Heat Recovery Ventilation (HRV)

HRV systems transfer heat from the stale air being expelled from a building to the fresh air entering it, improving energy efficiency. This process helps to maintain comfortable indoor temperatures while reducing energy costs.

In an HRV system, two air streams—one outgoing and one incoming—pass through a heat exchanger. The heat exchanger allows for the transfer of thermal energy from the warmer outgoing air to the cooler incoming air without mixing the two streams. This significantly reduces the energy required to heat the incoming air, making HRV systems particularly effective in colder climates.

An HRV unit, such as the **FLUXO**, installed in a newly built home may recover up to **82%** of the heat from the exhaust air. This means that during winter months, instead of losing valuable heat through ventilation, the home can maintain a comfortable temperature with much lower heating demands, resulting in reduced energy bills and a smaller carbon footprint.

In the UK, where many homes are retrofitted to improve energy efficiency, HRV systems have become increasingly popular. For instance, a retrofit project in a Victorian house could involve installing an HRV unit to replace outdated ventilation methods. This not only improves indoor air quality but also aligns with government initiatives aimed at reducing carbon emissions.