

# St Catherine's House, Ellesmere Port

## Background

Plus Dane Housing, a not-for-profit housing association, manages over 13,500 homes across Merseyside and Cheshire. With a strong social purpose, the organisation provides affordable housing to around 30,000 residents and is committed to tackling social inequality through regeneration, decarbonisation, and community investment.

St Catherine's House, Ellesmere Port, is a modern residential block containing 28 flats. Despite its relatively recent construction, residents were experiencing persistent issues with condensation, mould, and overheating – symptoms often found in airtight, energy-efficient buildings where ventilation is inadequate.

## The Challenge

Residents reported two dominant problems:

- **Condensation and mould growth** caused by daily activities such as cooking, showering, and drying clothes indoors. The airtight fabric of the building trapped moisture, leading to damp conditions and recurring mould complaints.
- **Overheating from solar gain**, particularly in summer, where residents struggled with hot, stale air but were reluctant to open windows due to external noise and security concerns.

Plus Dane Housing had trialled alternative solutions, including the Vent-Axia Heatsave, but found drawbacks in installation complexity (requiring an 8-inch core hole) and higher cost. They required a more practical, resident-friendly solution that complied with UK Building Regulations Part F and PAS 2035 for retrofit.

## The VENTI Solution

Following discussions between VENTI representative Ashley and Plus Dane's Sustainability Manager, Chris Roberts, the **VENTI FLUXO 150** was selected for installation across the block.

This decentralised single-room MVHR unit offered the following benefits:

- **Continuous 24/7 ventilation** – delivering a constant supply of filtered, fresh air while extracting stale, moisture-laden air.
- **Condensation and mould control** – by reducing relative humidity levels, preventing condensation on cold surfaces, and removing the conditions required for mould growth.
- **Overheating mitigation** – through summer bypass and extract-only modes, the unit helped

purge hot, stale air and introduce fresher night-time air.

- **Noise and draught reduction** – by eliminating the need for residents to rely on trickle vents or open windows.
- **Compliance and retrofit suitability** – fully compliant with Part F and PAS 2035, with simple installation requiring only a smaller core hole, making it ideal for retrofits.

## Project Goals

- Provide residents with **healthier indoor air quality**, reducing pollutants, CO<sub>2</sub>, and moisture build-up.
- Significantly **reduce condensation and mould** issues across the flats.
- Integrate a **cost-effective, scalable solution** that could be replicated across Plus Dane's wider housing stock.
- Support **compliance with Building Regulations Part F** for ventilation and **Part O** for overheating risk.

## Results

Post-installation, Plus Dane Housing reported:

- **Marked reduction in condensation and mould complaints** from residents.
- **Improved comfort levels**, with residents no longer struggling with draughts, noise, or overheating.
- **Healthier living conditions**, contributing to resident well-being and reduced maintenance costs.

The success of the project has prompted Plus Dane Housing to explore wider rollouts of the FLUXO 150 across similar housing blocks facing the same challenges.

## Client Feedback

“We’ve seen a significant drop in condensation- and mould-related cases since installing the VENTI FLUXO 150 units at St Catherine’s House. The health of the flats has improved noticeably, and residents are far more comfortable. On the strength of these

results, we're now looking at applying the same solution across other properties in our portfolio."

— **Chris Roberts, Sustainability Manager, Plus Dane Housing**

## **Contractor Feedback**

"The FLUXO 150 has proven to be straightforward to install and much less invasive than other alternatives we've used in the past. Its duct-free design saves time and reduces disruption, while the performance speaks for itself. It's an excellent option for retrofit projects."

— **Gateacre Electrical**

## **Conclusion**

The St Catherine's House project demonstrates how decentralised MVHR can provide a **practical, scalable, and effective solution** for modern housing challenges. With the VENTI FLUXO 150, Plus Dane Housing has achieved not only regulatory compliance but also healthier, more comfortable homes for residents - a result that is now shaping its wider retrofit and sustainability strategy.