



## Case Study

# Site Visit to Resolve UCV System Failures

## Challenge

Our team was requested to attend the site after the incumbent service provider failed to resolve ongoing Ultra Clean Ventilation (UCV) system issues. The theatre team had been experiencing problems with temperature regulation and loss of control over the UCV system, preventing it from being set into setback mode. This was causing operational inefficiencies and concerns over compliance.

### Initial Investigation Findings

- The recirculation air pathway was entirely blocked due to poor maintenance.
- The recirculation (recirc) fans were starved of air, leading to them running at 100% capacity, which in turn negatively affected the control system.

This resulted in a cascading effect, where the UCV could not achieve

proper setback functionality or maintain stable temperatures.

### Immediate Remedial Actions

- A temporary bypass was created to restore airflow, which allowed the UCV controls to function as designed.
- This intervention provided immediate relief, proving that the controls themselves were operational and the root cause lay within the blocked airflow system.

## Solution

Follow-up Maintenance & Full Remediation. Upon a return visit, we executed the following corrective actions:

**Thorough Cleaning of CG Screens:**  
The return air screens, which were clogged and heavily contaminated, were deep cleaned to restore optimal airflow.

**Pre-Filter Replacement:** The pre-filters, which had not been changed for over two years, were replaced to improve overall system performance.

**Baseline Testing: Preliminary:** performance tests were conducted post-cleaning to assess improvements and identify any additional issues.

## Outcome

-By simply providing an honest and transparent assessment of the issues and offering an effective short-term fix, the client gained trust in our expertise.

-As a result, they have requested a full service quotation for the maintenance of both operating theatres, covering:

- Ventilation System Maintenance
- Operating Lights Maintenance
- IPS/UPS Servicing
- AHU (Air Handling Unit) Maintenance