

Case Study: Rochdale Infirmary Theatre

Case Study: Healthcare
-installation of new theatre facility.





Client: Avrenim Group

Sector: Healthcare

Completed: August 2025

Budget: £507,000

Services Used

-  Project management
-  Mechanical engineering
-  BMS Team
-  AC & Ventilation team



Mechanical installation of the Theatre Suite at Rochdale Infirmary

Rochdale Infirmary is an acute general hospital in Rochdale, Greater Manchester, England. It is managed by the Northern Care Alliance NHS Foundation Trust.

The scheme involved the creation of a new Theatre Suite.

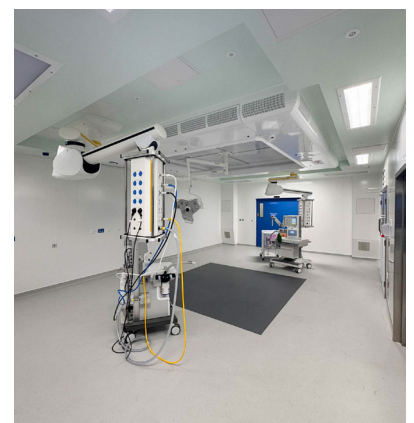
An existing ward area was stripped out and remodelled into a complete Theatre Suite including Theatre, Anaesthetic, Scrub, Clean Utility, Dirt Utility, MDT Room, Consulting Rooms and Office space.

Contract Arrangements:

Meel Group was engaged to supply the Mechanical Engineering aspect for the work by the Avrenim Group. We won this tender based on price, skill-set and reputation.

Mechanical Scope of Works:

- Mechanical works associated with the project consisted of Ventilation, Chilled Water, Heating and BMS, AC, Domestic Water, and Drainage.
- **New domestic hot and cold water services** in copper pipework with isolation, insulation and labelling. The system was tested, flushed and chlorinated prior to connection.
- **Medical gas services** were designed and installed to HTM 02-01, including new AVSUs and the final connections to pendants and wall outlets.





- **AHU Installation** – two new fully HTM 03-01 compliant Air Handling Units with filtration, heat recovery, heating and cooling coils, integrated dampers and fan arrangements, complete with extract and return ductwork systems.
- **LTHW & CHW** – We adapted and extended Low Temperature Hot Water (LTHW) and Chilled Water (CHW) services to serve the new Air Handling Unit, Duct Heater Batteries, Fog Coil, Reheat Coil and Radiant panels.
- **Ventilation** – Installation of new & complete ventilation ductwork, distribution to the theatre suite with dedicated supply and extraction systems.
Balancing dampers – fire and smoke dampers, and pressure stabilisation dampers, fully insulated and identified.
- **Installation of DX cooling systems** to UPS rooms, including external condensers, fan coils, insulated refrigerant pipework and BMS integration.

Project Challenges:

Working on a project of this scale within a live hospital environment required detailed planning and a strong focus on safety.

Existing services supplying other areas of the working hospital needed to be maintained while we carried out our work.

During the implementation of the scheme, design modifications were required to achieve the end result.

All of these challenges were solved by agile working, clear communication and collaboration with the designers, other trades and with the Trust's management team.



Documentation, Testing and Commissioning:

On completion, we undertook the commissioning and balancing of all systems, including pressure testing to HTM requirements, air permeability testing of the theatre envelope, and integration of all plant and systems into the existing site-wide BMS (Trend 963).

Results:

Meel Group's attention to detail and finish resulted in a mechanical installation of the highest standard. The Hospital now benefits from a new theatre and related facilities.

