CASE STUDY

World Trade Center, Seattle Washington USA

Facility Type: Commercial Office

Circon System Integrator: Holaday Parks, Inc.

THE CLIENT

The World Trade Centre of Seattle is an office facility currently comprised of two buildings. The facility occupants include a mix of national and international trade organizations as well as, in the East building, Visio Corporation an information technology leader in the Pacific Northwest area. A third building, which will also be occupied by Visio, is in the proposal stage.

THE CHALLENGE

The World Trade Center in Seattle, as a part of a global network of facilities devoted to international trade, offered Circon the opportunity to put the very best technology forward. With tenants the like of XY Point, the National Center for APEC, and Visio, the building's high profile came complete with high technological expectations. All of the systems − the HVAC, security, and lighting had to be completely integrated and controllable from a single station or remote source for each building, and all had to represent the very best in their efficiency and adaptability. To meet and surpass those lofty targets, Circon would be pressed to develop and adapt their existing inventory of controllers and to work intimately with the project's system integrator, Holaday−Parks Inc. of Seattle, and their own strategic partners, GE, Motorola and Raytheon, to develop an effective and efficient leading edge solution.

THE SOLUTION

The Circon Building Automation System was chosen because it offered a flexible, non−proprietary answer to the customer's immediate and long-term objectives. Circon's open architecture provides the foundation for future control capabilities such as lighting, security and card access. Circon's programmable controllers and network management software facilitate the integration of all control functions for true peer-to-peer communications

The state of the art system is effectively monitored from within the building itself, optimizing both the time and the cost of management, monitoring and troubleshooting. At the same time, the facility is assured the highest levels of efficiency, reducing energy consumption and maintaining comfortable temperature levels year round.

Circon is involved in the planning the BAS (building automation system) for the proposed new building, which will include a fiber optic link to allow its entire systems to effectively become a part of the East building's existing BAS network.

THE DETAILS

HIGHLIGHTS

- Delivered a full featured, open and interoperable Building Automation System
- Best of breed mechanical system selection, including Echelon® routers and Raytheon's "Control By Light" fiber optic based LonWorks® router
- A single LonWorks® network
- A flexible and adaptable design
- Portable management utilizing Circon Visual Integrator ™ software; allows building engineers to institute tenant changes as requested
- Provided a control system platform that facilitates future expansion and integration
- Highly efficient and cost effective system monitoring
- A high level of comfort and functionality

HVAC & LIGHTING CONTROLS

- → Extremely efficient energy consumption guaranteed by intelligent monitoring and controls
- → Unsurpassed levels of tenant comfort
- → Air quality monitored and controlled to highest standards
- → Echelon routers effectively handle and stabilize overall system connectivity
- → 51 unique lighting zones utilizing GE RR7 lighting relays and Circon VAV controllers

Circon programmable and terminal unit controllers effectively operate all HVAC systems including carbon monoxide monitoring and subsequent exhaust fan control with Circon BASIC language installed to program the sequence of operations to allow greatest efficiency and load handling capability.

SYSTEM MANAGEMENT

- → Total, real time monitoring and management via laptop PC
- → Expanded selective access to system provided through both wall mounted overrides and Circon's TouchBASe telephone interface software
- → Custom designed user friendly GUI (graphical user interface) with point and click maneuverability
- → Site management controller intelligently handles all alarms
- → Diagnostics, troubleshooting and repairs occur before building occupants are aware of a temperature change
- → LonWorks based technology allows unlimited expansion options

Circon's Visual Integrator™ software allows the building engineers total monitoring control, with the ability to view real time information on building conditions and mechanical system status. Circon's programmable controllers allow building engineers to monitor and control the air temperature and quality, security access and lighting in each of 51 separate lighting zones and 47 individual access doors through the East Tower office space.

Overall management can be affected through a single laptop computer, and control of individual areas can be accessed by both wall-mounted overrides and through the telephone, using Circon's TouchBASe telephone override software. Carbon monoxide sensors, installed throughout the parking garages of both buildings, activate exhaust fans as necessary and the BAS system works in complete conjunction with both the fire alarm system and the elevator cab controls.

When the third building comes on line, complete integration via fiber optic routing will be affected without the need for reconfiguration or substantial expense.

If you would like further information on this case study, Efficient Building Automation Corporation (EBAC), or more on our products and services, please refer to the contact information below.

Telephone: 604.248.4404

Facsimile: 604.248.4405

Email: sales@circon.com

www.circon.com

EFFICIENT BUILDING AUTOMATION

YOUR TOTAL SOLUTIONS PROVIDER

©2011 Efficient Building Automation Corporation (EBAC). Circon® and the Circon logo are trademarks of EBAC. Other brand names are trademarks or registered trademarks of their respective holders.