LCBS

Honeywell



LIGHT COMMERCIAL BUSINESS SOLUTION TRANSFORMS A HISTORIC BUILDING INTO A MODERN MARVEL

A Better Environment, Inside and Out



Light Commercial Business Solution (LCBS)

The Challenge

• Transforming Portland's historic Lovejoy building into a symbol of efficient "green" building design—including the first radiant cool and heating system in the state of Oregon.

The Solution

- Honeywell LCBS 4.6, including Excel 15B Web Controller; Excel 15C; W7750B; W7750C; actuators and valves; CO2, wall and emersion sensors.
- Honeywell Diamond Distributor MICONTROLS (www.micontrols.com)
- Authorized Controls Integrator Hunter-Davisson, Inc. (www.hunterdavisson.com)

The Result

• A building that will likely meet all LEED certification requirements and give OPSIS Architects the ultimate testimonial for its "green" capabilities.

Challenge

"Green" buildings use energy, water, land and materials more efficiently than their built-to-code counterparts—while also providing healthier, more comfortable and more productive indoor environments. As the Pacific Northwest's green-building design experts, OPSIS Architects of Portland, Oregon, wanted its new offices to showcase its green capabilities.

The challenge: renovating the historic 20,000-square-foot Lovejoy Office Building into a symbol of modern efficiency—with extensive daylighting, natural ventilation, automatic exterior sunshades and radiant heating and cooling. The stakes were undeniably high. After all, OPSIS could only gain the credibility and new business it wanted if it could practice what it preached.

Specific requirements for the building automation included remote access, remote alarming, easy set-up and programming, and compatibility with Honeywell actuator and valve field devices

Solution

Hunter-Davisson, Inc. was hired as the mechanical contractor for the project and thought it a perfect opportunity to integrate LCBS. Partnering with Traci Smith, a controls specialist at Honeywell Diamond Distributor MICONTROLS, the team set out to tackle the task, meeting such design requirements as:

- Creating the first radiant cooling and heating floor system in the state of Oregon (which requires extremely tight temperature control to avoid condensation problems).
- Integrating the HVAC system to enable and disable automatic operable motorized window controls.
- Meeting strict Leadership in Energy and Environmental Design (LEED) standards for sustainable site development, energy and atmosphere, water efficiency, indoor environmental quality, materials and resources, and design innovation.

 Integrating building automation control system remote Web access, remote alarming, service contractor authorization, and easy set-up and controls programming.

The team decided to tap Honeywell's complete line of products including the power and flexibility of Honeywell's LCBS 4.6, Excel 15B Web Manager, Excel 15C plant controller, W7750B and W7750C air handling unit controllers, actuators, valves, and CO2, wall and emersion sensors. The Excel 15B provided remote capabilities and the Excel 15C plant controller fulfilled the flexibility requirements the project demanded.

Results

With the help of LCBS, OPSIS was able to earn LEED certification, giving the firm invaluable credibility in the quest to earn green jobs and prospects.

"This was a very challenging project with atypical heating and cooling stages," says MICONTROLS' Traci Smith. "It involved modulating windows and shades for first stage cooling, in-floor hot water heating and in-floor chilled water for second stage cooling, and a rooftop air handling unit for third stage auxiliary cooling. Hunter-Davisson pushed LCBS to its limits, and LCBS responded. Everyone is very pleased with the installation."

"I wasn't surprised at how well LCBS performed because I've worked with it before," says Jon Buck, Hunter-Davisson's lead controls tech. "It's a flexible, programmable controller, and I haven't experienced any glitches in the system."

"We would recommend LCBS for other 'green' projects," says Greg Pelser, Hunter-Davisson's president. "And we intend to use it a great deal in the future."

Thanks to LCBS and Honeywell's expert network of independent contractors and distributors, OPSIS is now positioned to realize the true benefits of integrating sustainability into organizational processes—including lower costs, reduced absenteeism, and better worker health, safety and morale.



Find out more

For more information, please visit us online at www.honeywell.com or call us at 1-800-653-5216.

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