



# **SmartFan**

... Breathe freely with controlled home ventilation



# Feeling comfortable at home

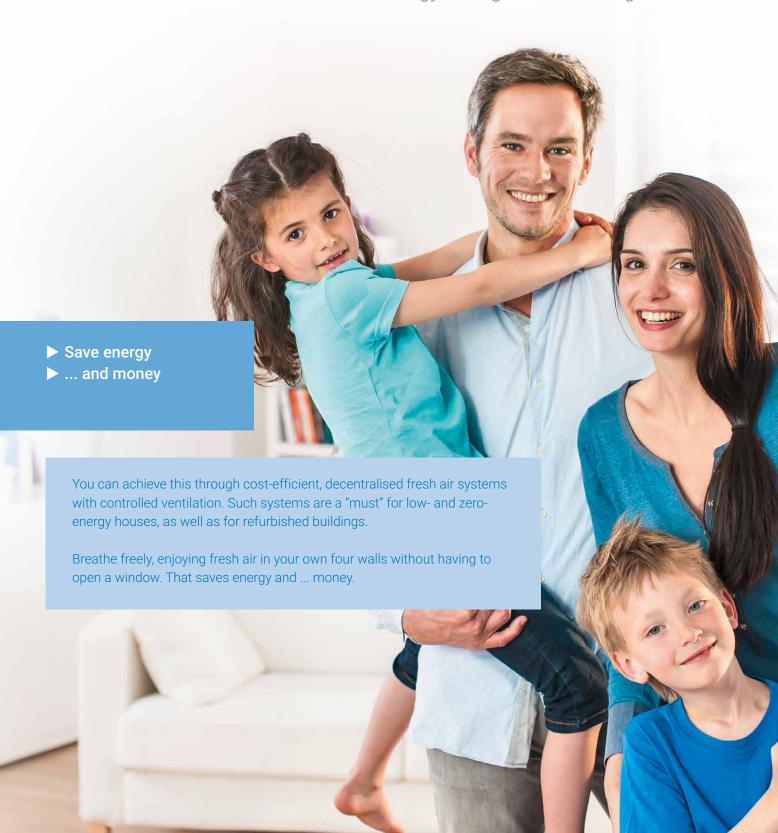
Fresh air for a high quality of life

Every day a person breathes in some 18,000 litres of air. On average we spend up to 90% of our time indoors, 60% of this at home – reason enough for us to want a good indoor climate in our own four walls. Fresh air full of oxygen plays a decisive role in our health and well-being.

Along with lighting and clean air, smells and noise as well as thermal factors affect whether we feel comfortable at home. Thermal factors include room and surface temperature, the relative humidity of the inside air and air movement.



# **Healthy air for a better life**Save energy through lower heating costs



# Optimal insulation of the building envelope

has many advantages, but it prevents air from circulating



Ways of insulating building are being steadily improved, helping to stop heat escaping. But this also prevents air circulating through leaks in the walls or windows. Spent, damp air can no longer escape outside, and fresh air can no longer find its way inside.

To gain sufficient fresh air, windows need to be regularly opened - for 15 minutes and wherever possible once every two hours (cf. §5.2 of Germany's Energy Saving Regulation). And this is not just a major problem for people out at work all day.



Regularly opening a window to let in fresh air means that a large share of the thermal energy escapes – energy that is supposed to be kept inside by triple glazing and double insulation.

A system based on insulation and opening windows is thus not a very good option from an energy perspective.

# The consequences of bad ventilation

for your health and purse

Damp	mould spores and other harmful substances
High levels of CO <sub>2</sub>	headaches and giddiness
Dust mites	allergies and asthma
Unpleasant smells	discomfort and difficulty concentrating
Opening windows despite insulation	higher heating costs

Unpleasant smells, caused for example by solvents in furniture, paint, etc., can make a room feel uncomfortable. According to estimates of the German Allergies and Asthma Association, some 30% of Germans suffer from allergies. The most common forms are dust mite and pollen allergies.

Opening windows, the conventional form of ventilation, allows pollen to freely enter a room. Through its integrated pollen filter, a controlled ventilation device can filter 90% of pollen out of the incoming air, while at the same time preventing mite populations increasing via the constant air exchange.



# Damage to buildings through damp

Mould - no thank you!



Insufficient air circulation is not just a problem for your health; it can also be a problem for the building itself.

Insufficient air circulation leads to higher levels of humidity in the air, in turn providing an ideal breeding ground for mould and mould spores. Both are often to be found in places where condensation occurs, for example thermal bridges or behind furniture. If mould is not fought immediately, it can lead to major damage to the building. At the same time, mould is bad for your health.

To achieve a pleasant indoor climate and prevent mould, relative humidity should be kept in the range of 30 – 65%. No great problem for getAir's SmartFan!

#### HOW DOES DECENTRALISED HOME VENTILATION WORK?

The SmartFan is a decentralised home ventilation unit achieving a heat recovery rate of up to 91%, allowing you to save up to 50% of your heating costs and prevent mould from occurring.

