

case study



Energy Saving benefits for care home



Byron House is an excellent example of the outstanding benefits available to care home operators who invest in a mechanical ventilation with heat recovery (MVHR) system.

The building originally started life as a large country residence before being converted to a hotel. Following a period of being unoccupied Byron House was purchased by Westgate Healthcare who converted it into a care home.

Aside from improving internal air quality, which has known health benefits for residents, the MVHR system was designed to recover about 90 per cent of the heat from the outgoing, stale air, which would normally have been lost to the outside.

Recovering all this heat is important because energy bills are one of the highest costs of running a care home. Investing in an MVHR system therefore made complete financial sense for Westgate Healthcare, because it should help cut energy bills.

Apart from reducing running costs, the MVHR system will help maintain a comfortable, constant temperature by continually circulating air in the building. This reduces the build up of cold air pockets around windows and doors which then lead to cold draughts for the residents.

The heat recovery files

Client:	Westgate Healthcare
Mechanical contractor:	Sidney Cabbage
Architects:	Alexander Sedley
Projects:	Refurbishment of a disused hotel into a 24 bedroom care home.
Ventilation:	Mechanical Ventilation with heat recovery (MVHR) system
Heating System:	Gas-fired boilers
Local conditions:	Refurbishment with a requirement for energy efficiency and sustainability

“Our new MVHR system provides a draught-proof way of improving indoor air quality. That is really important to our residents as it ensures they remain warm and comfortable.”

case study



The MVHR system will not only help Byron House save money on heating bills, but it has created a healthier building, too.

For example, its ability to completely change the air several times a day will result in significantly less condensation, a problem that leads to mould growth and the release of spores as well as proliferation of dust mites and the detritus they create. These can result in breathing-related conditions, especially amongst older people.

The filters in the MVHR unit are capable of capturing the majority of airborne particles that could affect breathing and that makes them ideal for care homes where the health and welfare of residents is paramount.

Regularly changing and circulating air also reduces the spread of coughs and colds by expelling stale air to the outside.

ADM Systems
Fairfax House, 7 Wool Gate,
Cottingley Business Park, Bingley,
West Yorkshire BD16 1PE
t: 01756 701051
e: info@admsystems.co.uk

www.admsystems.co.uk



As the manager explained: "We are confident that by changing the air inside the care home we will reduce the frequency and spread of common ailments such as coughs and colds, and provide a much fresher and more comfortable building."

The MVHR system's ability to eliminate stale air from kitchens and living areas also reduces unwanted odours in the building, again making it feel 'fresher' for both residents and visitors.

The filters on the MVHR system installed at Byron House remove pollutants from the outside environment, for example, those from car exhausts. Again, these can exacerbate breathing-related conditions with residents especially those suffering from respiratory ailments, asthma, rhinitis, hay fever and eczema. It does all this whilst the windows remain secured- a great safeguard benefit for residents of an MVHR system.

The MVHR system was installed by ADM Systems in bedrooms, bathrooms and living areas at the care home. MVHR systems are suitable for both new build and refurbishment projects.

Steve Alexander at London-based Alexander Sedgley Architects, said: "We wanted to make the care home as sustainable and energy efficient as possible and the MVHR system forms an important element of this. We are aware that ADM Systems is able to offer independent design advice and we prefer this to a manufacturer-led approach."

ADM Systems worked on behalf of Sidney Cabbage, the contractor on this project. Roland Simmons, Contract Manager at the company, said: "We have been impressed with the service provided by ADM Systems. The installers on site were able to fit around our requirements and completed the work exactly to schedule."

For more information on MVHR systems from ADM, telephone: 01756 701051. Alternatively visit the website at: www.admsystems.co.uk

