

Unique Approach:

OMNIE utilises a range of MVHR products to provide the best solution for your heat recovery system. This fully integrates into the control system and provides a unique ventilation system that meets your individual requirements. In conjunction with CAD design and technical support we believe we offer one of the best heat recovery offerings on the market.

Application:

- 1. For domestic properties only
- 2. MVHR is only suitable for new build or high end refurb projects.

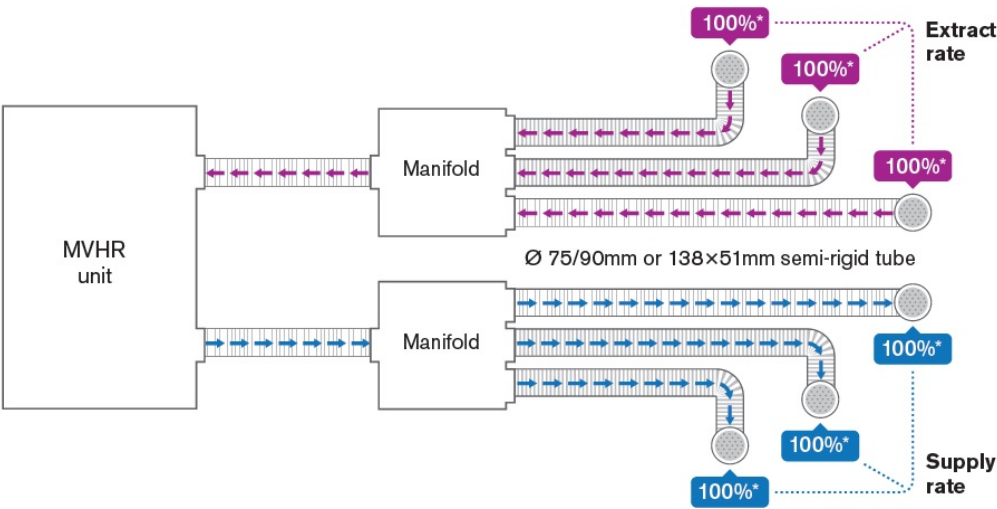
Principles; Why Semi Rigid and Manifolds?

- 1. Reliability- less likely to leak, no joins along the length of duct
- 2. Assured performance
- 3. Reduces noise, and cross talk

Flow rate - range (l/s)	Units	Area (m2)
34-75	1 x ComfoAir Q350	111-250
76-90	1 x ComfoAir Q450	251-300
91-105	1 x ComfoAir Q600	300-350

RADIAL SYSTEM: COMFOTUBE DUCTING - 75MM / 90MM

Correct airflow to specific rooms is possible to achieve.



* Relates to % of desired airflow at each termination

With increased monitoring of all elements of the built environment, it is essential to know that what has been installed will be able to deliver the specified performance. ComfoFresh has the facility to deliver individual, room by room airflow commissioning via a radial approach. This ensures that at the sign off stage there are no issues regarding meeting the specified rate. This radial approach also helps to reduce noise transfer within the home.

SIZING OF THE HEAT RECOVERY UNIT (HRU) / WORKING WITHIN 60% MACHINE SPEED

The MVHR will either be sized to meet the supply (habitable) requirement or extract to meet Part L. We design to meet the minimum requirement for habitable at low speed then extract is achieved with a 10% boost to meet the extract rate.

We work on fixed design principles for duct lengths, flow rates and pressure drops for residential properties. This ensures we are always working within the capacity of the HRU with a max 60-65% at low supply rate. Operating at this capacity also reduces the chance that the noise becomes an issue at the supply valves. We also try to reduce the flow rate to bedrooms where possible and design the valves away from the bed position. As a rule of thumb 75mm duct should not exceed 25m with a max flow rate of 7-8 l/s.

Fire Mode, Open Fires and MVHR:

Open fires are not recommended, however wood burning stoves that use a direct air supply can be used. This ensures that the air supply doesn't interfere with the pressure and operation of the ventilation system. On the CA models it has a fire mode which slightly pressurises the supply side to allow for air loss. If you are looking to use a wood burning stove then an extract valve can be installed at high level to recirculate this energy.

