Airflow Control

Critical Healthcare Environments

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Decreased performance of healthcare facility **HVAC systems**, **filter inefficiencies**, **improper installation** and **poor maintenance** can contribute to the spread of healthcare associated airborne infections.

- CDC.gov

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Proven partners

We are **e.i.p.**

Energy Improvement Products (e.i.p.) is a recognized leader in engineered solutions. Since 1983, our team has developed a strong network of engineering firms, contractors and other end users in the commercial HVAC industry. As your partner, we're committed to delivering quality solutions to enhance the health of your building, along with offering unmatched service and support.

In healthcare facilities, we understand the importance of airflow control and reliable, accurate performance of your system. Our team will evaluate your critical environment and work with you to establish a plan customized to your unique application and needs. ***The results?*** **Risk reduction, better control, improved energy savings, less wear and tear on your mechanical systems and compliance with ASHRAE standards and local codes.**

Improve patient safety by reducing risk

and ensuring **compliance**.

To prevent the spread of airborne pathogens, contaminants, bacteria, VOCs and more contagions and pollutants, critical environments like healthcare facilities must adhere to strict ventilation and pressurization flow requirements (scan the QR code to learn more). Operation rooms, isolation rooms, patient rooms and laboratories are among the critical environments that must have tight control over air quality, temperature, humidity, pressure and more. Implementing high-accuracy airflow monitoring in these spaces currently served by VAV systems will result in:

IMPROVED PATIENT CARE | SAFER LABS | LOWER ENERGY COSTS

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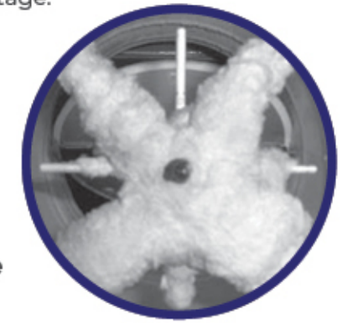
The problem:
Facility dependent on VAV flow cross system

The critical nature of a healthcare environment demands 24/7 system operation with sophisticated backups in the event of a shutdown or outage. Although variable air volume (VAV) systems can be applied with good results, they're not ideal due to **inefficient operation**, which leads to **wasted energy**. Often, VAV boxes **can't maintain the proper room pressurization** as designed, **don't have the ability to accurately calculate air change rates** and **cause safety issues**.



VAV box limitations:

- ☒ Transducer error/inaccuracy, drift
- ☒ Low turndown rate
- ☒ Inability to control at lower velocity pressure
- ☒ Flow cross can be easily soiled or clogged (primarily on return), requires maintenance and may not be accessible

The solution:

Turn to EBTRON® products

One of the industry's most **respected.**

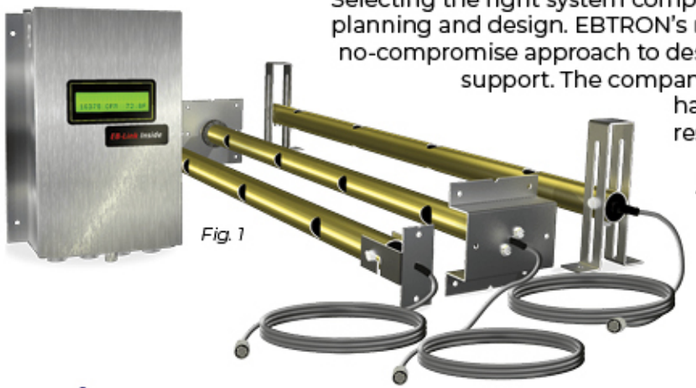


Fig. 1

Selecting the right system components for your facility requires careful planning and design. EBTRON's management philosophy starts with a no-compromise approach to design, manufacturing, application and support. The company's innovative measurement solutions have made them one of the most respected manufacturers in the industry.

At e.i.p., we're confident you'll find a measurable difference in your healthcare facility using EBTRON technologies.

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Fig. 2

A truly measurable difference.

EBTRON airflow measurement technologies paired with control strategies are proven to optimize ventilation air, improve occupant health, reduce energy consumption, limit IAQ liability and increase building life, among other benefits.

EBTRON® product benefits:

- ☑ +/- 2% of reading accuracy
- ☑ NIST-traceable calibration
- ☑ Ability to read low flow
- ☑ Plug-and-play operation
- ☑ Bluetooth capabilities
- ☑ Airflow and status alarms
- ☑ Easily accessible
- ☑ No calibration required
- ☑ High-accuracy, integral temperature and humidity sensors
- ☑ No drift

We can prove it. Better airflow is achievable and **important.**

"I encounter EBTRON flow stations often and find them to be extremely accurate and reliable devices."

- Brendan Loftus
Project Manager/Senior Technician
Superior Test & Balance, Inc.

"EBTRON airflow measuring stations not only allowed us to maintain better control of our operating room pressure, but we are now confident that air changes per hour are accurate."

- BAS Facility Engineer

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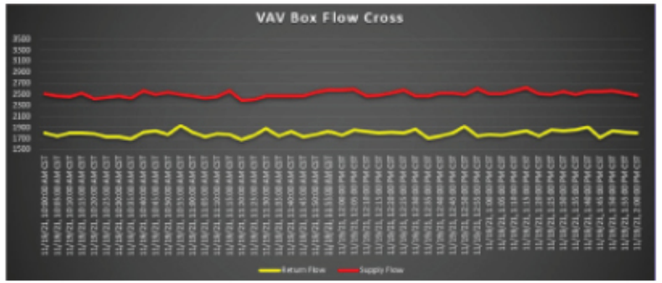

Fig. 3

Before installation

This graph shows a typical operating room in a 10-year-old hospital. Based on the charted information, everything "appears" to be working correctly. The room is positively pressured and return is tracking the supply.

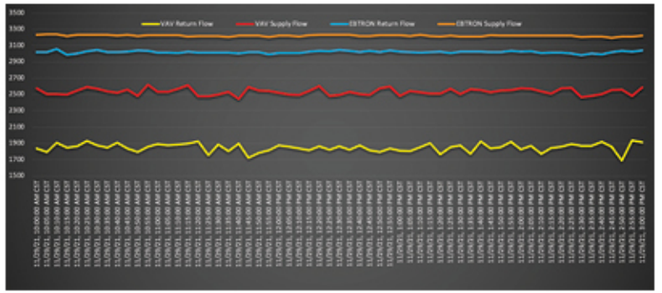

Fig. 4

After installation

Once the EBTRON airflow measuring station was installed, we begin to see a different story. The actual airflow in and out of the operating room (verified by a third-party balancer) was substantially higher than what the flow cross read. The information obtained by the new readings allowed building engineers to reduce the static setpoint on the air handling unit and slow the supply and return VFDs to maintain the design airflow for the critical space.

You're not alone. We're good at this.

We have a **reputation.**

Healthcare facilities throughout the country serve hundreds of thousands of patients, employees and visitors 24/7. These critical environments require best-in-class products. Rely on e.i.p. to deliver quality solutions to enhance building health and increase energy savings.

See more e.i.p healthcare projects:

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Relationships that **work for you**.

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