Aereco: Simplicity is the key

Colin Hone, from ventilation product experts Aereco, explains how a humidity operated Demand Controlled Ventilation system is more realistic for today's households than complicated systems

Today's air tight homes call for the most efficient ventilation systems to ensure the best possible Indoor Air Quality (IAQ) to protect residents from health problems and the building from deterioration of the fabric by mould and damp.



Unfortunately, almost universal yet erroneous acceptance of Mechanical Ventilation with Heat Recovery (MVHR) as the only practical method to achieve the requirements of the Code for Sustainable Homes is preventing the take-up of other more

effective systems.

So called energy-efficient MVHR ventilation systems are now perceived by many specifiers and contractors as the only method that can ventilate air tight homes adequately and still meet Target Emission Rates (TERs) laid down in the Code and also in 'passive house' construction. This culture of slavish adherence to a sadly well-established SAP tick-box culture is hindering the adoption of more practical and effective tried and tested methods such as Demand Controlled Ventilation (DCV).

A recent survey by Oxford Brookes University on mechanical ventilation fitted in a test house by Swindon Homes found that air tightness targets were not met and that occupant awareness of the system is low.*

A report from the Good Homes Alliance blames the failure of so many mechanical systems on lack of skills and experience designing complex systems for houses; lack of skills and experience in installing and commissioning complex mechanical systems; and the complexity of systems and lack of information for the occupants.

In a perfect world where MVHR is installed properly it could well be the

case that the technology works effectively, but it is obvious from the many problems being encountered by social landlords and tenants post-installation that this is not happening. And we have to take into account that the housing stock in the UK is overwhelmingly outnumbered by old housing.

The trouble with the rules we have tied

ourselves too is that they do not take into account the vagaries of real life. The way we really live is never taken into account when the authorities dream up the tick box protocols for energy efficient housing. And the trouble with overly complicated systems like MVHR is that when householders are actually given instructions on how to operate the system these instructions tend to be produced by technical people and are not couched in language the average person understands. The result is that householders are frightened by the technology and do not utilise the most economical method to achieve optimum indoor comfort.

It is clear that a more simple system that does not call for costly ongoing maintenance is called for especially in social housing, that will work just as well with refurbishment of old stock as with

new build projects. Many properties could achieve Code 4 and 'passive house' targets by adopting non-MVHR DCV instead.

Aereco's fit and forget occupancy-driven DCV system takes all the fear out of operating ventilation in air tight dwellings. A humidity controlled DCV passive stack system offers nearly the same performance as an 80 per cent heat recovery system – and at half the price, and needs virtually no maintenance. They certainly do not need filters changed.

Aereco is one of Europe's leading ventilation manufacturers offering a comprehensive range of energy saving demand-controlled Passive ventilation systems as well as Mechanical and Hybrid ventilation systems.

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