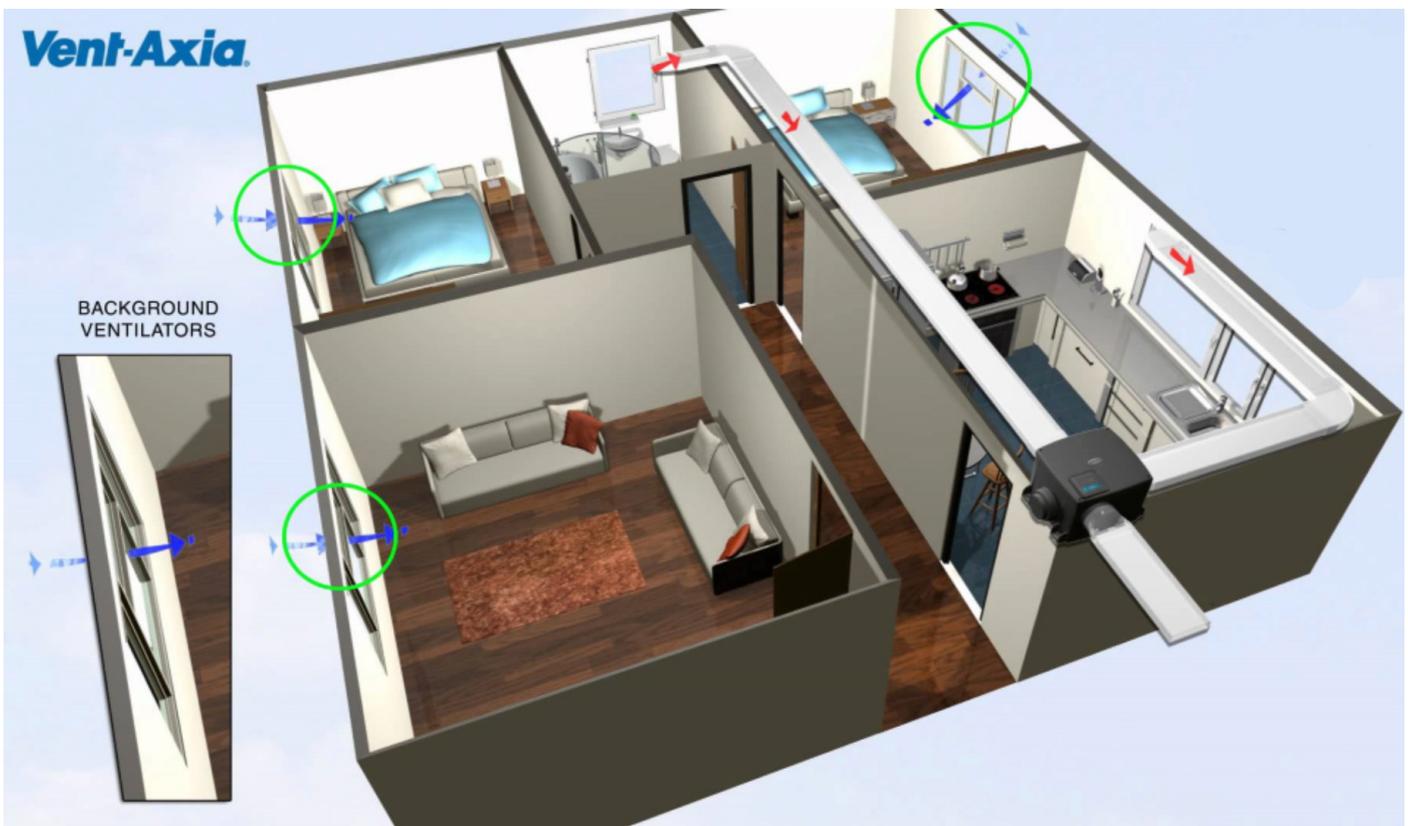




**MEV**  
**Buyers**  
**Guide**



## What are MEV Systems?

MEV, or Mechanical Extraction Ventilation, is a ventilation system that extracts moisture laden air from multiple wet rooms of a property. The concept of MEV is to provide simultaneous, low level extraction from wet rooms to a central unit that is most commonly placed in a loft or cupboard. The unit is connected via a system of duct work, valves, and grilles. The air is extracted from rooms and would then be normally discharged to outside via a single duct and a grille or cowl on an exterior wall.

