Intelligent Air Quality System for New Build

Vent-Axia's Lo-Carbon Sentinel Kinetic Plus creating the perfect home environment







heat recovery





Lo-Carbon Sentinal Kinetic Plus

Vent-Axia has supplied a Lo-Carbon Sentinel Kinetic Plus Mechanical Ventilation with Heat Recovery (MVHR) unit to a 205m² new-build 4-bed, 2-bathroom home in Sutton Coldfield, Birmingham. Chosen to provide quiet, energy efficient and effective ventilation and heat recovery for the 2-storey home, the Sentinel Kinetic Plus is installed in a plant room on the ground floor of the home.

The new-build home is being built by a small developer and the MVHR unit was specified and installed by Mark Heat Recovery Systems. Having previously used the same system on another new build project, the company knew the Sentinel Kinetic Plus would provide good indoor air quality (IAQ) and energy efficiency with the added benefit of featuring built-in humidistats that would boost for the client once high levels of humidity were detected in the wet areas. Noise levels were important for the project, with the Sentinel Kinetic Plus running as low as 17.6 dB(A).

The Sentinel Kinetic MVHR units has an integral humidity sensor for intelligent air quality control. The sensor increase speed in proportion to relative humidity levels, saving energy and reducing noise. It also reacts to small but rapid increases in humidity, even if the normal trigger threshold is not reached. This unique feature ensures adequate ventilation, even for the smallest wet room. The night time relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperature. A summer bypass provides passive cooling when conditions allow whilst a frost protection mode ensures maximum ventilation during the coldest periods. A digital controller is mounted on the front of the units and a remotely-wired version has also been included for each.

The low carbon, energy saving, Sentinel Kinetic Plus MVHR is ideal for larger homes and offers a whole house heat recovery system combining 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 outside and fresh incoming air is preheated via the integral heat exchanger. The unit can extract from up to fourteen wet rooms and a communal kitchen while still achieving almost 90% heat recovery [in line with Product Characteristics Database (PCDB) data]. It has two fully adjustable speeds and a purge setting and its energy saving Vent-Axia DC motors further improves efficiency and carbon reductions.

"The Vent-Axia Sentinel Kinetic Plus unit is a great compact unit that fits in with most self-builders' and developers' budget. The unit offers simple controls and also built-in humidistats to avoid manually boosting the system. Overall, the Sentinel Kinetic range is one of the best MVHR units on the market." Mark Wormington of Mark Heat Recovery Systems

The units benefit from the latest high efficiency, backward curved impeller design, ensuring the lowest possible energy consumption, ultra-quiet operation and an exceptional performance range covering small one bed apartments to the largest of houses. Recognised in SAP PCDB, the lightweight MVHR unit is simple to install with a horizontal duct option for space-saving installations and a unique folding filter for removal when access is restricted. The models can be mounted vertically in a roof space or on a suitable wall and ducting can be attached to the unit horizontally, vertically or both. Left or right-hand installation further adds to its installation flexibility.

Find out more about the product at www.vent-axia.com/kineticplus

