Trickle Vent

A trickle vent is a small opening or device installed in windows or walls to allow for controlled passive ventilation. It enables a continuous flow of fresh air into a building, helping to maintain indoor air quality without mechanical systems.

Trickle vents are commonly integrated into window frames or installed as air bricks in walls. They are intended to provide ventilation in tightly sealed buildings, particularly in the UK, where energy efficiency is a priority. However, their effectiveness is often compromised.

Challenges with Trickle Vents:

1. **Ineffectiveness**: Despite their design, trickle vents are frequently kept closed by occupants, limiting airflow. Even when open, they can let in cold air, noise, and insects while allowing warm air to escape.
2. **Increased Airtightness**: As homes undergo retrofitting to improve thermal efficiency, the airtightness increases. This can lead to condensation, damp, and mould if proper ventilation measures are not implemented alongside.
3. **Limited Control**: Trickle vents do not provide adequate control over indoor air quality and cannot respond to varying humidity levels effectively.

Practical Example:
In a retrofit project in a Victorian home, trickle vents were found to be ineffective as residents reported persistent damp issues. The installation of a mechanical ventilation system resolved these issues by providing consistent airflow and managing humidity levels.