## What is a Condensation Trap?

A condensation trap is a collar or device installed within a vertical duct run, designed to collect and remove condensation that forms within a venting system. It is predominantly used in vertical venting systems that pass through roofs, particularly in scenarios where the ducting is positioned higher than the fan unit. The trap prevents moisture buildup, which could otherwise lead to water damage, mould growth, or system inefficiencies.

In the UK house building, residential retrofit, and home renovation sectors, condensation traps are essential components in mechanical ventilation systems, such as those used in kitchens, bathrooms, and utility rooms. They are particularly relevant in compliance with **Part F of the Building Regulations (Ventilation)**, which mandates effective moisture control to ensure indoor air quality and prevent damp-related issues.

## **Practical Example:**

In a residential retrofit project, a condensation trap might be installed in the vertical ducting of a kitchen extractor fan that vents through the roof. During cooking, warm, humid air rises through the duct, and as it cools, condensation forms. The trap collects this moisture, allowing it to drain away safely, preventing it from pooling within the duct or dripping back into the fan unit.

## **Synonyms:**

- Condensate trap
- Moisture trap

## **Related Terms:**

- 1. **Mechanical Ventilation with Heat Recovery (MVHR):** A system that extracts stale air and supplies fresh air while recovering heat, often requiring condensation traps in its ducting.
- 2. **Part F of the Building Regulations:** UK regulations governing ventilation requirements in buildings, including moisture control.
- 3. **Ducting Insulation:** Insulation applied to ducting to reduce heat loss and prevent condensation formation.
- 4. **Extractor Fan:** A device used to remove moisture-laden air from rooms like kitchens and bathrooms, often connected to ducting with a condensation trap.
- 5. **Roof Vent:** A component that allows air to exit a building through the roof, often integrated with ducting and condensation traps.
- 6. **Damp Proofing:** Measures taken to prevent moisture ingress in buildings, often complemented by effective ventilation systems.
- 7. **Approved Document F:** The official guidance document supporting Part F of the Building Regulations, providing detailed advice on ventilation and moisture control.