# HEALTHCARE VENTILATION SERVICES

## ENSURING YOUR HTM COMPLIANCE





**Independent Verifications** 

When considering ventilation within a hospital or healthcare facility the person responsible must comply with the guidance of **'Health Technical Memorandum 03-01 - 'Specialised Ventilation in Healthcare Premises'** commonly referred to as HTM 03-01.

A verification of operating theatre/critical area performance must be undertaken in accordance with HTM 03-01. The verification is a way of *'verifying'* the performance of an operating theatre, ensuring the system is functioning to an acceptable performance level and is fit for purpose. The verification may be required annually or quarterly depending on the area concerned.

AirisQ have over 30 years' experience in Theatre verifications. We are currently working with over 50 NHS Trusts and routinely perform thousands of theatre & critical area verifications annually.

### **Our verification includes:**

- Measurement & analysis of airflow velocity & volumes
- Calculation of supply & extract room air changes
- Measurement & analysis of room pressure differentials
- Room schematic
- Duct Traverse readings
- HTM 03-01 AHU inspection
- HTM 03-01 Theatre suite/Critical area inspection
- Particle counts (included where applicable/if requested)
- Filter integrity testing (DOP) of HEPA filters fitted (supply/extract or UCV canopy)
- UCV Preliminary checks
- UCV 1 & 2 metre readings
- Interim reports (issued by our engineers the day following their site visit)
- A final professional & comprehensive visit report, with recommendations/action plan
- Online data centre for easy 24/7 unlimited client access to all current & archived reports

Optional extras:

- Microbiological air sampling
- Particle Counting
- Settle plates
- Surface contact plate testing
- Customised summary spreadsheet
- Tailored action plan for maintenance works

We offer competitive daytime and evening rates that offer minimal disturbance to our clients.







**Independent Validations** 

Part A of the **Health Technical Memorandum 03-01 'Specialised Ventilation in Healthcare Premises' (HTM 03-01)** covers the concept, design, specification installation and acceptance testing of healthcare ventilation systems and applies to all new installations and major refurbishments of ventilation systems in a healthcare premises.

A validation involves checking the performance and design of your system separately and independently from your contractor, to ensure it will make your newly ventilated area compliant to the required HTM 03-01 guidance.

According to HTM 03-01 Part A 12.1 'All new and refurbished ventilation systems should be independently validated prior to acceptance by the client'.

All AirisQ surveyors are all expertly trained to Authorised Person HVAC 03-01 standard and our team has a vast range of experience testing different types of critical and non-critical healthcare ventilation systems.

#### As part of our validation service, we would:

- Conduct multiple onsite inspections,
- Consult on the ventilation system design &
- Assess its 'fitness for purpose' as a whole and ensure the system achieves the operating performance originally specified.

This includes examining the fabric of the building the system will serve, inspecting the ventilation equipment in addition to measuring the actual ventilation performance.

The system will be inspected from intake to discharge, and numerous rounds of extensive testing must be witnessed by the validator.

In order to ensure the validators independence they should be directly employed and paid by the client and according to HTM 03-01 Part A 12.3 '*be completely independent of the system designers, contractors, suppliers, installers, commissioners and those who will subsequently operate the system*'.

As validator AirisQ would be your representative to inspect the system and check the performance before recommending whether to accept the system or not.







#### **Microbiological Monitoring**

AirisQ Ltd is accredited for airborne microbiological sampling in conventional operating theatres and sterile services IAP rooms. We have a strong partnership with a Surrey based independent UKAS accredited laboratory with qualified mircobiologists.

All procedures and methodologies are in line with ISO 17025 guidelines and we welcome customers to audit our procedures as part of their suppliers/subcontractor management. We can also arrange a visit to the laboratory itself.

The benefits of microbiological sampling during the validation & verification process includes **reassurance of the cleanliness of the ventilation system** and the effectiveness of the filtration system within the air handling unit.

**HTM 03-01 requires at 'wound site' monitoiring** under UCV canopies following a validation to determine the level of colony forming units per cubic metre (cfu/m<sup>3</sup>).

Air supplied to operating theatres should be sampled microbiologically before a theatre comes into use. With levels in an empty theatre for HTM 2025 compliance required to be < 35 cfu/m<sup>3</sup> and for HTM 03-01 compliance < 10 cfu/m<sup>3</sup>.

At wound site monitoring is frequently undertaken to provide **assurance that the UCV canopy and clinical procedures are effective in controlling the levels of bacteria**, this is particularly important for deep wounds such as those made during orthopaedic surgeries.

#### How is microbiological sampling conducted?

Airborne bacteria and fungi are measured by taking air samples with a Micro-Bio sampler using 55mm contact plates or 90mm agar plates. A pair is taken per position with each plate being selective for bacteria or fungi. Agar settle plates (90mm) may also be taken at the same or adjacent table height/wound site locations. Settle plates are open for 60-120 minutes in an unoccupied indoor environment. Surface measurement involves the contact slide or plate being depressed against the surface being assessed. Action levels will be calculated with regard to the surface area of the plate or slide.

#### How long will my results take?

AirisQ we offer different types of laboratory monitoring procedures and results with options ranging from results in 3 days, 5 days up to 14 days.



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At AirisQ we specialise in independent ventilation assessment and HTM compliance within the healthcare sector. With over 30 years of industry knowledge and hands on experience we offer a high quality bespoke service tailored to your needs.

As independent monitoring experts with a full microbiological lab service, we are a trusted supplier to over 50 NHS Trusts alongside other independent healthcare providers across the UK. We offer nationwide coverage, are fully insured and nationally accredited.

All our engineers are Authorised Person HVAC HTM 03-01 qualified as a minimum standard, 90% of our staff have at least a decade of industry experience alongside their professional qualifications.

We have a long history of successfully delivering on large contracts and are committed to continuous improvement through innovation and investment in our personnel, methodologies and equipment.





For verification enquiries please contact: Richard Barry or Peter Twynam

For information on our validation services please contact Gareth Twynam.

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