

# ComfoAir Q

OMNIE.

Mechanical Ventilation  
and Heat Recovery



the whole house system

# Optimum indoor ventilation

The ComfoAir Q from OMNIE is the NEW generation of heat recovery ventilation units, with state of the art design and intelligent technology, regardless of whether you are working on a new build or an old building, with OMNIE comfortable ventilation you have an innovative, tried and tested complete system.

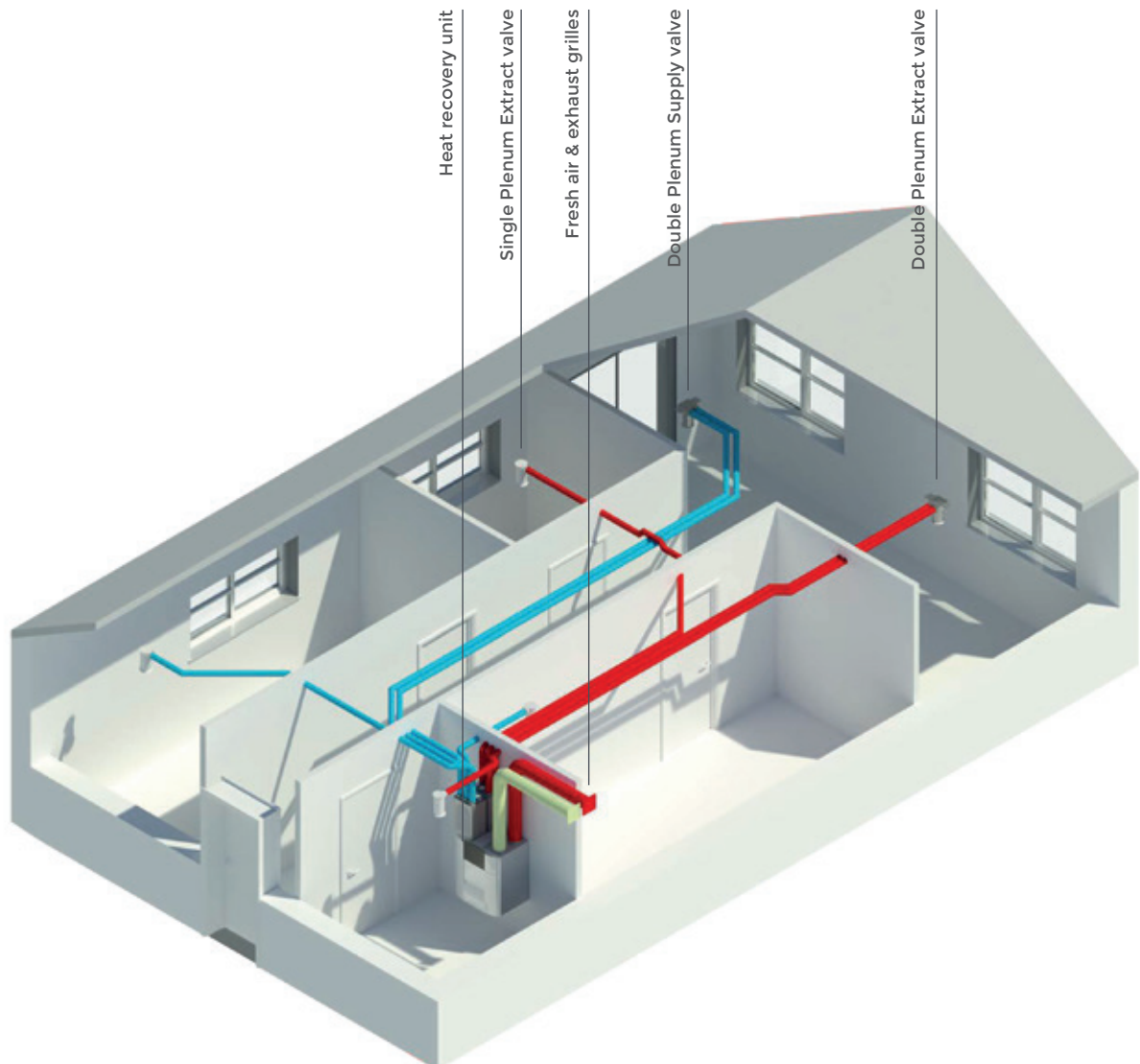
OMNIE ventilation systems innovative technology make for less complexity, increased heat recovery efficiency, lower specific fan power and significant noise reduction.

A perfect combination of outstanding technical performance and excellent features makes ComfoAir Q the best in class achieving top efficiency ratings.

