

Virido Development Vent-Axia provides sustainable development with energy efficient ventilation

The Virido development offers future living with a collection of 208 unique apartments, duplex apartments and townhouses that offer a more sustainable lifestyle arranged around an open green space. Brimming with eco-design, the homes are architecturally pleasing, triple-glazed and clad in brick and dark timber. The Ventilation system was designed, installed and commissioned by DR Ventilation using Vent-Axia's Lo-Carbon Sentinel Kinetic BH and Lo-Carbon Sentinel Kinetic Plus Mechanical Ventilation with Heat Recovery (MVHR) units, providing energy efficient and effective ventilation to these sustainable homes.

To meet Code for Sustainable Homes Level 5, the homes in the sustainable development in Cambridge have been designed and constructed to be highly energy efficient and to reduce carbon emissions by 100%. To achieve this the homes at Virido have been designed to use as little energy and water as possible. Virido's homes provide exceptional standards of insulation. Using Structurally Insulated Panels (SIP), approximately 4 times more insulation than an average new build home is achieved. The walls provide approximately 20% less heat loss than a typical building without compromising on room sizes. With such high levels of insulation and air tightness MVHR was vital to provide good air ventilation to the homes.

The pioneering Sentinel Kinetic BH MVHR Unit is designed specifically for new build and low-permeability properties. A whole-house, multiroom ducted solution, this MVHR system combines supply and extract ventilation in one unit. Warm, moist air is extracted from `wet' rooms through ducting and passed through the heat exchanger before being exhausted to the outside. Fresh incoming air is filtered and then preheated via the integral heat exchanger which recovers an average of 90% of the heat energy that would otherwise be wasted. With comfort key for occupants the system also features a `summer bypass', for passive cooling when conditions allow and an integral humidity sensor for intelligent air quality control, which are vital in thermally efficient air tight homes.

Sentinel Kinetic Plus

"The homes in the Virido development feature very high levels of insulation, air tightness and thermal efficiency which meant it was essential to specify MVHR in order to provide good levels of ventilation within the properties. We specified Vent-Axia's MVHR because of their ecocredentials offering both energy efficient ventilation and good comfort for households. Having worked on many developments we have great confidence in Vent-Axia's products and a professionally installed system with an efficient MVHR unit provides a winning combination."

Helen Roberts, Director, DR Ventilation



The Sentinel Kinetic BH and Sentinel Kinetic Plus MVHR units both fit with the Virido's project objective which is to provide homes that effortlessly facilitate a lifestyle which is both environmentally responsible and sustainable without compromising on comfort.