

# WAFE 200 E

## SOLUTION FOR FAMILY HOMES



BENEFITS | HEAT RECOVERY CONCEPT | WAFE 200 E | ENTHALPY EXCHANGER | ZONE VENTILATION  
UNIT SPECIFICATIONS | CONTROL AND MANAGEMENT



## SPECIALISTS IN HEAT RECOVERY

# BENEFITS OF WAFE 200 E

**CONTROL AND MANAGEMENT OF UNIT**  
LOCAL AND REMOTE CONTROL OPTIONS.



**MOISTURE RECOVERY**  
THE OPTIMUM HUMIDITY IS MAINTAINED THANKS TO INNOVATIVE ENTHALPY EXCHANGER TECHNOLOGY.



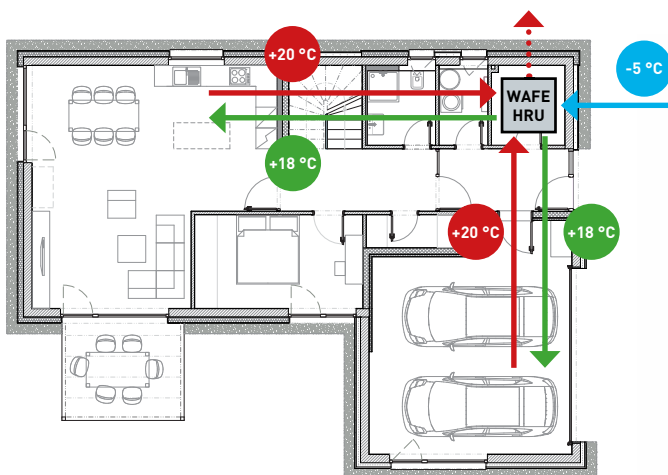
**LOW INVESTMENT COSTS**  
NO OTHER EXPENSIVE ACCESSORIES HAVE TO BE ACQUIRED FOR THE UNIT.



## HEAT RECOVERY CONCEPT

Heat recovery brings savings for heating, but it primarily creates a healthy home and is becoming the standard for the construction of family houses, flats and commercial properties.

The EU's pressure on energy savings also manifests itself in the construction industry. Stricter standards are leading to demands for better building insulation and to airtight low-energy buildings. It is evident that without effective building ventilation it will not be possible to economically fulfil these standards. For example, in Holland and Norway heat recovery is installed into practically all new and reconstructed buildings.



- |            |  |
|------------|--|
| <b>HRU</b> | Heat recovery unit   |
|            | Fresh cool outdoor air enters the HRU from the outside   |
|            | The exhaust warm internal air is conducted from the building to the HRU                          |
|            | The exchange of heat inside the HRU (in the exchanger) between fresh cool air and stale warm air |
|            | Waste cool air leaves the HRU and the building   |
|            | Fresh warm air enters the building from the HRU  |

## WAFE 200 E

WAFE 200 E is a premium heat recovery unit, which fulfils our customer philosophy: **We think like you do.**

The unit was designed for smaller houses and flats with a usable space of up to 170 m<sup>2</sup>. Its construction minimises the demands on space and completely fulfils our customers' idea of a small, easy-to-use unit. WAFE 200 E is equipped with an enthalpy exchanger as standard. Thanks to this system, the unit does not only recover heat, but also helps to maintain optimal level of humidity in the interior. Odours and harmful substances are conducted away from the building.

For chilly days the unit is equipped with anti-frost protection, though thanks to the technology used, this protection is activated at temperatures below -7 °C. Thus the unit significantly lowers the overall operating expenses. This can be lowered even further with zone ventilation.



**LOW OPERATING COSTS**  
EXTENDED SERVICE LIFE OF  
FILTERS, LOW CONSUMPTION  
OF FANS, HIGH EFFICIENCY  
OF EXCHANGER.



**PLACEMENT VERSATILITY**  
THE UNIT CAN BE INSTALLED  
ON THE WALL OR CEILING  
IN THE BUILDING'S TECHNICAL  
SPACES, WHICH PERMITS THE  
MINIMUM USE OF SPACE.



## ENTHALPY EXCHANGER

The heart of the WAFE 200 E unit is a modern enthalpy exchanger. This technical solution makes it possible to maintain a natural humidity in the house while not having to worry about condensation drainage. The system is reliable, effective and modern exchangers have a very long lifetime. We use membrane enthalpy exchangers by CORE that are made of hygienically compliant plastics.

The main task of the WAFE unit is to deliver an abundance of fresh air regardless of the temperature outside. Some manufacturers of units without preheating decrease the flow of fresh air at low temperatures, which may be contrary to hygienic requirements.