- 1. The outgoing warm air flows through the heat exchanger, thereby heating it
- 2. After 70 secs, the axial fan changes direction and starts sucking in fresh air
- 3. The fresh outside air is pre-heated by the ceramic heat exchanger and then blown into the room

An animated diagram can be found at www.getair.eu..

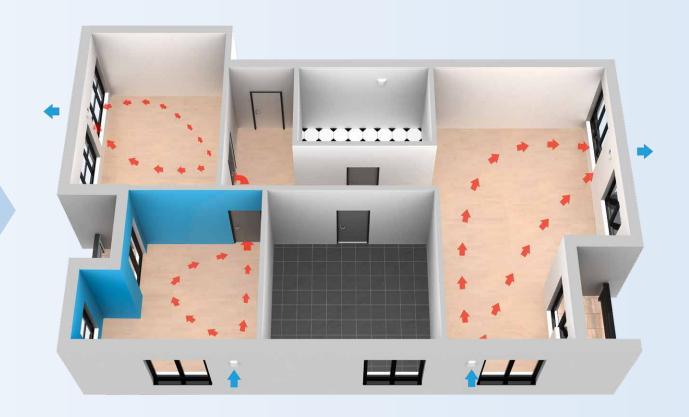
# **Controlled home ventilation**

Letting in fresh air and saving energy through heat recovery

Controlled home ventilation ensures that rooms are kept well aired at minimal energy loss. By contrast, opening windows for long periods causes high levels of heat loss. A lot of energy is needed to heat up the inside air again, causing a significant increase in heating costs.

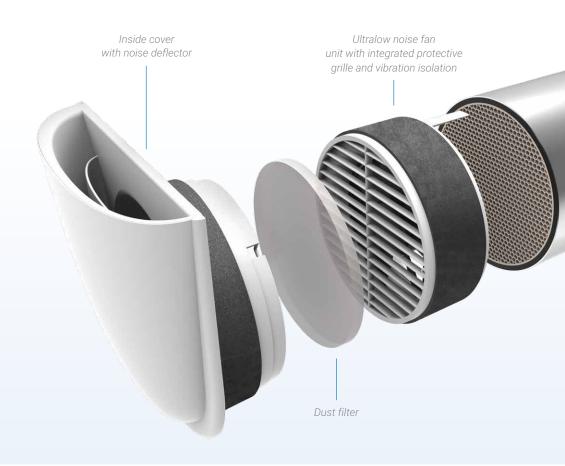
#### Decentralised home ventilation units from getAir

getAir's SmartFan provides demand-driven decentralised ventilation with integrated heat recovery. The fan provides your home with a constant flow of fresh clean air. In a centralised ventilation system the ventilation units are very large and require ducts to be installed throughout the building – virtually impossible in apartments or refurbished older buildings. By contrast, in a decentralised ventilation system, the units are only to be found where they are needed.



## The SmartFan home ventilation unit

is the smallest, quietest and most efficient unit in its class.



- **EFFICIENT:** our Perfect Perfusion Technology provides for optimal airflow with minimum energy consumption and maximum performance
- QUIET: our mour noise deflector minimises noise
- **ULTRA COMPACT:** all that is needed is a 162 mm-diameter hole through a wall at least 265 mm thick
- **DESIGN:** the flow-optimised, rounded cover protrudes just 45 mm from the wall

Outside cover with noise deflector

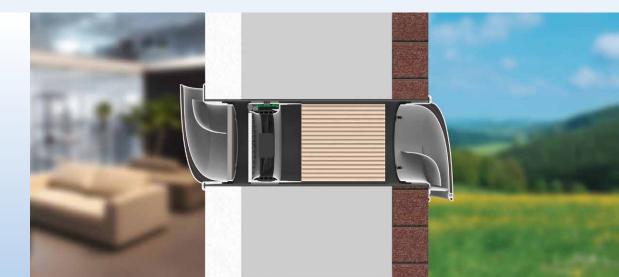


High-efficiency heat recovery unit with a honeycomb structure for low-loss air flows

# Advantages of

# getAir SmartFans:

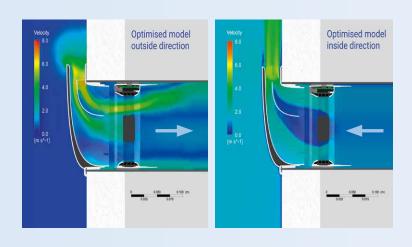
- ► No ventilation ducts, quick installation
- ► Increased sound insulation
- ► Up to 50% less heating energy
- ► Up to 91% heat recovery
- ► High ventilation performance, yet ultra-compact
- ► Clean and pollen-free indoor air



## SmartFan: Improved air flow management and optimal acoustics

Optimised components

Due to their design, home ventilation units up to now have not/only to a certain extent been optimised for airflow or acoustics. By contrast, getAir's new Smart-Fan features innovative inside and outside covers optimising air intake and output.



# EFFICIENT: Minimum energy consumption – maximum performance

Our Perfect Perfusion Technology with its specialshaped air outlet and the guide vanes integrated in the cover guarantee optimal airflow. In combination with the highly efficient axial fan, energy consumption is minimized without detriment to performance.



