

What is a Humidistat?

A humidistat is a device that measures the relative humidity (RH) of the air in a given space. When the RH reaches a pre-set threshold, the humidistat activates a ventilation fan to reduce moisture levels. This is particularly useful in areas prone to high humidity, such as bathrooms, kitchens, and utility rooms, to prevent condensation, mould growth, and dampness. Humidistats can be integrated into the fan unit itself or installed as separate switch units to control inline duct fans remotely.

In the UK, humidistats are commonly used in residential retrofits, home renovations, and extensions to comply with **Part F of the Building Regulations (Ventilation)**. Approved Document F emphasises the importance of adequate ventilation to maintain indoor air quality and prevent moisture-related issues. Humidistats are particularly relevant in energy-efficient homes, where airtight construction can exacerbate humidity problems if not properly managed.

Synonyms:

- Humidity sensor
- RH controller

Related Terms:

1. **Relative Humidity (RH):** The amount of moisture in the air compared to the maximum amount it can hold at a given temperature, expressed as a percentage.
2. **Extractor Fan:** A mechanical device used to remove stale or humid air from a room, often controlled by a humidistat.
3. **Inline Duct Fan:** A fan installed within a duct system, typically controlled by a remote humidistat for spaces where the fan cannot be placed directly in the room.
4. **Condensation:** The process by which water vapour in the air turns into liquid, often leading to dampness and mould if not properly ventilated.
5. **Building Regulations Part F:** UK legislation that sets standards for ventilation in buildings to ensure healthy indoor air quality.
6. **Airtightness:** The measure of how well a building prevents uncontrolled air leakage, which can impact humidity levels and ventilation requirements.
7. **Mould Growth:** The proliferation of fungi due to excessive moisture, often mitigated by effective ventilation systems like humidistat-controlled fans.