

## SMART AIR for a healthier living





- Prevents build up of excess moisture
- Mold growth prevention
- . Building foundation protection



- Relax in the comfort of clean and pre-tempered air
- Breathe in an allergen free environment due to powerful filters
- Enjoy a pleasant room temperature without a feeling of draught



- Ventilation without the disturbance of external noise
- · High sound and acoustic insulation
- · Virtually noiseless operation



## ENERGY AND COST EFFICIENCY

- Reduction of heating costs and CO2 emissions
- Extremely low power consumption
- Suitable for cost-efficient Low-energy houses (according to KfW)



Clean and fresh air in a home is no longer a certainty. Formerly, a natural but uncontrolled air flow occurred through cracks and gaps in walls, windows and doors in a home. Nowadays, saving energy is a necessity and many people invest large amounts of money into expensive insulations of roofs, facades, and windows. As a consequence of the increasingly rigid energy efficiency requirements, the building shells have become more isolated and air proof than ever before, which leads to a higher concentration of contaminates, dust, mold and odors in the interior air. A higher concentration of humidity will lead to moisture and mold damages. All of theses factors lead to an unhealthy indoor climate and environment, which may cause headaches and nausea. Also carbon dioxide (CO2), which we exhale, adds to a "used" and stuffy interior air climate which will cause a lack of ability to concentrate and tiredness. Especially elderly people and children react severely to a high concentration of contaminates in the air. The most common symptoms are asthma, difficulties in breathing and discomfort. To ventilate the home by simply opening a window is completely heat energy insufficient – up to 50% of the heat energy is lost when opening the windows. What is the point in having an expensive home insulation when all the saved energy literally goes out of the window again? This is simply throwing your money out of the window.

Ventilation with heat recovery units by Meltem, keep the warmth in your home, extract contaminates in the air and always supply you with clean, fresh and healthy air.

Protect the health of your family, increase your quality of life!

CLEAN AIR. GREEN TECHNOLOGY.

The M-WRG ventilation unit with heat recover is a high quality product for automated and controlled home ventilation. You will no longer have high heating expenses due to the innovative technology of the heat exchanger, which transfers the warmth of the extracted stale air to the supply air. Additionally, the energy consumption is also very low (ca. 0,70  $\in$  a month at ventilation rate I) and you will provide your family with a healthier living environment.

## **OPERATION**

For an optimum utilization of the M-WRG ventilation unit with heat recovery, we recommend to **continuously operate the unit at ventilation rate I or II** (basic ventilation).

It is no longer necessary to ventilate your home by opening a window, especially during the winter season. However if you wish to do so, you may open your windows during the warmer seasons at any given time - since there is no energy and heat loss due to the warmer exterior climate.

In case of an **increase of humidity** (due to cleaning, laundry or showers), we recommend to switch to **ventilation rate III** until a normal concentration of humidity is reached again.

We also recommend to ventilate at **ventilation rate III** if **multiple persons** are present in a room.

## FILTER REPLACEMENT

The M-WRG ventilation unit with heat recovery has separate filters for fresh and exhaust air. This ensures the optimum filtration of the fresh air and keeping the unit clean. If the filters need to be replaced, an acoustic signal will inform you to do so.

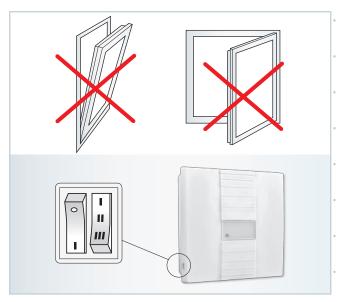
Caution: Due to hygienic reasons, the filters have to be replaced annually - ideally before the heating season.

**Note:** A family of four produces up to 14 liters of humidity daily. This high concentration of humidity can cause serious damages in your home. Therefore we recommend to operate the M-WRG ventilation unit 24 hours a day at **ventilation rate I or II**, especially during the **winter season** (exterior temperatures below 10°C)

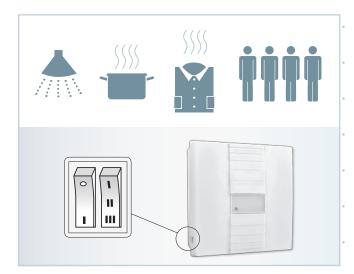
We further recommend to operate the M-WRG ventilation unit daily for a minimum of 15 minutes at ventilation rate III (Intensive ventilation), in order to avoid any possible build up of condensate inside the unit. During the winter season icicles may form on the exterior outlet of the unit. You are required to obtain a legal permit by the chimney sweeper in case you wish to install an M-WRG ventilation unit in a room with an open fireplace. Please see the user manual for further details.

Additional information about the M-WRG ventilation units and other products by Meltem can be found on our web page www.meltem.com





Continuous operation: Ventilation rate I or II



Intensive ventilation: Ventilation rate III