# QUIET: Not much louder than a pin dropping

The noise deflector minimizes noise from outside as well as any noise caused by the fan motor or airflow. The curved guide vanes in the covers prevent airflow degradation, while allowing optimal acoustics and airflow direction. A specially developed multimembrane noise insulation material absorbs a large part of the noise caused by the airflow.



# **ULTRA-COMPACT:** fits into any house

Fitting into a 162 mm-diameter hole through a wall at least 265 mm thick, the SmartFan is one of the smallest home ventilation units with heat recovery on the market today.



### DESIGN: Low profile

getAir's new development is the best of its class – without detriment to its optical appeal. Through its modern, low-profile design this new product blends in with any wall.



## SmartFan - controls for optimal operation

Intuitive and flexible

The new SmartFan units can be controlled to your individual requirements through a modern smart-screen, elegant push-buttons or a smartphone app.



#### **Push-button controls**

- ► Four airflow levels
- ► Easy to use
- ► Flat, aesthetic design
- ➤ Three selectable programmes: heat recovery, full-blast ventilation and sleep mode
- ► Integrated filter change indicator



#### **Smart-screen controls**

- ► Able to control up to three individual groups
- ► WiFi controls via iOS, Android or web-browser
- ► Four airflow levels
- ➤ Five selectable programmes: heat recovery, full-blast ventilation, sleep mode, party mode and holiday mode
- ➤ Timer-controlled programmes and ventilation
- ➤ Smart filter change indicator
- ➤ Various languages available
- ► Built-in meter for measuring actual airflows



#### App

➤ The smart-screen controls can be individually monitored / operated from a smartphone

# THE DIFFERENT CONTROL PROGRAMMES:



#### 1. Heat recovery mode

Up to 91% of heat can be recovered.



#### 2. Full-blast ventilation

In hot summers, cool air can be pumped in at night, thereby cooling rooms without using much energy.

## **SmartFan**

# Technical data

TECHNICAL DATA	
Heat recovery	Up to 91%
Controls	different versions
Operating modes	
Paired mode (heat recovery)	✓
Permanent full-blast mode	✓
Sleep mode	✓
Other functions dependent on the version	✓
Filter status display	✓
Operating voltage	12 V DC
Fan type	reversible, axial, electronically controlled, moisture-resistar
4 ventilation levels	from 15 m³/h to 55 m³/h
Energy consumption	> 0.15 W / (m³/h)
Sound pressure level dB (A)	15.9 dB(A) at level 1, exhaust air (15 m³/h)
Filters	dust filter (G3) / pollen filter
nside cover	closable, with soundproofing
Outside cover	plastic (optionally as a V2A stainless steel hood)
Wall thickness	> 350 mm ≥ 200 mm with adapter frame
SmartFan diameter	160 mm
Diameter of the hole through the wall	 162 mm



#### 3. Sleep mode:

The fan switches itself off for one hour before automatically restarting. This allows even people extremely sensitive to noise to fall asleep.

And while they are asleep they will benefit from constant ventilation.



#### 4. Party mode:

The fan runs at full power, meaning that any excess  ${\rm CO}_2$  is quickly removed.



#### 5. Holiday mode:

The fan runs at a low level, providing optimal ventilation at minimum energy consumption.

# **Optimised SmartFan covers**

The sleek design blends in with the wall.

With their aerodynamically shaped air outlet and integrated guide vanes (a feature of modern turbine technology), the high-tech covers guarantee optimal airflow. Airflow is considerable increased by the ¼-circular deflection of the vane and the ¼-circular rounded edge, as well as the cover's elevated cross section, as confirmed by the aerodynamic tests conducted by the Düsseldorf University of Applied Science's Department of Fluid Mechanics.

#### Your cover – your design!

200 designs

The SmartFan's inside and outside covers can be individually designed to blend in with any inside wall or outside facade.





# getAir comprehensive solutions

for the whole house.

getAir provides optimised ventilation solutions for the whole house – from unobtrusive reveal-fitted ventilation systems to systems for damp cellars and the roof.

#### **Solutions for individual rooms**

- ▶ Based on the principle of double ventilation with heat recovery
- ▶ Quick and inexpensive installation, even after refurbishment
- ▶ Ideal for autonomous residential units:
  - Small apartments
  - Old people's homes
  - Student accommodation

#### **Special versions**

- ➤ SmartFan L: The air outlet is concealed in the window reveal, as well as being acoustically flow-optimised
- ► SmartFan D: The roof version is ideal for loft ventilation
- ➤ SmartFan K: Damp and nasty-smelling cellars belong to the past with the SmartFan cellar version

#### SmartFan X

- ➤ Discrete ventilation ideal for toilets, shower rooms and bathrooms
- Innovative technology with a pleasing design
- ► Pleasantly quiet
- ► The unique iris diaphragm prevents undesirable draughts
- ► Easy installation and operation









For more information, see our website.

www.getair.eu

## getAir GmbH & Co. KG

getAir is a multi-generation family-run German company with over 60 years' experience in the field of ventilation and air conditioning. The company stands for sophisticated and innovative products. The family-run company is based in Mönchengladbach, Germany, close to the Dutch border.





#### getAir GmbH & Co. KG

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