Basements and Dual Usage Rooms:

In some applications we look to provide extract and supply in the same room, this is applicable for spaces with no windows. Other rooms benefit from both extract and supply valves such as games rooms and gyms.

Kitchen Extract:

Kitchen extract should be via a recirculation hood and filter. The extract valve in the kitchen will remove warm stale air.

Reliability:

German/ Swiss designed heat recovery are built to last and have quality electronics and insulation that meet Passive house standards.

Warranty and Insurance:

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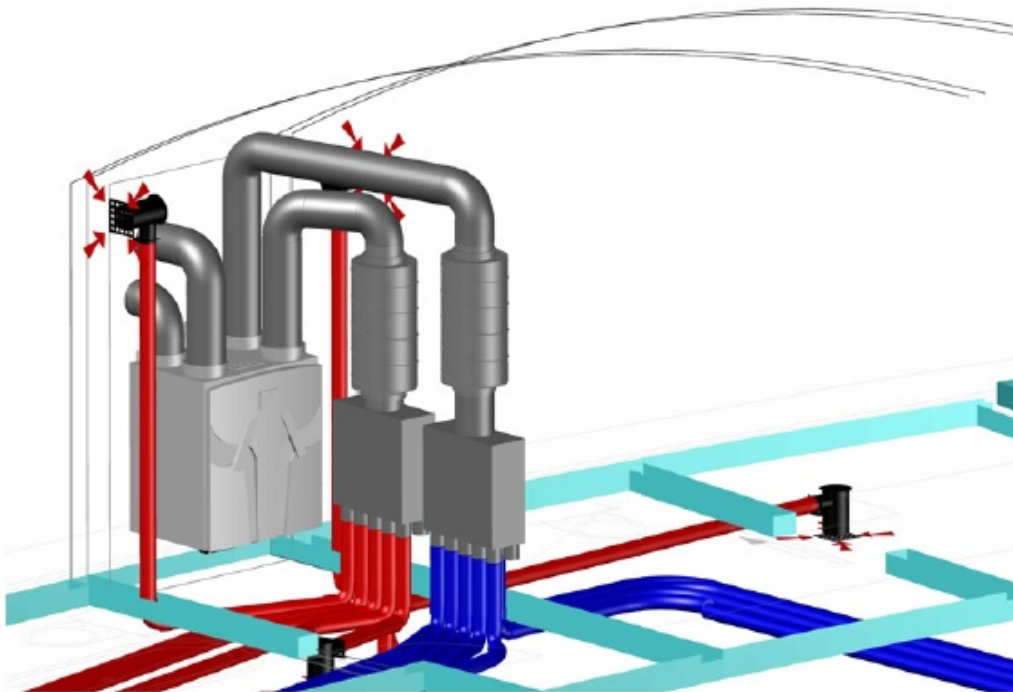
CAD layout Design and Back Up Information:

CAD layout design provides an excellent reference point for the installer to install the duct components.

