

Energy Optimization Survey

MANAGE VENTILATION & CONTROLS FOR SAFETY, COMFORT & SAVINGS

Heating, Ventilation, and Air Conditioning (HVAC) energy costs represents 40% of the total energy bill in most facilities... and is the most difficult component to manage. Overventilation is a common occurrence and can generate thousands of dollars in unnecessary energy expenses. Controls systems that are out of calibration or mis-programmed waste energy and cause discomfort. HVAC system components, such as economizers, are notoriously inoperative and can produce the opposite of the desired effect if not maintained and monitored.

AN EFFECTIVE SOLUTION

In the past, facility professionals have been hesitant to decrease ventilation rates for fear of uncovering issues that generate complaints. The **Energy Optimization Survey** includes a post-adjustment analysis of the nine environmental parameters most related to common occupant complaints. If issues are uncovered, facility personnel have the information necessary to perform a meaningful cost benefit analysis of adjustments and energy savings. The Energy Optimization Survey reduces investigative time and takes the guesswork out of HVAC energy optimization.

SAVINGS BASED ON DEMAND

Demand Control Ventilation (DCV), implemented properly, is the most energy efficient method to manage the quantity of outdoor air. However, DCV is not always economically viable due to the cost of equipment or related maintenance. The Optima system develops a complete picture of HVAC system delivered performance over several days or weeks. The HVAC system can then be adjusted to correctly match a building's typical daily activity. For buildings with a consistent use pattern, an Energy Optimization Survey can be performed 2-4 times per year and yield cost savings similar to other DCV methods.



WHAT IT RECOMMENDS

- **EFFICIENT CONTROLS STRATEGY**
Optimal setback, start-up based on occupant demand
- **EFFECTIVE VENTILATION MANAGEMENT**
Balance ventilation rates with safety and comfort
- **PROPER HVAC COMPONENT OPERATION**
Evaluates operation of economizers, filtration, distribution and more

HOW IT IS DONE

- Survey entire building or representative area
- Enter information into the Aircuity Ventilation Savings Estimator
- Compare savings with cost of adjustments
- Review controls strategy in report
- Make adjustments
- Repeat surveys to validate improvement
- Repeat surveys to ensure safety, comfort or 2-4 times per year as preventive maintenance

THE OPTIMA SYSTEM

The device used to collect information within the building is uniquely designed to perform the monitoring in an unobtrusive manner. Its physical appearance allows it to blend into any setting, and it is virtually silent. Depending on the survey, the monitor can either remain at one location during the entire survey, typically 24 hours, or may be moved to new locations throughout the day.

The number of test locations depends on both the size and use of the facility, and whether or not previous problems have been noted. Our representative will work with you to establish the best program for your building.



THE BUILDING PERFORMANCE EVALUATION REPORT

The final report is comprehensive, easy to understand, and most importantly, meaningful to those responsible for building operations. The report goes beyond traditional data summaries of years past - it provides *expert analysis* of the data, and includes detailed assessments of the current state of the facility, and qualitative recommendations for improvement of suspect areas.



To learn more about what we can do for you, just give us a call today!

Aircuity Optima Sales
617-641-8800
sales @aircuity.com

