

CASE STUDY



The Resurrection Center

ROOFTOP UNITS AND I-VU[®] INTERFACE DELIVER EFFICIENT COMFORT AT THE RESURRECTION CENTER

I-VU[®] INTERFACE ALLOWS 24/7/365 MONITORING FROM ANY WEB-ENABLED LOCATION



Eight Carrier 48HC WeatherMaster* rooftop units, monitored by the i-Vu* web-based user interface, provide targeted high efficiency comfort to The Resurrection Center. The units can be monitored from any web-enabled location, allowing service personnel to respond to alerts immediately for optimal performance and occupant comfort.

Project Objectives

The Resurrection Center, a nondenominational church located in Wilmington, Delaware, serves some 1,500 members with a 35,000 square foot multi-purpose facility. Religious services, classes for children and adults, daycare, administrative activities and community functions take place in various areas of the building every day of the week. Church administrators needed to replace the outdated heating, ventilation and cooling (HVAC) equipment at the church with an efficient, reliable system. They also required the ability to remotely monitor and troubleshoot any component. Finally, the new system would have to be installed and brought into service without disrupting the occupants of the heavily used facility, leaving no zone of the building deprived of HVAC services, even for a short time.

"When the church members arrived for their activities, they said, 'Is there a problem?' and we said, 'Not any more.' Thanks to the i-Vu[®] system, we can keep tabs on operations, even when no one is present at the church to call us for help."

- Carl Wolf, President, Service Unlimited, Inc.

The Solution

Service Unlimited, Inc.—a Delaware-based HVAC installation and service company and a Carrier customer for almost fifty years—in consultation with Peirce-Phelps, Inc., their local Carrier distributor, recommended that The Resurrection Center install eight highly efficient, reliable 48HC WeatherMaster[®] packaged rooftop units, with an i-Vu[®] web-based user interface to provide access to the integrated digital controls in each unit. A zoneby-zone schedule was developed and successfully



executed to install and bring the units online without disrupting church life or leaving any part of the building without heating, cooling and ventilation services. Thanks to the rooftop units' efficiency and the fine-tuning and early-response capabilities of the i-Vu user interface, The Resurrection Center expects significant savings in utility costs. Additionally, Service Unlimited is able to provide remote troubleshooting via the i-Vu interface, even when no one is present at the church to call for assistance.



Synopsis

The Resurrection Center, a nondenominational church located in Wilmington, Delaware, serves some 1,500 members with a 35,000 square foot multi-purpose facility. Religious services, classes for children and adults, daycare, administrative activities and community functions occupy various areas of the building every day of the week. Church administrators sought to replace the outdated hot- and chilled-water heating and cooling equipment — which was inefficient and did not provide sufficient ventilation — with an efficient, reliable system that would provide remote monitoring and troubleshooting capabilities. The new system would have to be installed and brought into service without disrupting the occupants of the heavily used facility, leaving no zone of the building deprived of HVAC services, even for a short time.

Service Unlimited, Inc.—a Delaware-based HVAC installation and service company and a Carrier customer for almost fifty years—in consultation with Peirce-Phelps, Inc., their local Carrier distributor, recommended that The Resurrection Center install eight highly efficient, reliable 48HC WeatherMaster[®] packaged rooftop units (RTUs). The gas-heating/electric-cooling 48HC units offer SEER ratings up to 15.6 and EERs of up to 12.2, with up to 82 percent gas efficiency. These efficiency rates will deliver significant savings in utility costs over the lifetime of the unit. The RTUs are designed for ease of maintenance and are charged at the factory with environmentally sound Puron[®] (R-410A) refrigerant.

A zone-by-zone schedule was developed and successfully executed to install and bring the units online without disrupting

church life or depriving any part of the building of heating, cooling and ventilation services, even temporarily.

Dan Fischback, Territory Manager for Peirce-Phelps, said, "The installation schedule was very challenging, but Peirce-Phelps and Service Unlimited were able to coordinate with church administrators to install the new equipment and ductwork, bring it online and then remove the old system so there was seamless service and minimal disruption to the church community."

To meet The Resurrection Center's remote accessibility objectives, the team recommended the i-Vu® web-based user interface to provide access to the integrated digital controls in each rooftop unit. The i-Vu interface has trending, reporting, setpoint, scheduling and alert capabilities that enable authorized church members to override heating and cooling schedules as needed for an activity in an unusual time slot, while also keeping the technicians at Service Unlimited apprised of the RTUs' operations. Sometimes this leads to opportunities for proactive service to prevent occupant discomfort.

"A recent storm led to a wide-spread power outage, after which three of the church's rooftop units needed to have the power re-set," said Carl Wolf, President of Service Unlimited. "The i-Vu interface alerted us to the problem, and our technicians went to the site. When the church members arrived for their activities, they said, 'Is there a problem?' and we said, 'Not any more.' Thanks to the i-Vu system, we can keep tabs on operations, even when no one is present at the church to call us for help."

Project Summary

LOCATION: Wilmington, DE

PROJECT TYPE: Unitary comfort system with web-based user interface

BUILDING SIZE: 35,000 ft²

BUILDING AGE: Approximately 35 years

BUILDING USAGE: Religious services, daycare, education and community gatherings

OBJECTIVES: Replace outdated heating and cooling system with efficient, reliable unitary system without disrupting occupants of the heavily used building. Obtain remote monitoring and troubleshooting capabilities.

EQUIPMENT: Eight 48HC WeatherMaster® packaged rooftop units

CONTROLS: i-Vu[®] web-based user interface

MAJOR DECISION DRIVERS: Carrier rooftop units chosen for quality, efficiency and reliability; zone-by-zone installation schedule dictated by the need to install and bring units online without disrupting church life, leaving no part of the building without heating, cooling and ventilation (HVAC) services, even temporarily. i-Vu user interface selected for its remote troubleshooting and alert capabilities.

UNIQUE FEATURES: New rooftop system was installed and old heating and cooling system removed without disrupting the church's busy schedule.

INSTALLATION DATE: 2012

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