As this type of system has to work 24 hours a day, 7 days a week, 365 days a year, low noise levels and reliability are critical.

## Benefits of MEV Systems

- Can extract simultaneously from up to 6 wet rooms
- Continuous operation
- Prevents condensation & mould growth
- No extractor fans needed
- Quiet in operation
- Low running cost
- Humidity sensor models available
- Wireless controlled models available
- Acoustic lined models available
- Low specific fan power
- SAP Appendix Q rated
- Manufactured in the UK
- Up to 5-year warranty

## MEV Systems Overview

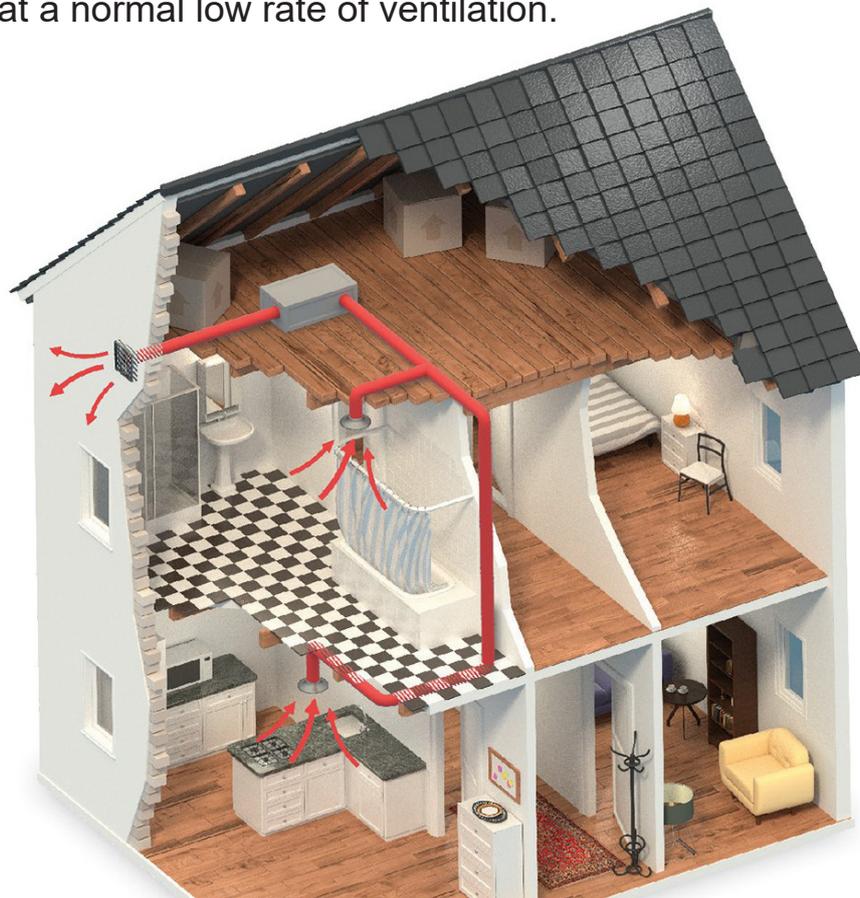
A Centralised Mechanical Extract Ventilation (C-MEV) system is a low energy, continuous mechanical extract ventilation. It is designed to extract moist and stale air from multiple rooms at once, these rooms include kitchens and bathrooms. A C-MEV unit provides a quiet system and more efficient than separate fans in each room. A C-MEV is more commonly known as a Mechanical Extraction Ventilation (MEV).

The unit is usually situated in a loft or roof space. It works by continuously extracting at a low ventilation rate. A mechanical extraction system can create energy savings as there is no need to run a lot of extractor fans in every wet room in a home. There are also beneficial over fans as they do not create air leakage, heat loss or drafts.

Mechanical extraction is advantageous as it eliminates damp and polluted air creating a healthier and better indoor air quality.

