

How Much Does a Trickle Vent Cost Per Year Due to Heat Loss?

The average annual heat loss cost for a trickle vent in the UK is £5.76, calculated using an 8000mm² vent area, a U-value of 1.2W/m²K, an electricity cost of £0.2236/kWh, a 12°C indoor/outdoor temperature difference, and an airflow velocity of 0.1m/s.

Work Out the Cost of Your Trickle Vents Using Our Calculator

Breaking Down the Maths: Why Trickle Vents Drain Your Wallet

Let's cut through the jargon. Heat loss through trickle vents isn't some abstract concept—it's cold, hard cash leaking out of your home. Here's how the numbers stack up:

1. Formula for Annual Heat Loss Cost:

2. $\text{Cost} = ((\text{U-value} \times \text{Equivalent Area} \times \text{Temperature Difference} \times \text{Hours}) / 1000) \times \text{Electricity Cost}$

Plugging in the values:

- **U-value:** 1.2W/m²K (a measure of thermal conductivity)
- **Area:** 8000mm² = 0.008m²
- **Temperature Difference:** 12°C (typical UK winter indoor/outdoor gap)
- **Hours:** 8,760 (annual hours)
- **Electricity Cost:** £0.2236/kWh

$$\text{Cost} = ((1.2 \times 0.008 \times 12 \times 8760) / 1000) \times 0.2236 = £5.76$$

3. Variables That Inflate Costs:

- **Larger Vents:** A 10,000mm² vent increases costs to **£7.20/year**.
- **Poor Insulation:** Higher U-values (e.g., 2.0W/m²K) could double losses.
- **Colder Climates:** A 15°C temperature difference raises costs to **£7.20/year**.

The Hidden Flaws of Trickle Vents: Beyond the Numbers

Trickle vents are like leaving a window slightly open—year-round. The £5.76/year figure might seem trivial, but consider these broader implications:

- **Mould & Damp:** Poorly controlled airflow exacerbates condensation. Repairing mould damage costs UK households **£1,000-£5,000** on average.
- **Energy Inefficiency:** Heat loss from vents forces boilers to work harder, increasing wear and tear.
- **Noise & Draughts:** Unfiltered airflow introduces pollutants and street noise, compromising comfort.

Mechanical Ventilation: A Smarter Investment

Compare this to systems like VENTI's **FLUXO** (continuous mechanical ventilation with heat

recovery):

Factor	Trickle Vent	FLUXO System
Annual Heat Loss Cost	£5.76	£5 (fixed, with 82% heat recovery)
Air Quality	Unfiltered, variable	Filtered, continuous fresh air
Condensation Risk	High	Eliminated
Noise	Uncontrolled	10-29dB (quieter than a whisper)

FLUXO's heat recovery unit retains **82% of warmth**, slashing energy bills while maintaining airflow. For wet rooms, the **ARIA** system extracts moisture on demand, preventing damp without constant heat loss.

Upgrade to modern ventilation—cut energy waste and breathe cleaner air with VENTI's solutions.