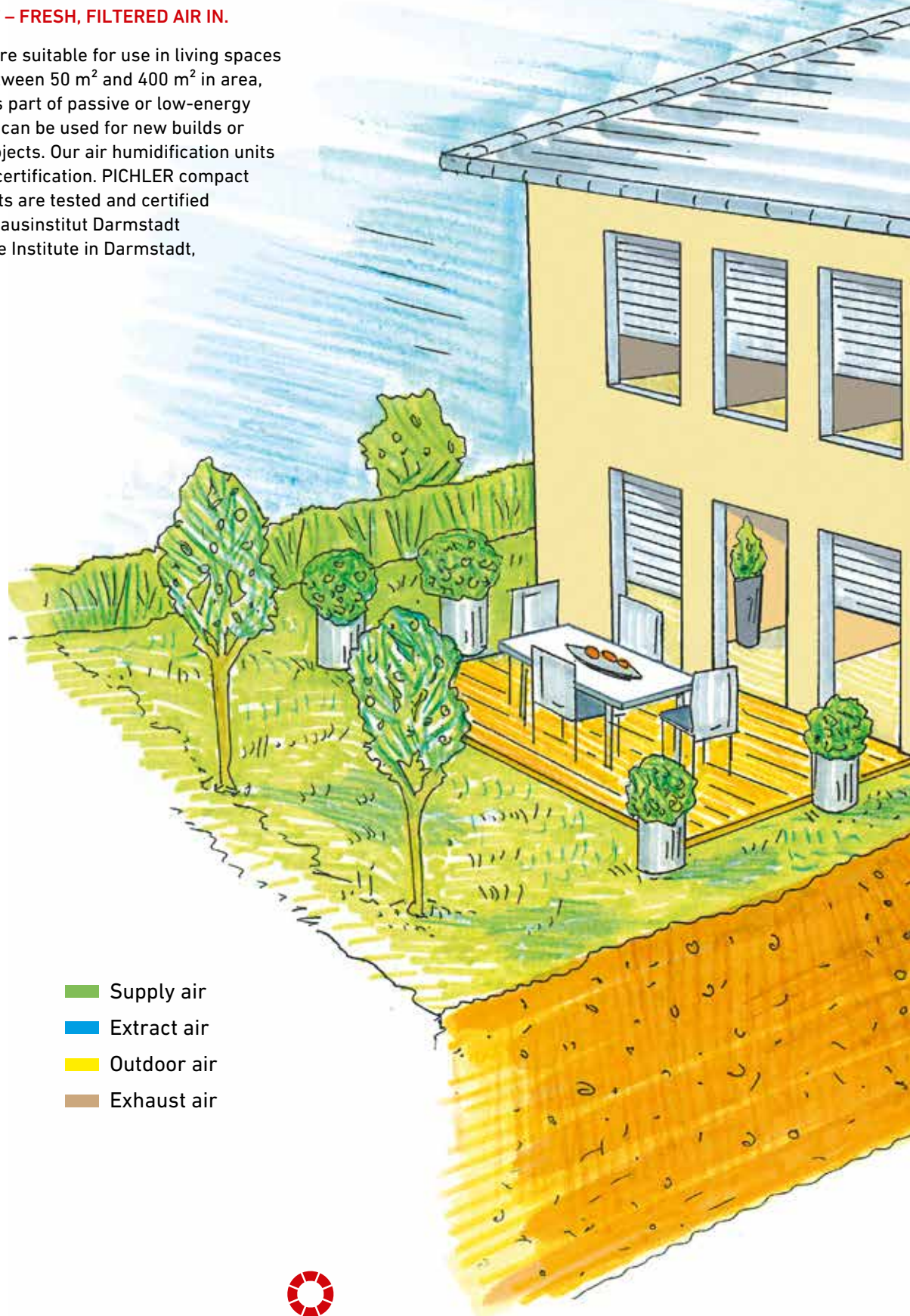
It's not just about distributing the air in the best way possible – the design of the vents is also important. We have a large number of designs for you to choose from.



