

Elmetes Estate, Leeds

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always the
best climate

Heating

Cooling

Fresh Air

Clean Air



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Social housing providers are already outperforming other housing providers in delivering energy efficient homes. But as properties become better insulated, there are significant challenges to overcome if they are to deliver ambitious retrofit programmes to keep homes adequately ventilated.

Improving the standard of older homes in the social housing sector poses many challenges, with funding a key barrier to retrofitting at scale and pace.

This case study showcases a successful retrofit story on one of Leeds & Yorkshire Housing Association's oldest housing estates.



The Project

Leeds and Yorkshire Housing Association (LYHA) is a registered social landlord providing affordable homes and services to the people of Leeds and Yorkshire.

The Elmetes Estate at Roundhay in Leeds, (part of the LYHA portfolio), consists of 180 social housing properties, including 138 flats. The 1960s concrete-built homes were in need of an energy-efficient ventilation solution to prevent the build-up of condensation and improve the indoor climate.

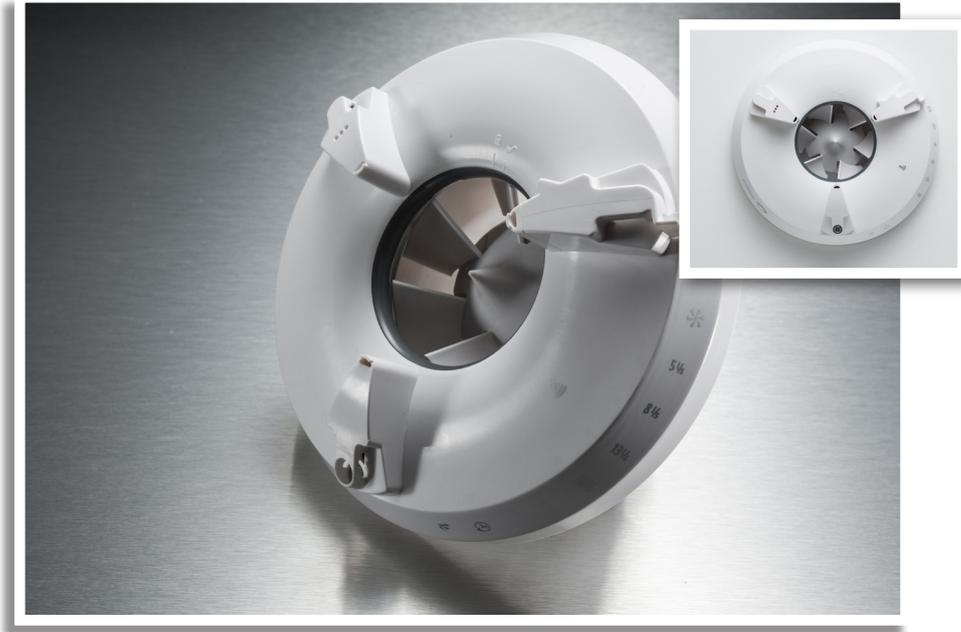
Ventilation is just one aspect of a wider improvement programme on the estate, which has also included cavity wall insulation, replacing heating and hot water systems and the installation of fibre optic broadband.

The Consultant

- ▶ Gilmore + Stones Associates, a cutting-edge firm of consulting engineers specialising in mechanical and electrical engineering services for the built environment, was appointed by LYHA to assess ventilation solutions and recommend the most suitable product for the Elmetes estate retrofit project.
- ▶ The consultants were particularly impressed by the Zehnder Greenwood Unity CV3 dMEV extract fan, which met all project requirements, including low energy consumption and the availability of energy consumption usage data. The unit was also highly competitive on price.

The Challenge and Product

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1. The Challenges

Fans being turned off or not working correctly and poor airflow performance all play a huge part in the issue of condensation in homes, so product selection to address this was the initial challenge.

Gavin Fisk, Director of Communities and Customer Service at LYHA said, "Selecting the product was in the end a relatively straightforward process but finding a contractor to install the fans properly was more challenging. Some properties had to have fans vented through windows and a joiner was required to box-in multi-trickle solutions."

A further challenge came from the pandemic, which temporarily halted work and impacted completion deadlines.

Experienced in delivering flagship neighbourhood regeneration schemes, LYHA project lead, Gavin Fisk, said:

"Our top priority for installing the new heating and ventilation systems on the Elmetes estate was that they should provide a comfortable, healthy and energy-efficient indoor climate for customers. Our customers played an active role in all key decision making - we held consultation open days and workshops to enable customers to ask questions about products and the installation programme. We engaged a specialist mechanical and engineering consultant who carried out a market review of the options available and identified the Zehnder extractor fan as the best fit for our needs. The fans have now successfully been installed and we have had lots of positive feedback from customers about the new systems."

2. The Product: Unity CV3

Adequate ventilation is critical for health and wellbeing and for keeping homes free from condensation, damp and mould. However intrusive noise, concerns about running costs or under performance can mean that required ventilation rates are not achieved.

Unity CV3, the next generation of extractor fan, addresses all of these common ventilation issues. Designed to reduce energy usage and eliminate nuisance noise, the product also provides easy compliance and uses intelligent technology to make installation and set-up straightforward.

Key Advantages of Unity CV3

- ▶ Integrated airflow sensing
- ▶ Four airflow performance points meet regulation room rates requirements for trickle and boost speeds
- ▶ Running levels as low as 14.5dB (min)
- ▶ SMART sensors that ensure the fan only boosts when required
- ▶ Do not Disturb feature
- ▶ Costs less than £1 to run for the entire year (up to 50% less than other comparable products in the market)
- ▶ Capacitive touch technology for quick and easy set-up on-site
- ▶ Outstanding SFP Performance and reward in SAP

