

Ductless MVHR

A decentralised ventilation system used in residential and retrofit projects, particularly where installing ductwork is impractical or cost-prohibitive.

A ductless MVHR is a compact, wall-mounted ventilation unit (through-the-wall) that supplies fresh, filtered air into a room while simultaneously extracting stale air, recovering heat from the extracted airflow to pre-warm incoming air. Unlike traditional centralised MVHR systems, it operates without ductwork, making it ideal for retrofitting older UK homes or small spaces.

Key Features

1. **Heat Recovery:** Uses a heat exchanger to transfer up to 90% of thermal energy from exhaust air to incoming fresh air, improving energy efficiency.
2. **Alternating Airflow:** Cycles between supply and extract modes, typically every 60-90 seconds, ensuring balanced ventilation.
3. **Simplified Installation:** Requires only a single wall penetration, reducing structural disruption and installation costs compared to ducted systems.

Applications in UK Building and Retrofit

- **Retrofit Projects:** Suited for listed buildings or heritage properties where duct installation is restricted. For example, in Victorian terraces, ductless MVHR units can be installed room-by-room to meet Part F ventilation standards without compromising original features.
- **Energy-Efficient Renovations:** Paired with airtightness measures in low-energy retrofits (e.g., EnerPHit standards) to maintain indoor air quality while minimising heat loss.