# VENTILATION SYSTEMS

**IT'S RATHER SIMPLE IN PRINCIPLE:  
USED AIR OUT – FRESH, FILTERED AIR IN.**

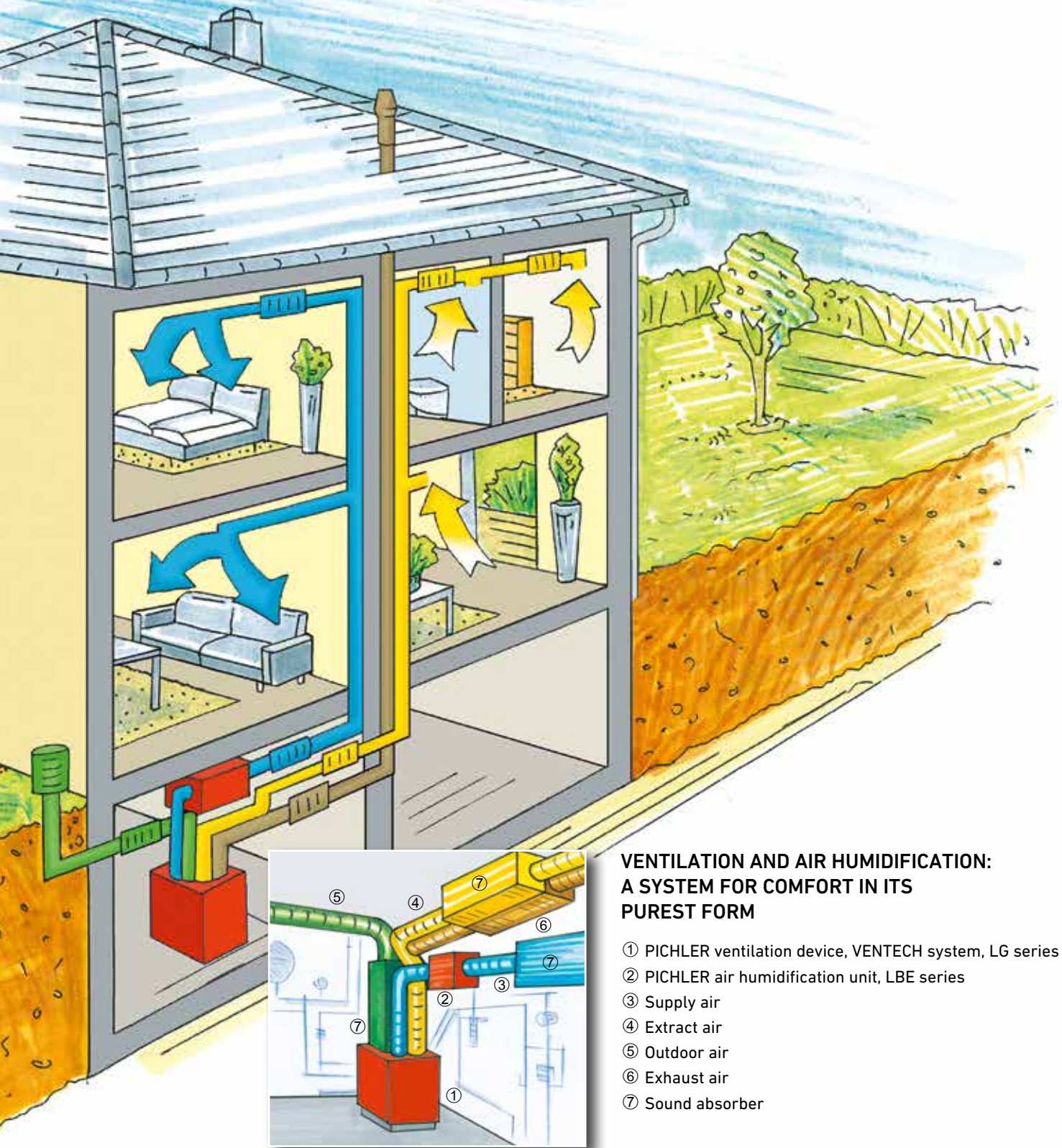
Our systems are suitable for use in living spaces measuring between 50 m<sup>2</sup> and 400 m<sup>2</sup> in area, constructed as part of passive or low-energy buildings, and can be used for new builds or renovation projects. Our air humidification units have hygiene certification. PICHLER compact ventilation units are tested and certified by the Passivhausinstitut Darmstadt (Passive House Institute in Darmstadt, Germany).



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







**VENTILATION AND AIR HUMIDIFICATION:  
A SYSTEM FOR COMFORT IN ITS  
PUREST FORM**

- ① PICHLER ventilation device, VENTECH system, LG series
- ② PICHLER air humidification unit, LBE series
- ③ Supply air
- ④ Extract air
- ⑤ Outdoor air
- ⑥ Exhaust air
- ⑦ Sound absorber





# WHAT YOU SHOULD KNOW ABOUT VENTILATION SYSTEMS

## HOW ENERGY-EFFICIENT ARE VENTILATION SYSTEMS?

The savings made on heating costs by reducing the amount of ventilation heat lost are much greater than the power consumed by home ventilation systems. Further information can be found at [www.pichlerluft.at](http://www.pichlerluft.at).

