



FROM STANDARDS TO PROVEN PERFORMANCE

A Practical Guide to
Strengthening Your IAQ Strategy

Introduction

Meeting ventilation standards is essential, but it only confirms what a system was designed to do.

Performance-based IAQ strategies validate how a building actually behaves throughout the day.

This guide brings together the core principles, real-world examples, and practical checkpoints that help teams move confidently from minimum compliance to proven indoor air quality performance.

The Four Pillars of Performance-Based IAQ

Continuous Monitoring

Track PM2.5, TVOCs, CO₂, humidity, and pressure across zones to see how IAQ shifts with occupancy, seasons, and daily activity.

Data-Driven Adjustments

Use real-time insights to fine-tune ventilation, understand system responsiveness, and pinpoint underlying issues faster.

Localized Support for HVAC

Deploy purification or supplemental ventilation where systems are strained to maintain stable IAQ during spikes or events.

Verified Performance

Use pollutant data and trend analyses to validate outcomes for IAQP, WELL, RESET, and LEED frameworks and to build transparent occupant trust.

Examples of Zone-Level Monitoring Insights

These are common findings when teams begin monitoring real conditions:

- **Afternoon CO₂ rises** in meeting rooms despite standard ventilation rates
- **TVOCl spikes** during cleaning cycles or new-material off-gassing
- **Localized PM_{2.5} increases** near high-traffic corridors or adjacent construction
- **Humidity swings** tied to weather or underperforming mechanical zones
- **After-hours stagnation** where airflow schedules do not match space use

These examples demonstrate why continuous monitoring is the foundation of real-world IAQ performance.

How Localized Purification Supports HVAC

Localized purification enhances both IAQ and energy stability by:

- Reducing reliance on high outdoor air volumes during pollution events
- Addressing room-level challenges without overburdening the central system
- Capturing contaminants at the source before they travel
- Creating more predictable conditions despite occupancy variability

This approach works alongside ventilation to maintain performance while managing energy use responsibly.

How Systems Like Fellowes Array Help Validate Design Intent

Platforms such as Fellowes Array bring together monitoring, zoned purification, and performance reporting so teams can:

- Compare actual IAQ conditions to expected design outcomes
- Document how the building responds to real events
- Verify that system adjustments lead to measurable improvements
- Demonstrate compliance with performance-based rating frameworks
- Provide occupants with confidence through visible, accessible IAQ data

These capabilities turn design intent into verified performance.



Is Your Building Ready for Performance-Based IAQ? Quick Readiness Checklist

Use this checklist to identify next steps:

- Do you have visibility into zone-by-zone IAQ conditions?
- Have you identified pollutant spikes or patterns that occur at specific times?
- Do certain rooms routinely perform worse than others?
- Are cleaning cycles or staff activities impacting IAQ?
- Have you documented how your HVAC system responds to real-time IAQ changes?
- Are you pursuing WELL, RESET, LEED, IAQP, or other sustainability goals?
- Do occupants request more transparency or reassurance about air quality?
- Are energy constraints making higher outdoor air intake difficult?
- Would localized purification improve consistency where ventilation falls short?
- If several of these resonate, your building is an ideal candidate for a performance-based IAQ approach.



Ready to See How Your Spaces Perform?

Fellowes can help you begin with a no-cost air quality assessment that establishes your true baseline and identifies opportunities for improvement.

Schedule your assessment and take the first step toward performance you can prove.

Fellowes.com/air