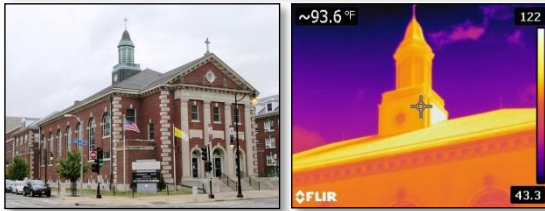


ST. JOHN'S CATHOLIC NEWMAN CENTER RCx STUDY

CASE STUDY



QUICK GLIMPSE	
Customer	St. John's Catholic Newman Center at the University of Illinois Champaign
Measures Implemented	Retro-commissioning Study
Total Project Cost	\$81,652
Total ECMs Found:	30
Total Possible Savings Found:	Approximately \$144,491.96

ST. JOHN'S CATHOLIC
NEWMAN CENTER
AT THE UNIVERSITY OF ILLINOIS

BASELINE

St. John's Catholic Newman Center (SJCNC) was established at the University of Illinois in 1926. The majority of the 225,000 square foot facility functions as a residence hall for 600 U of I students. In 2014, SJCNC spent over half a million dollars on utilities. Looking for ways to improve the performance of their building, SJCNC hired Ruyle Mechanical Services to conduct a retro-commissioning (RCx) study.

OUR SOLUTION

The RCx project assessed the building envelope, mechanical systems (heating, ventilation, cooling and plumbing), building automation system, electrical and lighting systems. Ruyle Mechanical Services benchmarked SJCNC using EPA's Energy Star Portfolio Manager. At the beginning of the RCx study SJCNC scored a 30. By the end of the study, SJCNC scored a 48. By making energy use a priority, SJCNC was able to improve their building.

Ruyle's industry-leading approach of energy and building performance along with implementing "fixes" as the study is conducted, resulted in many benefits for SJCNC. Ruyle accomplished:

- Control upgrades to air handling unit and make-up air unit
- Re-programmed fan coil units controls in residence rooms
- Reconfigured heat exchangers' controls
- Installed safeties on make-up air unit
- Water balancing of chilled water and heating hot water
- Air balancing of ventilation air
- Repositioning of air sensors
- Energy Model
- RCx report with prioritized ECM's
- Reduced water consumption by adjusting potable water booster pump cooling water control valve.

BENEFITS

The benefits of the RCx study were immediate. Throughout the RCx study, Ruyle implemented various energy efficient measures that saved SJCNC money on utility costs. With a functioning BAS system, SJCNC has more comfort control and less complaints and work orders from the residents. Ruyle provided SJCNC with a full report and presentation reviewing what was implemented, an action plan for further improvement of SJCNC's energy use and occupant comfort, and a better understanding of how and where energy is used. SJCNC will use the RCx study's results to help them make the important decisions related to future capital expenditures and pro-active maintenance.

"The team from Ruyle was great to work with on the RCx project. We went in knowing we had a lot to learn, and they helped us get a handle on our utility usage, correct a number of issues right away, and identify areas to work on. Their ECMs have given us a lot to think about and targets to shoot for. "

-Tristan Pisarczyk, Director of Operations



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