## DO WINDOWS HAVE TO STAY CLOSED?

You can open windows at any time, for as long as you want. If it is cold outside, bear in mind that this will increase the energy required.

## WILL THE VENTILATION SYSTEM CREATE DRY AIR IN THE ROOM?

There is no difference between dry air entering the room through a window or via a ventilation system. To ensure a constant, comfortable level of humidity in the room's air, we recommend integrated PICHLER air humidification, which comes with hygiene certification.

## WILL THE VENTILATION SYSTEM CREATE A DRAUGHT?

With our systems, air is supplied to the room without much in the way of current; as a result, drafts are prevented.

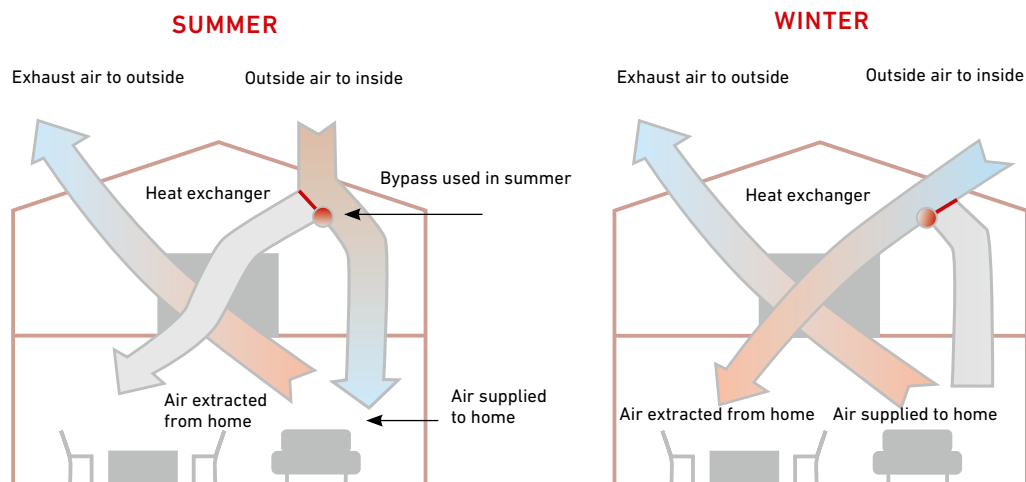
## ARE VENTILATION SYSTEMS AN OPTION IF YOU DON'T HAVE A PASSIVE HOUSE?

Ventilation systems provide benefits in all types of build applying current standards, both for new builds and for renovation projects.

## WHAT ARE THE DIFFERENCES BETWEEN USE IN THE SUMMER AND WINTER?

In winter, the fresh outside air is warmed up in the heat exchanger. In summer, the integrated 100% bypass comes into play to bypass the heat exchanger, ensuring fresh air goes straight inside.

More information on this subject can be found at [www.pichlerluft.at](http://www.pichlerluft.at).



## VENTILATION SYSTEMS WITH PASSIVE HOUSE CERTIFICATION



The PICHLER VENTECH compact ventilation system with passive house certification is used to control ventilation, namely the air going in and out. VENTECH systems can be used for living spaces measuring between 50 m<sup>2</sup> and 400 m<sup>2</sup> in area, in passive houses and low-energy buildings.



### The VENTECH system from PICHLER at a glance:

#### Fans:

Energy-saving radial fans with highly effective EC motors that need no maintenance

#### Counterflow heat exchanger:

Highly efficient heat recovery system with plastic air-to-air counterflow heat exchanger and automatic 100% bypass

- | Ease of use, several types of remote control available
- | Straightforward filter change
- | Can be mounted on floor, wall or ceiling
- | Ready to plug in
- | Can be combined with air humidification unit LBE



## AIR HUMIDIFICATION UNIT

The PICHLER LBE automatic air humidification unit is used to actively moisten the air in the room and reheat the air in apartments and habitable rooms. It works on the natural evaporation principle, and can be integrated into any PICHLER VENTECH ventilation system. Independent hygiene tests carried out externally have confirmed that use of the system is perfectly hygienic.

### PICHLER LBE air humidification unit at a glance:

#### Humidity control:

Ensures constant and optimal humidity in the home – can be adjusted with settings to provide relative humidity in the 40 % to 60 % range



- | Ease of use
- | Suitable for wall mounting
- | Ready to plug in
- | Can be integrated into any central ventilation system, also suitable for retrofitting
- | Can be combined with our compact ventilation devices VENTECH



## VENTILATION SYSTEMS WITH AIR TO-AIR/AIR-TO-WATER HEAT PUMP



Enjoying passive house certification, the GENVEX COMBI system combines a service water heat pump with a ventilation device, and is used to provide basic heating in the home and treat service water. The system can be used for living spaces measuring between 85 m<sup>2</sup> and 150 m<sup>2</sup> in area, in passive houses and low-energy buildings. The ventilation device is capable of covering the hot water requirements of a family of four for a whole year.



