

PROJECT CASE STUDY QUEEN ELIZABETH HOSPITAL, WOOLWICH

AirCraft Air Handling recently manufactured a third HTM-03.01 AHU for Queen Elizabeth Hospital in Woolwich.

Over the past 18 months, AirCraft Air Handling have manufactured, delivered, and tested prior to commissioning, three large external HTM-03.01 specification AHUs with internal service corridors for Queen Elizabeth Hospital in Woolwich. The hospital has 521 beds, an A&E department and multiple specialist departments, including major trauma and intensive care and air quality is vital to aid patient recovery. The new HTM-03.01 AHUs are serving the operating theatres, pathology, delivery suite, special care baby unit and ward areas.

As with other projects of this type, we worked closely with Lewisham and Greenwich NHS Trust's M&E Services Contractor to design and supply the units. In January 2025 Aircraft Air Handling completed the delivery of the latest AHU.

The first unit we delivered to Queen Elizabeth Hospital 18 months ago, was for a roof top installation. The second two, the latter being a vertical unit, were located at ground level. This removes any need for building works to increase the structural support of a roof carrying the additional weight of service corridor HTM-03.01 AHU. The new unit was manufactured with supply and extract fans delivering 1.1m³/s and houses a plate recuperator, DX cooling coils, fog and electric reheat. To safeguard against fire risk, the filters which were positioned above the electric heater battery, are high temperature, fire rated F7 rigid bags rated for operating at 250°C. The internal service corridor is sized to allow withdrawal of all AHU components and has internal lighting, chequered plate flooring and a quick release emergency exit.

Fresh air, supply air, return air and exhaust components are all at high-level, leaving the ground area free from duct-work.

We completed the AHU build towards the end of 2024, and after final quality testing at our premises in Stafford, we shipped the AHU as a complete assembly directly to the site prior to it being handed over to our client for final installation and commissioning.