

Trickle Speed

Trickle Speed refers to the low, continuous airflow rate maintained by mechanical ventilation systems to ensure consistent background ventilation. It operates at a minimal level to extract stale air and introduce fresh air without causing draughts or excessive energy consumption.

Key Characteristics

1. **Continuous Operation:** Runs 24/7 at a reduced capacity, even when higher “boost” modes are inactive.
2. **Energy Efficiency:** Designed to minimise power usage while complying with Part F ventilation requirements.
3. **Humidity/Moisture Control:** Prevents condensation and mould by steadily removing damp air (critical in UK retrofits with airtightness improvements).

Practical Application

- **Example:** In a retrofit bathroom, an ARIA DMEV HT unit uses trickle speed to continuously extract moisture-laden air. When humidity spikes (e.g., during showers), it switches to a higher extraction rate.
- **Compliance:** Meets Approved Document F’s requirement for “whole dwelling ventilation” (Table 1.3) by providing a baseline airflow of 5–8 l/s in wet rooms.

Differentiation from Similar Terms

- **Intermittent Extract Fans:** Unlike traditional fans that only activate manually or via sensors, trickle speed ensures **constant air exchange**.
- **Trickle Vents:** Passive vents in windows (often disliked for heat loss and noise) are distinct from mechanical trickle speed, which is actively controlled and filtered.

Importance in UK Building

- **Retrofit Relevance:** Essential for homes post-energy efficiency upgrades (e.g., insulation, window replacement), where reduced infiltration risks poor indoor air quality.
- **Part F Alignment:** Ensures compliance with 2022 regulations requiring “adequate means of ventilation” without relying on occupant interaction (e.g., opening windows).