BUILDING CONTROLS 101

Five tips to help provide more cost effective, environmentally friendly buildings

We're at a crossroads today in building management. Owners want smarter buildings and electrical contractors want to deliver them, but there's a lot of confusion about how to go about it.

Here are five suggestions that can help the process go more smoothly.

▶ Choose building controls that use open protocols (ideally BACnet) and open databases

It's important that all building systems—lighting, HVAC (heating, ventilation, and air conditioning), shade control, room scheduling and A/V (audio/video)—can communicate and operate with one another. Even if a project does not include a building management system, it's a good bet the owners will want one within the next five years.

Today we're seeing a transition from proprietary to open protocols. Using open protocol components will make the automation process easier and more economical while maximizing results.

▶ Push owners and design engineers to specify exactly how the systems should work and interact

Often the design team does not include enough details in the bid and construction documents. It's not enough to say 'use best practices'. Specifying an open control protocol and detailing how the systems will interact is the best path for success.

▶ Include energy monitoring hardware

Ethernet-based electrical consumption meters installed on the incoming service and on panels throughout a facility can provide extremely useful data. It's the missing link in many energy initiatives—a method for measuring the exact power savings from changes in systems or practices.

▶ Include an energy management information system (EMIS)

An EMIS brings data from all of the control systems together, providing historical reporting and at-a-glance views of the energy consumption of HVAC, lighting, plug loads and audiovisual. Building managers can use those reports to perform continual commissioning, pinpoint priorities for energy initiatives and easily measure return on investment.

Likewise, a building dashboard, usually a flat panel display in the lobby showing occupants their energy usage, can incentivize further reductions. Many users who have installed dashboards have seen a five to seven percent reduction in energy consumption.

▶ Share occupancy sensor status with all systems

Occupancy sensors can do more than control lighting. They can power down AV systems and trigger thermostat setback adjustments, saving energy and equipment life.

Many of our customers have tied occupancy sensors into scheduling applications like Microsoft Outlook. Because employees rarely release a scheduled room when a meeting is canceled, making the room available if no one arrives at the meeting time can dramatically improve space utilization.

Crestron Electronics is a leading manufacturer of control and automation hardware and software. We are strong advocates of open protocols and our systems are fully compatible with the leading BMS applications. Visit *www.crestron.com/about/go_green_conserve_energy_savings_management* for more information.

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