

BIDDLE CASE STUDY

BIDDLE PROVIDES ITS PROAIR SERIES FAN COIL UNITS AS PER A NET ZERO CARBON HVAC SOLUTION TO BIRMINGHAM'S FIRST SMART BUILDING – ENTERPRISE WHARF



THE REQUIREMENTS

Situated at the heart of Birmingham's Knowledge Quarter, the construction has over 120,000 sq ft and 10 floors of flexible office space.

Enterprise Wharf is aiming for Net Zero Carbon Emissions and will use Internet of Things (IoT), solar power and other sustainable solutions, which will help to manage and optimise the energy utilisation, resulting in a sustainable usage.

Manstal Ltd provides the Enterprise Wharf project with multilevel Mechanical and Electrical Engineering services, including utilities / ASHP / solar PV / CCTV / BEMS Control and sustainable HVAC solutions.

A long serving customer of Biddle, Manstal Ltd approached our dedicated specification team to provide a sustainable, modern and energy efficient HVAC solution, which would work with BEMS Control. Moreover, the solution had to be quiet as the units are going to be installed without a false ceiling.

THE BIDDLE METHODOLOGY

For this project, the preferred climate solution was the ProAir Series 270 Fan Coil Units, as it meets all the client's HVAC requirements, including energy efficiency, dBA levels and heating/cooling duty.

Biddle ProAir Series 270 FCUs provide a sustainable heating and cooling solution, being engineered and manufactured in the UK with the most energy efficient EC DC motors and PIC (Pressure Independent Control Valves) Valves, supplied by FloControl.

PIC Valves from FloControl are specifically manufactured for use in fan coils and automatically regulate the water's flow and temperature, regardless of any system pressure changes, reducing time needed when commissioning and running each unit's performance levels.

Designed to meet the most rigorous Building Regulations and the strict requirements of the UK Specification market, the ProAir Series 270 is tested in-house to ensure all the guidelines are met.

The fan coil units are internally lined to provide the quietest operation. They are ideal for exposed situations, due to their low noise levels, making them the perfect candidate for Enterprise Wharf.

The ProAir Series 270 provides flexible controls options, therefore, in order to meet Enterprise Wharf's requirements, the units were supplied with integrated smart BMS Controls.

Having the controls exterior to the unit allows for easy access whilst attributing more space to the modular design. Moreover, the controls are safe from the airflow, reducing chances for dust or other particle build-ups.

As standard, the ProAir Series 270 FCUs are supplied in unpainted galvanised sheet steel, but these can also be painted in a selected range of finishes on request.

THE BIDDLE SOLUTION

To ensure that Enterprise Wharf achieves Net Zero Carbon status, it utilises modern green energy heating, cooling and power generation technology. The combination of heat pumps, chillers and an A-Rated EPC Solar cell bank, enables extremely efficient heated and chilled air serves over 80 ProAir Series 270 fan coil units.

Here at Biddle, we always aim to provide the most cost effective, energy efficient HVAC heating and cooling solution to suit the needs of the customer.

CONTACT US

If you're ready to find the perfect HVAC solution for you, our in-house technical and engineering experts, are on hand for advice and guidance every step of the way.



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