

What is a Fan Speed Controller?

A Fan Speed Controller is a device used to adjust the rotational speed of a fan, thereby regulating the airflow rate in a ventilation system. It allows for precise control over ventilation performance, ensuring optimal air exchange while minimising energy consumption.

In the UK house building, residential retrofit, and home renovation sectors, fan speed controllers are commonly used in mechanical ventilation systems, such as Mechanical Extract Ventilation (MEV) and Mechanical Ventilation with Heat Recovery (MVHR). They are particularly valuable in ensuring compliance with **Part F (Ventilation)** of the Building Regulations, which mandates adequate ventilation to maintain indoor air quality.

Synonyms:

- Fan Regulator
- Speed Adjuster
- Airflow Controller

Practical Examples:

1. **Residential Retrofit:** In a retrofit project, a fan speed controller can be installed to upgrade an existing ventilation system, allowing homeowners to adjust airflow based on occupancy or seasonal requirements.
2. **New Builds:** In new builds, fan speed controllers are integrated into MVHR systems to ensure energy-efficient ventilation that meets Part L (Conservation of Fuel and Power) requirements.
3. **Extensions:** When adding an extension to a home, a fan speed controller can be used to balance airflow between the new and existing spaces, ensuring consistent ventilation throughout the property.

Related Terms:

1. **Mechanical Ventilation with Heat Recovery (MVHR):** A system that extracts stale air and supplies fresh air while recovering heat from the extracted air.
2. **Part F (Ventilation):** The section of the UK Building Regulations that sets standards for ventilation in residential buildings.
3. **Airflow Rate:** The volume of air moved by a fan, typically measured in cubic metres per hour (m³/h).
4. **Demand-Controlled Ventilation (DCV):** A system that adjusts ventilation rates based on occupancy or air quality sensors.
5. **Building Regulations Approved Document F:** Provides guidance on meeting the ventilation requirements outlined in Part F.