

What is a Fixed Louvre?

A fixed louvre is a non-adjustable ventilation component designed to allow the controlled passage of air while preventing the ingress of rain, debris, and pests. It is commonly used in building ventilation systems, particularly in alternate flow heat recovery ventilation (HRV) systems, where it facilitates the intake and exhaust of air without mechanical intervention.

Fixed louvres are integral to maintaining indoor air quality and energy efficiency in residential and commercial buildings. They are typically installed in external walls or roofs and are designed to meet specific airflow requirements while adhering to Building Regulations. In the UK, their design and installation must comply with **Approved Document F (Ventilation)** of the Building Regulations, which outlines standards for ventilation systems to ensure adequate air supply and extraction.

Synonym(s): Fixed Air Vent, Static Louvre

Practical Example:

In a UK residential retrofit project, fixed louvres might be installed in a loft conversion to support a mechanical ventilation with heat recovery (MVHR) system. The louvres ensure a consistent flow of fresh air into the system while preventing water ingress during heavy rain, a common concern in the UK climate.

Related Terms:

1. **Mechanical Ventilation with Heat Recovery (MVHR):** A system that extracts stale air from a building and replaces it with fresh, filtered air while recovering heat from the outgoing air.
2. **Alternate Flow Heat Recovery Ventilation:** A ventilation strategy that alternates the direction of airflow through a heat exchanger to maximise energy efficiency.
3. **Approved Document F (Ventilation):** Part of the UK Building Regulations that specifies requirements for ventilation in residential buildings.
4. **Air Permeability:** A measure of how airtight a building is, influencing the design and placement of ventilation components like fixed louvres.
5. **Passive Ventilation:** A natural ventilation strategy that relies on pressure differences and wind effects rather than mechanical systems.
6. **Building Regulations:** Statutory instruments that set standards for the design and construction of buildings in the UK.
7. **Retrofit:** The process of upgrading existing buildings to improve energy efficiency, comfort, and compliance with modern standards.