## ZONE VENTILATION

Zone ventilation takes care of primarily the spaces that are occupied. In the simplest form, the flow of air is switched between two zones. The living section is ventilated during the day and the bedrooms at night. Zoning may also direct exhaust power of the unit to rooms where boost has been used.

The switching is automatic using ventilation valves and CO<sub>2</sub> sensors, which are located in the individual zones. In the simplest form, the user can switch the valve manually or through a programmable time setting.

Zone ventilation makes it possible to install a recovery unit that is one size smaller. This leads to a decrease in the initial investment. A smaller unit also means savings of space. It is frequently possible, thanks to zone ventilation, to replace a suspended unit with a ceiling-mounted unit. This significantly simplifies the installation and it is no longer necessary to resolve an extra technical space for the recovery unit. Zone ventilation also lowers operating costs, extends durability of filters, lowers the effect of dry air in the interior and contributes to quick and efficient reduction of unwanted substances.

## UNIT SPECIFICATIONS

### HEALTH HYGIENE AND COMFORT

The recovery unit eliminates an abundance of dust, smog, radon, benzo(a)pyrene and formaldehyde, as well as allergens, odours and other detrimental substances in the interior air. It also maintains a low level of CO<sub>2</sub> and natural humidity in the building. A low level of CO<sub>2</sub> decreases fatigue and improves concentration. Humidity relieves the respiratory system. An indirect internal by-pass that allows free cooling in the summer switches on automatically.

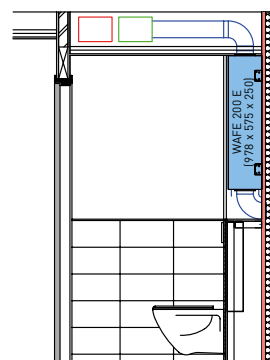
### OPERATION

There is a wide range of methods for operating and administering the unit. You can choose between local and remote control. In the case of an external CO<sub>2</sub> sensor, the unit is controlled automatically. The unit itself indicates when the filter needs to be replaced.

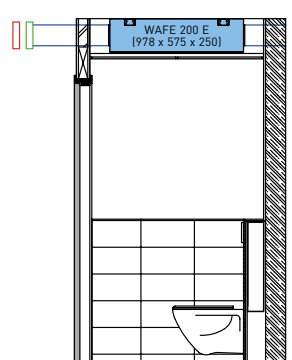
### INSTALLATION

The unit is installed without condensation drainage. That makes ceiling-mounted horizontal and vertical positions possible, together with integrated preheating. With the width of only 250 mm, the unit has minimal space requirements. The unit can be installed into ceiling soffits, fitted cabinets, and also technical spaces of the house or flat (WC, hallway, technical rooms).

#### 1. Vertical installation



#### 2. Horizontal installation



# CONTROL AND MANAGEMENT OF UNIT

LOCAL CONTROL		REMOTE CONTROL	
Analogue Control	The unit is controlled manually over an <b>analogue wall control unit</b> with the possibility of nine levels of ventilation intensity.	Ethernet Connection	The most common way to control the recovery unit outside of the house.
	The unit may not be concurrently controlled over a local network or remotely.		The control environment is identical to Local Control.
Indirect Control through Local Control Network	Control through the <b>MyWAFE web application</b> using the user's devices, e.g. smartphone, computer.	Sigfox IOT network	Primarily provides information about the unit, temperatures, sensors, the state of the unit, alarms, etc. WAFE 200 E is capable of communicating to the outside regardless of an Ethernet connection.
	Logging in through a local network is assumed.		The remote overview is once again provided through the <b>MyWAFE web application</b> .
Direct Control over local network	The unit can be controlled not only by the user's actions (a weekly program in addition to manual control), but also automatically through a CO <sub>2</sub> sensor.	Ready for connection to smart home with BMS module	A unit equipped in this manner can be classified as a "smart home system" and, thanks to the ModBUS protocol, the unit can be controlled by external commands.
	The user controls the unit using a 5" touchscreen on the <b>WAFE Airtouch panel</b> , which has the same controls and graphics as the Local Control web environment.		Thanks to ModBUS, the unit can also be monitored and the measured values can be displayed using a visual environment of the parent smart home system.
	The panel is connected by a cable to the control unit and also gets its power in this manner.		



Analogue wall control unit



MyWAFE web application



WAFE Airtouch panel

As part of the administration of the unit (with the exception of the analogue wall control unit), the modes (operation mode, fireplace ventilation, circulation, boost, night mode) can be changed as required by the user. For more on modes see our product section at [www.wafe.eu](http://www.wafe.eu).

## PARTNER PROJECTS