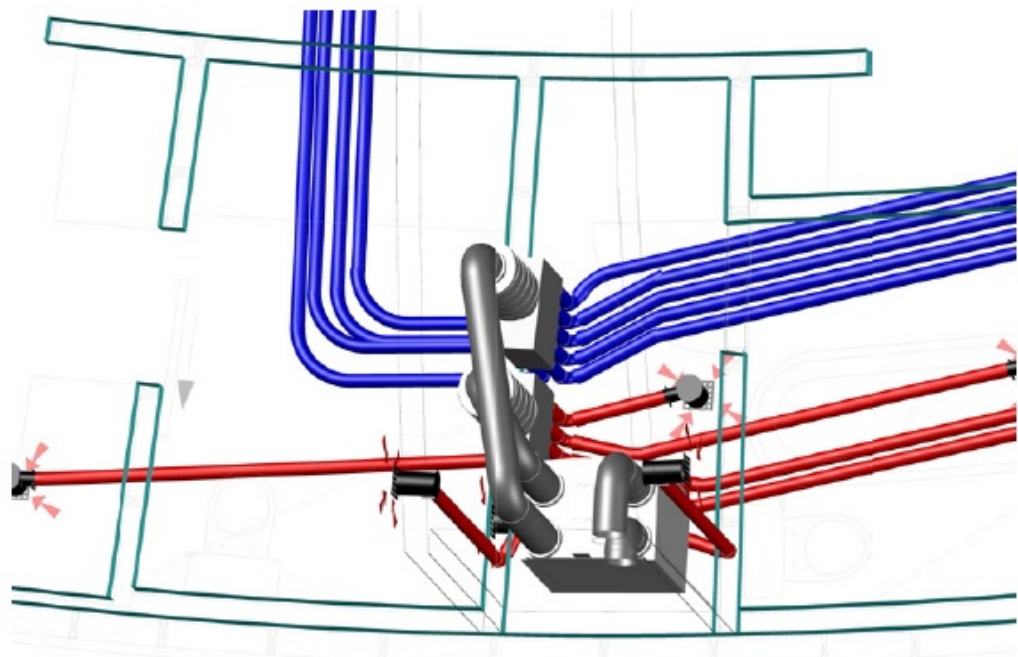
OMNIE provide an indicative design for the HRU unit location and mass flow duct work to external supply and extract points.

This enables a good visualisation for the installer to build a list of components available from OMNIE.

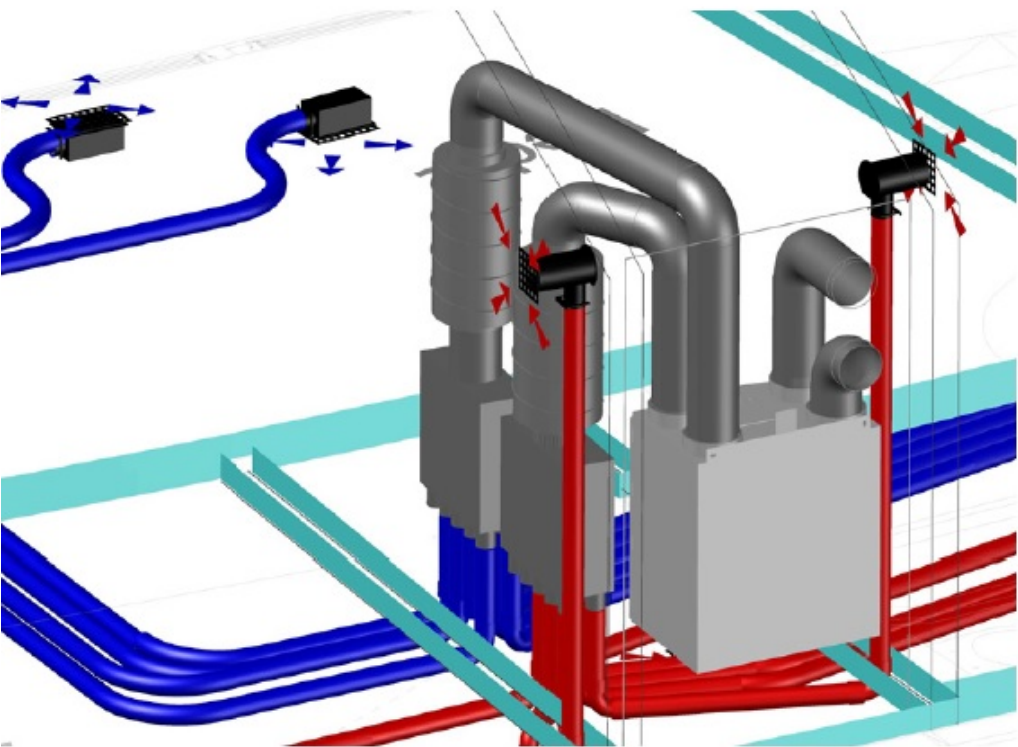
1b-plant room detail (front view):



1c-plant room detail (above view):



1d-plant room detail (rear view):



WARRANTY & INSURANCE

HRU have a standard warranty period of 2 years from the point of sale.

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