

## **TEMPERATURE CONTROLS: WHAT'S REALLY HAPPENING?**

*Pat is the facility manager for a three-story office building in Western Canada. Like most managers, Pat works hard and takes a lot of pride in making it the best it can be. As a goal for the 50,000 sq ft. this year, Pat wants to reduce the energy spend below the current \$3/sq ft and improve the Energy Star score.*

*Having made great progress by addressing two of the most common inefficiency villains – underserviced economizers (article three) and over-ventilation (article four) - Pat is now focusing on the third culprit: temperature controls.*

**10% to 30% of the energy used in commercial buildings is wasted because of improper and inefficient operations, a large portion of which are related to temperature controls. (Pacific Northwest National Lab)**

Most of us know when a building isn't quite right. Whether you're sweating in a restaurant or freezing in a movie theatre, cranking up the space heater under your desk or packing a sweater for the afternoon, it's just uncomfortable. And it wastes a lot of money. But it doesn't have to be that way.

The most frequent temperature controls issues are (in no particular order): winter overheating, summer overcooling, and improper set points, set backs and scheduling.

So in Pat's case, the best starting point to determine if the temperature controls are right is to simply walk through the building with a clipboard and ask the tenants:

- How comfortable are they with the temperature?
- How does that change throughout the day?
- Do they access the thermostats?
- What times are people actually in the building? At night, on weekends?

Comfort is subjective but such polling often produces telling trends. As a next step, Pat needs to determine if the building is actually doing what Pat thinks it is or should be. Working with a trusted partner, they measure the building's environmental conditions over the period of one week. This includes CO<sub>2</sub>, relative humidity and temperatures in different areas.

With information about comfort levels, occupancy and how the building is actually performing, Pat can now work with the service provider to improve the delicate balance of temperature controls to the most efficient and cost effective settings.

**Questions about how to make your plan a reality?  
Call Aerco Industries 1-800-663-0401 or visit [www.aercoindustries.com](http://www.aercoindustries.com)**