

United Mechanical Corporation

The Leader in Comfort and Process Mechanical Solutions

# YOUR BUILDING CONTROLS SYSTEM GOT YOU STRESSED OUT??

## SEE IF ANY OF THE SCENARIOS BELOW SOUND FAMILIAR.

\*\*Your HVAC systems and components are not integrated into one system with one web-based user interface

\*\*You are unsure if you have a completely "open" system that allows total flexibility in the choice of vendors and contractors; choice that makes competitive bids possible

\*\*You are already completely frustrated with the inflexibility of your controls system and are locked into a proprietary system that is costly to maintain

### 1. HVAC Being Run By Multiple Systems That Are Not Communicating With Each Other

One very common scenario is one in which various HVAC components and/or systems are not linked together and are run by separate control systems on separate workstations. Integrating these disparate elements and viewing them from one single user interface will reap the following rewards:

- Time and money savings as a result of using just one graphical interface that allows setpoints to be changed and problems diagnosed and solved with a simple keystroke. Also, it takes far less time to get to know one system than it does several different ones.
- **Reduced energy costs** by having the ability to simultaneously monitor and adjust chillers, boilers and other various pieces of equipment
- Remote access due to web-based interface technology
- Quicker response time to problems because of centralized monitoring visibility

SOLUTION: Integrate the multiple HVAC systems and/or elements into an open-licensed front end. One word of caution, however, when it comes to integrations, is to make sure and <u>avoid any kind of proprietary software and hardware</u>. Not only should the controllers share a common communications protocol, like BACnet® or LonWorks®, <u>but the software on the front-end needs to be openly-licensed as well</u>. Only then do you have a truly "open" BAS. Otherwise, only a limited number of technicians and contractors can modify or upgrade the BAS, making it more expensive and difficult to switch systems and/or servicing contractors. This in essence greatly reduces, or even eliminates, the ability to get competitive bids on future work required.

### 2. HVAC Controls System Needs to be Repaired or Expanded

If you are lucky enough to already have in place a totally open controls system, then you should have your choice of vendors and mechanical contractors to perform the required work. If not, then you are finding out how expensive it is to deal with a vendor who has you locked into their specific product line.

SOLUTION: This is the point at which you should <u>convert your system into a completely open one</u> in conjunction with the needed repair or expansion. Typically, all that is required is a new front-end interface. The incremental cost of this change out is far less than the ongoing expense that will be incurred as a result of being held hostage by proprietary equipment and the higher associated costs.

#### 3. HVAC System Operated by Pneumatic Controls

A building constructed a couple of decades ago may very well still have an HVAC system based on air-powered pneumatic controls. Not causing any problem, then why worry? After all, "if it's not broke, don't fix it—right? If only pneumatic controls offered more than just limited control, any diagnostic information or the ability to "talk to each other," then maybe right. However, what building owners and property managers are lacking in a pneumatic based system is the inherent advantages a digital BAS offers. In addition to moving buildings towards a "greener" environment, digital controls provide:

- Actionable data supporting energy management, maintenance management and HVAC system operation Lower energy costs achieved by flexible, programmable schedules, DCV (demand control ventilation), optimum start up scheduling based on seasonal variances and setpoint monitoring
- Lower maintenance costs by means of controls that typically retain accuracy to established setpoints Higher income potential because of better environmental control that tends to retain tenants longer and increase lease rates

Graphical interfaces that are extremely user friendly

SOLUTION: Depending on the circumstance, an entire conversion or partial conversion from pneumatic to digital controls would offer several short-term and long-term benefits.

# CALL US NOW AND TAKE US UP ON A FREE CONSULTATION AND/OR BUILDING SURVEY!

# COUNT ON US TO TAKE THE STRESS OUT OF YOUR CONTROLS SYSTEM AND

## SAVE YOU MONEY AT THE SAME TIME



2811 Central Avenue, Charlotte NC 28205 / www.unitedhvac.com / phone: 704.374.1857