- 3 models available - 350m<sup>3</sup>/hr, 450m<sup>3</sup>/hr and 600m<sup>3</sup>/hr
- Suitable for medium and large size properties
- All units have been certified as an official Passive House Component by the Passive House Institute
- Left or right hand unit configuration combined in one device for installation flexibility
- Wall mounted or free standing on mount options
- All units - dimensions 850mm (h) x 725mm (w) x 570mm (d)



Comfo Air Q - 350/450/600m<sup>3</sup>/hr



# How it works

## 1. Supply of fresh air

Fresh air is fed into the system via an external wall vent. The fresh outside air can optionally flow through a sub-soil heat exchanger beforehand which uses geothermal energy to pre-temper the outside air.

## 2. Ventilation unit

Up to 96% of the heat is recovered from the extract air and transferred to the fresh air. This can be humidified, dehumidified, heated and cooled using optional components.

## 3. Air distribution

The air distribution system channels fresh air at the right temperature to individual rooms as needed and vents the extract air to the outside. The air volume can be individually adjusted for each room.



### BENEFITS TO END USER

- Control from your smartphone
- Remote monitoring
- Easy maintenance
- Cooling option available
- Demand-based ventilation sensors



### BENEFITS TO INSTALLERS

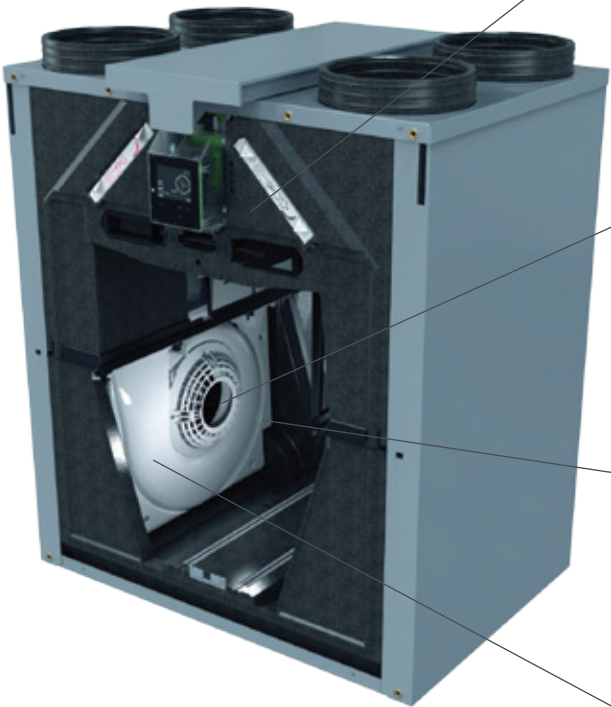
- Step by step start-up wizard
- Simply type in the required airflow rates
- Right and left handing can be modified on-site easily
- Simple installation process

- Outside air
- Supply air
- Extract air
- Exhaust air



# Understanding the mechanics

Heat Recovery Performance is an important factor in unit specification as it has a direct impact on the heating load and offers savings to the homeowner. When comparing two MVHR units with 87% and 94% heat recovery efficiency you can achieve up to a 25% reduction in heating costs (from ventilation loss) if selecting the higher performing unit.



## TEMPERATURE CONTROL

The pre-heater adapts its operation taking into consideration temperature, air flow and humidity to ensure consistent supply air temperature is achieved no matter what is going on outside. Thanks to its large surface and delta shape, the level of pressure loss is negligible - and that also reduces the power consumption.



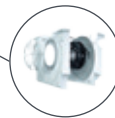
## AIR VOLUME BALANCING

Innovative sensor technology Automatically ensures balanced supply air and extract air volumes. This flow control guarantees maximum heat recovery. What's more, you save time during commissioning because there is no need to adjust the speed manually and the air volumes are balanced automatically.



## HEAT EXCHANGER

The unique diamond heat exchanger features an especially large surface, which allows it to achieve a higher level of efficiency. Variable channel heights ensure a constant flow and lower pressure loss. As a result, less energy is required to overcome the air resistance.



## FAN TECHNOLOGY

The flow grid, scroll housing and impeller ensure the best possible air flow. This guarantees not only extremely quiet operation, but also particularly low power consumption. A high-quality, future-proof solution, based on tried-and-tested technology.

# Adaptable for each unique installation

The intuitive start up wizard offers a simple installation process on-site including left and right hand configuration in one single unit. Flexibility is at the heart of ComfoAir Q.



## INSTALLATION WIZARD FACILITATES EASE OF SET-UP

The start-up wizard guides you step by step through the set up process including an automatic self-test. Using the design drawings you can simply type in the required airflow rates for low, medium and boost and the system automatically sets these across the installed system.



## ON-SITE INTERCHANGEABLE ORIENTATION

Right and left handing can be modified on-site easily when required helping save time and money on-site and reducing risk of incorrect installations.



## ENSURING AN OPTIMUM ROOM TEMPERATURE - AT ALL TIMES

The most important feel-good factor is comfort, through regulation of temperature and humidity. OMNIE ComfoAir Q's intelligent temperature control factors in the varying outdoor temperature at different times of the year, to ensure ideal comfort conditions indoors.

