

WATFORD GENERAL HOSPITAL

West Hertfordshire Teaching Hospital NHS Foundation Trust

HTM 03-01 AHU's with Central Maintenance Corridor

HOSPITAL & HEALTHCARE

Air Handling Solutions by Mansfield Pollard

specialist care needs specialist air

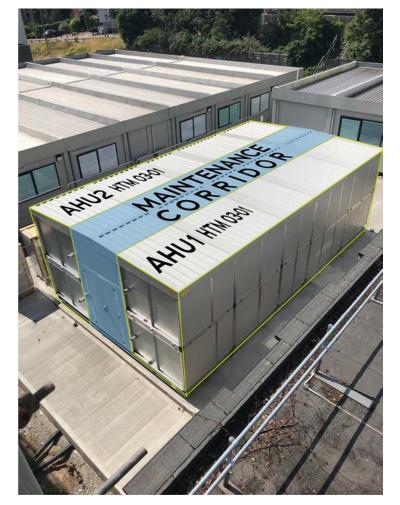
THE SHRODELLS UNIT: A £4.1m OFFICE CONVERSION TO CLINICAL WARD SPACE

Works were recently completed on a £4.1 million project for West Hertfordshire Teaching Hospital NHS Trust to convert existing office accommodation into additional clinical ward space.

The project: 'Shrodells Building', comprised a complete architectural fit out of the existing building at Watford General Hospital, with full

mechanical and electrical services installation including new air handling plant to HTM specifications.

As air management experts, Mansfield Pollard were engaged by Principal Contractor Briggs & Forrester Special Projects team to manufacture and install a unique air handling solution to serve the new clinical facility







Hospital & Healthcare Ventilation Specialists

critical ventilation solutions



Maintenance Corridor

Fully welded central service pod enables access to both units



Thermal Break Profile

Specialist aluminium profile to achieve class TB2(M)



Fan Redundancy

Twin fans with 80% redundancy to maximise unit reliability



DX Cooling

Additional cooling requirement from integrated DX units

PROJECT HIGHLIGHTS

Both **HTM O3-O1** AHU's were manufactured using specialist thermal-break aluminium profile, to achieve **TB2(M)**. This not only improves energy efficiency, but also minimises the risk of any condensation forming internally or externally, protecting the units from both corrosion and micro-organism growth. Hygiene levels were further improved via **stainless steel** internal paneling, specialist coils & oversized drain trays to remove any condensate.

A twin E.C. fan section improved reliability with an **80% redundancy** level and unit manufacture to D2 casing strength and L2 thermal transmittance levels maximised energy efficiency of the unit.

A tailor-made **central maintenance corridor** was designed and manufactured to run along the length of the AHU's. Fully seam welded with an double pitched roof, the corridor provides protection from the elements and access to both units. To accommodate **DX pipework**, the corridor was designed with a **150mm void** in the roof space and also incorporated a lift up floor inspection panel and **sumps** to contain drainage traps.