### The GENVEX COMBI system from PICHLER at a glance:

#### Fans:

Energy-saving radial fans with highly effective EC motors that need no maintenance

#### Counterflow heat exchanger:

Air-to-air/air-to-water heat pump with aluminium counterflow heat exchanger (highly efficient heat recovery system)

- | Water tank with 185-litre capacity
- | Connection for solar panels or central heating
- | Ease of use, remote control panel (black or white) included
- | Straightforward filter change
- | Suitable for floor mounting
- | Ready to plug in

## CONTROLLED INDIVIDUAL ROOM VENTILATION WITH HEAT RECOVERY

The compact ERG for ventilation of individual rooms with heat recovery is used to control ventilation in the home. It can be combined with any kind of domestic heating system to give optimal results. Ideal for new builds, or as an addition or upgrade to existing buildings.



### The VENTECH ERG system from PICHLER at a glance:

#### Fans:

Energy-saving radial fans with highly effective EC motors that need no maintenance

#### Counterflow heat exchanger:

Heat exchanger with up to 90 % efficiency (recovery coefficient) thanks to the patented counterflow channel heat exchanger

- | 4 different ventilation settings between 20 and 80 m<sup>3</sup>/h are available on the device
- | Easy installation in the home
- | Very quiet when in use, even at the maximum setting
- | Ease of use
- | Condensate can be drained easily, filter simple to change
- | Suitable for wall mounting, compact size

Technical information is available in the Downloads at [www.pichlerluft.at](http://www.pichlerluft.at).

## PICHLER COMFORT SERVICE

### **CUSTOMER SERVICE**

You can reach your PICHLER technical advisor at the service no.: **+43 (0) 463-32769-0**.

### **YOUR LOCAL PARTNER**

Consulting, installation and start-up of PICHLER ventilation systems come from trained, technical installers.

### **PROMPT DELIVERY SERVICE**

One of our strengths is the high availability of our extensive product range. Prompt service that is close to the customer means effective time savings for you.

### **MANUFACTURER'S GUARANTEE**

Our extended manufacturer's guarantee creates additional reliability and means effective benefits for you.

### **SEMINARS FOR TECHNICAL PARTNERS**

Training for energy-efficient, central and decentralised living space ventilation systems is available on request.

Information and registration at:

[www.pichlerluft.at/messen-veranstaltungen-seminare.html](http://www.pichlerluft.at/messen-veranstaltungen-seminare.html)



Pichler delivery service



Technical Service

# REFERENCES

## SYSTEMS FOR HOUSING COMPLEXES

- | Housing complex, Olympic Village, Innsbruck
- | Lodenareal housing complex
- | Korneuburg housing complex
- | Hollabrunn housing complex
- | Prinzersdorf housing complex
- | Tulln housing complex

## HOTELS & EVENT BUSINESSES

- | Concert hall of the Vienna Boys' Choir, MuTh Vienna
- | Hotel Sacher, Vienna
- | Schönbrunn Zoo, Vienna
- | Museum District, Vienna
- | Casino Velden
- | Thermenland Congress Center, Loipersdorf
- | Hotel Slovenija I. Portorož, Slovenia
- | Seeparkhotel, Klagenfurt

## SCHOOLS, EDUCATION CENTRES & RECREATION FACILITIES

- | St. Veit Secondary School
- | Klagenfurt Vocational School
- | University of Graz
- | Vienna Neustadt Military Academy
- | Khevenhüller Casern, Klagenfurt
- | Sports and recreation facility, Strallegg

## OFFICES, BANKS & INSURANCE COMPANIES

- | DC Tower, Vienna
- | Telekom FG 20, Vienna
- | Office building, Dampfschiffstraße, Vienna
- | Vienna Municipal Regional Council of Graz
- | Planungsgruppe Viereck Bürobox, Graz
- | UniCredit Leasing Tower, Graz

## RETAIL & GASTRONOMY

- | EKZ Seiersberg, Graz
- | EKZ Atrio, Villach
- | HOFER distribution centres and branch offices in Austria, Slovenia, Croatia
- | Interspar stores in Austria
- | IKEA, Graz and Klagenfurt
- | Rutar Center, Klagenfurt
- | Hypermarket Tuš, Kranj, Slovenia
- | GIGASPORT stores in Slovenia



Olympic Village, Innsbruck



Concert hall of the Vienna Boys' Choir



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