# Common questions

## Does the system run all the time and all year round?

The ventilation system runs all year at a low level and increases the air flow rate when needed.

## What is the running cost of an MVHR system?

The running cost depends on the size of the system and how often it needs to go into boost mode. The unit will consume around 70W in normal mode.

## What will happen if there is no power?

The HRU will not be circulating air so may become more humid in certain rooms.

## Are the units noisy?

A well-designed system should not be noisy. Some systems are designed to operate at maximum capacity all the time. OMNIE systems are designed for 60% and therefore remain quiet in continuous operation.

## Where is the unit normally located?

The MVHR units can be sited on a wall or in the loft. Additional space is needed for the manifolds to distribute the air into the 75mm semi-rigid duct.

## How do I maintain my MVHR unit?

MVHR systems require very little maintenance. The filters are accessible on the front of the unit and these can be easily cleaned.

## How does the system boost?

This is done automatically by the HRU sensing the humidity level and boosting the fan.



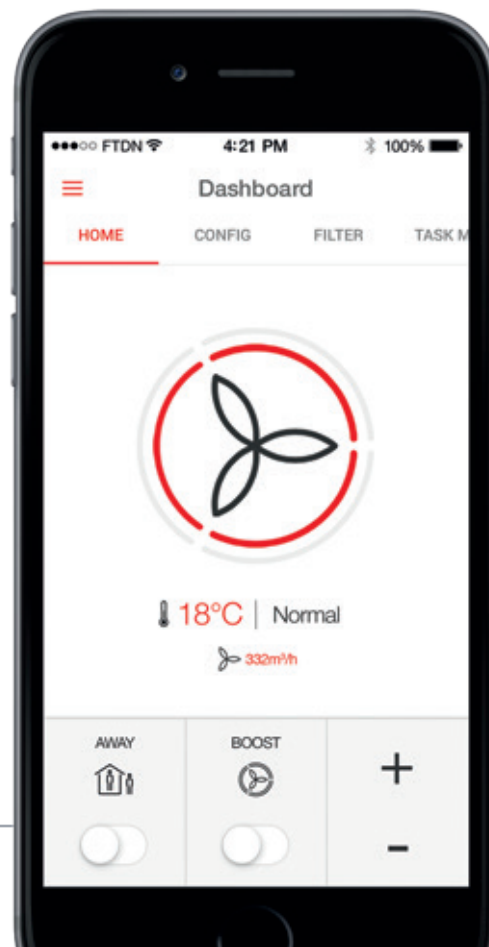


# Why compromise? Air matters.

Good air quality in the home is essential for your long term health, especially when you consider an average person spends 90% of their time indoors, and 75% of this time at home.

A recent report stated that poor air quality was linked to more than 40,000 premature deaths in the UK every year. This is likely to affect people who live in built up areas who experience higher levels of road traffic and subsequently harmful air pollutants. More of us are living in areas of the country which are highly polluted and will have a higher proportion of lung disease and cardiovascular problems. In addition to manmade pollutants, other particles such as bacteria, fungi and pollen can cause lung irritation and respiratory problems, especially in younger and older occupants.

Our homes offer some protection from the elements, however we are still reliant on fresh air coming into the building through infiltration in the fabric. This approach provides limited control of the air and its quality. With this in mind, pollutants are part of our built up environment and we need to make decisions to how we reduce the risks within our homes and how to control the air quality.







#### How OMNIE can help...

Maintaining good air quality is achievable with a OMNIE comfort air system which utilises Mechanical Ventilation and Heat Recovery (MVHR). The OMNIE MVHR system has the ability to filter pollen and dust as standard, in addition to this, we have the options to provide some protection against harmful air pollutants.

The Heat Recovery Unit provides a countdown to when the filters need to be checked, ensuring that high levels of filtration are maintained. Even though the OMNIE MVHR offers some protection from pollutants and will improve air quality, no solution can provide 100% control and guarantees on air quality and prevent the associated health risks.

#### Humidity

With an average family producing 18 litres of water every day, regulating this humidity is possible through the OMNIE MVHR system. High levels of humidity can lead to health issues if mould occurs on cold surfaces and there is poor ventilation. One of the main benefits of the OMNIE solution is that it will extract more moisture over a longer period then compared with a conventional intermittent ventilation system.

#### OMNIE Ventilation system main features

- Up to 96% efficient heat recovery saves energy
- Ability to control humidity levels within the building
- Improves air quality and reduction in some pollutants
- Regulates comfort level and provides some cooling effect with greater air movement and modulating summer bypass
- MVHR essential for low energy building design



**OMNIE.**

18 Apple Lane  
Trade City  
Sidmouth Road  
Exeter, Devon  
EX2 5GL

T +44 (0) 1392 36 36 05  
W [www.omnie.co.uk](http://www.omnie.co.uk)