

# What is Back Draught?

**Back draught (also known as back draft) refers to the unintended reverse flow of air into a property through ducting or ventilation systems when the extraction unit is inactive. This phenomenon can occur due to pressure differentials between the indoor and outdoor environments, leading to stale or contaminated air re-entering the property.**

In the UK house building, residential retrofit, and home renovation sectors, back draught is a critical consideration in designing and maintaining ventilation systems. It is particularly relevant in properties with mechanical extract ventilation (MEV) or positive input ventilation (PIV) systems. Failure to address back draught can compromise indoor air quality, increase energy consumption, and lead to condensation or mould issues.

## **Practical Examples:**

1. In a retrofit project, an improperly sealed duct in a kitchen extractor fan may allow cooking odours and moisture to re-enter the home when the fan is turned off.
2. During winter, cold outdoor air may flow back into a property through an unsealed bathroom extractor duct, reducing thermal comfort and increasing heating costs.

## **Related Terms:**

1. **Mechanical Extract Ventilation (MEV):** A system that uses fans to extract stale air from wet rooms (e.g., kitchens, bathrooms) and expel it outside.
2. **Positive Input Ventilation (PIV):** A system that introduces fresh air into a property to improve air quality and reduce condensation.
3. **Air Pressure Differential:** The difference in air pressure between indoor and outdoor environments, which can drive back draught.
4. **Building Regulations Part F:** UK regulations governing ventilation standards in dwellings, including measures to prevent back draught.
5. **Approved Document F:** Provides guidance on compliance with Part F, including best practices for ducting and ventilation system design.
6. **Condensation Risk:** The potential for moisture to accumulate on surfaces due to poor ventilation, exacerbated by back draught.
7. **Duct Sealing:** The process of ensuring airtight connections in ventilation ducting to prevent air leakage and back draught.