

In the Countryside, Ventilation is cool.

Country tradition is that ventilating a home is just a matter of opening the windows, breathing deeply, and hoping you are not downwind of the cowshed. However, countryside homebuyers nowadays want something more. Developers who want their new homes to appeal to really discriminating buyers, builders who want living in their upmarket barn conversions not to feel like living in a barn, are at last treating ventilation seriously. Ventilation is now a technology that can improve lives and enhance long-term health while also cutting house running costs and increasing comfort. Suddenly it is cool to be able to breathe fresh air wherever you are in the home.

So what is new? We all grew up with the extraction fan in the kitchen window, the lavatory extractor fan that woke the entire household in the small hours and the open bedroom window that was supposed to ward off colds but actually induced something perilously close to hypothermia. Is it not true that pushing warm air out and letting cold air in does little more than increase energy bills and jack up sales from the sweater counter at Marks and Spencer?

Central extraction technology



Barn conversion in Hereford which includes Central Extraction and Ventilation technology

The truth is that a whole new approach to ventilation and energy conservation is appearing in countryside developments and conversions designed by enlightened architects. Homes from the smallest two-bedroom house to the most spacious five-bedroom dwelling within a rebuilt timber structure can now benefit from the cost and comfort advantages of central extraction and ventilation technology.

At its simplest, a domestic central extract system consists of a single compact and extremely quiet unit, usually in the loft or in a cupboard. This is connected by hidden ducting to extraction vents in the ceilings of the 'wet' rooms of the home - the bathroom, the kitchen and maybe the utility room. Inside the hidden unit is an extremely well balanced and quiet high-capacity fan that draws damp air out of the wet rooms via the ducting, thereby eliminating all the problems caused by condensation, and expels it to the outside air. That wet air is replaced by dry, fresh air, drawn in through scientifically designed window vents.

Such a simple system benefits the home, its furnishings and the health of those living in it by reducing moisture levels in the air

and removing cooking and toilet smells. It is a relatively inexpensive approach, even by comparison with conventional use of separate wall or window-mounted fans. However, it does not provide the energy benefits of a true whole-house environmental system. That's the system that's really cool.

Making the whole house better to live in

A company in Sussex called Greenwood Airvac, and its Worcester-based partner Starkey Systems, can supply builders and developers with a system that constantly ventilates the whole house, gently pushing polluted air out and drawing fresh air in, day and night. The general principle is the same - a loft mounted unit connected by ducting to every room in the house. However, the big difference is that an Airvac central continuous mechanical ventilator incorporates a heat recovery unit. This extracts the heat from the polluted air as it is extracted and uses the recovered heat to warm the incoming filtered fresh air. So up to 96% of the heat is recovered. Almost no heat is wasted in ventilating the home, energy costs are minimised, environmental benefits are maximised. All wet rooms are ventilated to eliminate damp and fungus. All living rooms are kept fresh and warm in winter, fresh and airy in summer.

Central ventilation reduces noise significantly. With central ventilation there is no need for one of those fans that comes on automatically in the en suite bathroom. There is no need for noisy cooker hoods or extractor fans and no noise from air coming in through window vents as polluted air is extracted elsewhere. Best of all, the actual cost of a central extract system, because it makes separate fans around the house unnecessary, is little more, when labour costs are taken into account, than that of the fans it replaces. So you get a lot more comfort for very little more money.

Healthy air quality

A further consideration to bear in mind is that modern houses need reliable ventilation because of all the pollutants we introduce into them, particularly since houses are built to tighter tolerances and are much better sealed than they were only ten or fifteen years ago. Fitted carpets, laminate flooring and modern decorating materials all gradually liberate chemical pollutants into the atmosphere of the home and the materials themselves contribute to even better sealing against natural ventilation through leakage. Most households also contain a wide variety of volatile organic compounds, such as those contained in cleaning products, which can contribute to indoor airborne chemical levels and health risks.

Perhaps even more important, particularly in households where somebody has hay fever or is asthmatic, is that central ventilation systems not only get rid of allergens already in the home, but can also filter out any pollen grains or other allergens that would otherwise be introduced in the fresh air drawn in from outside. Tobacco smoke is also constantly and silently removed, benefiting the health of the household and keeping the furnishings and décor relatively free of tobacco residue.

This latest Airvac central ventilation systems are inexpensive to run yet reliable and extremely quiet. The whole dwelling is continuously ventilated day and night by an extremely quiet unit using a low power consumption motor. It makes a big improvement in the comfort of your new home, while helping to keep costs down.

Central vacuum systems too

Further significant contributions to the health of those in the home can be made by simplifying and improving routine



Showing the use of the Central Vacuum System in the Barn conversion in Hereford

cleaning. Central vacuum systems can now be easily installed into countryside barn conversions just as they can be into new houses, so that whoever cleans the house need only connect the special vacuum cleaning hose and tools to skirting-level central vacuum sockets, usually with one or two on each floor. A centrally located hidden power unit provides as much as five or six times more suction than you get from a portable vacuum cleaner. This gets carpets, floors and upholstery cleaner and more free of dust-mite and other allergenic material that can damage the health of asthmatics and others. Best of all, instead of just recirculating a substantial proportion of the dust and pollen around the house, as portable machines tend to, the central vacuum system gets virtually all of it out of the house because the exhaust air is exhausted to the atmosphere, not into the home. Here again, Starkey Systems of Worcester can provide detailed specification advice and installation to get the design right and achieve maximum long-term efficiency.

Reader Enq. 021

Improving resale values

Home buyers looking now for new homes, or for the increasing number of sophisticated barn conversions becoming available nationwide, are becoming increasingly aware that the future value of their investment depends in part on buying now the features that future buyers will want when they come to sell. Many developers have not yet spotted the fact that buyers who really want what is best for their health and their family's future are already demanding central mechanical ventilation systems as a pre-requisite to even looking at any home, be it part of a new development or a barn conversion. There is little doubt that, over the next five years or so, buyers of second-owner homes will be putting a high priority on the comfort, health benefits and convenience of central ventilation and central vacuum systems.

So, if you are a developer designing a new project, a builder planning the detail of a barn conversion, or a home buyer in the market for a new home, get to know more about central systems. If you are a builder or developer, look at the whole financial equation, not just at the initial cost of the system. If you are a home buyer, remember the potential resale benefits and ask whether the homes on the developments that interest you have central ventilation systems or heat recovery environmental systems. Check whether central vacuum facilities are part of the specification. Make sure that whoever answers you does understand what you are talking about - you can get information and a brochure on Greenwood Airvac environmental systems by calling 0870 900 1880 or going to www.greenwood.co.uk. Information on Starkey Systems' central vacuum systems is available from 01905 611041.

Reader Enq. 022