BPC stock a range of C-MEV units from worldwide leading manufacturers. A D-MEV is a Decentralised Mechanical Extract System which is designed to replace conventional bathroom fans and draw out moisture laden air from wet rooms such as bathrooms and utility rooms. D-MEV systems provide a more efficient and a quieter system than separate fans.

Decentralised Mechanical Extract Ventilation systems are low energy systems, they are usually installed in a bathroom wall or ceiling and extract continuously at a normal low rate of ventilation.



## MEV Kits

Centralised mechanical extract systems can be purchased singularly or in a MEV Kit that comes with required fittings depending on how many rooms the unit will service.

MEV kits are a complete DIY Kit of a MEV multiple room extraction unit with insulated flexible ducting and fittings suitable for extraction up to 7 separate areas.

Our comprehensive DIY kits have everything you should require installing the system to building control regulation. Kits include the correct ducting, connectors, grilles, valves, and installation materials for your chosen MEV unit.



## MEV Building Control Regulations

### Building Control System 3

Building Regulation Part F - System 3 covers continuous mechanical extract ventilation (MEV). This can be either a whole house centralised MEV system, or localised decentralised MEV fan.

Current Building regulation requires such systems be designed to provide background extraction at a rate equating to approximately 0.3 to 0.5 air changes per hour or individual room rates of 13 kitchen, and 8l/s for bathrooms (whatever higher is used) with the ability to boost by approximately 25% for times when increased ventilation is required e.g. during cooking.

Replacement air is normally able to be provided via structural air leakage with older buildings above 5ma@50Pa or if the home is built to good airtight standards with background ventilation openings like trickle vents and wall vent having a minimum equivalent area of 2500 mm<sup>2</sup> should be fitted in each room, except wet rooms, from which air is extracted.

Always refer to your local building control regulations as this information can change.

## Installation

MEV are best suited to be installed in apartments and homes where there is possible only one external wall.

Suitable for homes with more than one wet room such as kitchens, bathrooms, toilet, en suites, laundry rooms, and utility rooms.

MEV units have multiple installation options, they can be installed on the wall, ceiling or in a loft.

The unit is connected via ductwork pipes to valves in each wet room in your home. The air is extract through the valves and ductwork, back to the unit where it is then expelled outside, giving your home a better indoor air quality.

MEV systems are easy to install and can be done via DIY or by most competent people, tradesmen or we can install your system for you via our network of installers across the UK and Ireland.

## MEV units

We stock only the highest quality MEV units from world wide leading brands including Vent Axia, Duco, Domus, Passivent and Xpelair.

The Vent Axia Multivent is our most popular Mechanical extract ventilation unit (MEV) we sell due to high quality construction, reliability and controllability, there are three 125mm extraction points on the sides and one 125mm to the back for ease of installation.



## MEV FAQ's

### What is the difference between MEV and MVHR?

A MEV *extracts* air from wet rooms in your home and requires either trickle vents or a positive ventilation unit to bring air into the property.

A mechanical ventilation heat recovery (MVHR) system both *extracts* and *supplies* filtered air and recovers up to 90% of the normally wasted heat reducing your heating bills and all the air is fully controllable.

In a MEV system the air is extracted from the kitchen and bathroom to the unit that is situated in the loft space (or other chosen installation place), the extracted air is then exhausted out through a grill on the outside wall.

### What ducting systems is best used with a MEV system?

Rigid ducting, or also known as branch duct system is a commonly used ducting solution for ventilation systems.

Branched Ducting a system of round or flat PVC or EPE rigid ductwork which are typically 150mm or 125mm which branch out with T-pieces into various rooms. PVC Rigid ductwork has been used for over 50 years in domestic installations.

### What are the advantages of rigid / branched ducting for MEV systems?

- Easy to install with a simple push to fit
- No need for extra rock wool or foil wrapping
- No requirement for additional clamping
- Very low leakage
- Full range including round and rectangular solution

### Can I change the products in my kit?

Yes, we can tailor easy system directly to your projects needs. If necessary products can be changes or amounts can be altered, please not this many incur extra costs.