

BUILDING VENTILATION SOLUTIONS

# Case Study AHU Refurbishment Private Hospital

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# Case Study - Private Hospital, Operating Theatre

As part of a critical upgrade at a private hospital in Bath, the existing air handling unit (AHU) underwent a full internal refurbishment to improve performance and energy efficiency. The project began with the safe removal of outdated components, followed by modifications to the AHU structure, including the fabrication of new fan bulkheads to support modern equipment. High-efficiency EC supply and extract fans were then installed to enhance airflow control. A custom cubic heat exchanger was manufactured and fitted to optimise heat recovery. The project concluded with full commissioning, system testing, and site cleanup, ensuring the AHU was ready for reliable and efficient operation.



**AHU Upgrade at Leading Private Hospital**



**The AHU Supplied The Operation Theatres**

## Project Overview

This upgrade formed a key part of the hospital's long-term strategy to reduce its carbon footprint while maintaining high standards of indoor air quality for patients and staff. The installation of EC fan technology and a high-performance heat exchanger not only delivers significant energy savings but also supports improved system reliability with reduced maintenance demands. The collaborative effort between on-site engineers and the BVS team ensured that all works were delivered on time and with minimal disruption to the hospital's day-to-day operations.

# Case Study - Private Hospital, Operating Theatre



REMOVING PREVIOUS FANS



MODIFYING AHU LAYOUT

## Removal of Existing AHU Components

All outdated internal components were carefully stripped out to prepare the unit for refurbishment.

## AHU Modifications for New System

The existing AHU layout was reconfigured, including the fabrication of new fan bulkheads and structural metalwork, to accommodate modernised components.



NEW EC EXTRACT FAN WALL



NEW HEAT EXCHANGER CUBE

## Install New Supply & Extract EC Fans

High-efficiency EC fans were installed on both the supply and extract sides, significantly improving airflow control and energy performance.

## Supply & Installation of Heat Exchanger

A new cubic heat exchanger was designed, manufactured, and installed to enhance heat recovery efficiency within the system.

GET IN TOUCH WITH US

Our dedicated team is ready to assist you with your needs. Get in touch and we'll promptly respond to your inquiry. Don't hesitate to contact us for your personalised quote today!

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## CONTACT DETAILS

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