



Students Participate In 'Platinum' Hotel Project

ASHRAE Insights

Contributors to the project include (front, from left) Harmohindar Singh, Cherie Perry, Sharika Bradley, Melissa Wise and Riem Rostom. Also (back, from left) Tony Santoro, Peter Rojeski, Ira Poston and Winfred Locus.

ASHRAE student members from North Carolina A&T State University contributed to the first LEED™ Platinum hotel in the United States.

The Proximity Hotel and Print Works Bistro in Greensboro, N.C. earned the rating late last year. One of the LEED points was for a measurement and verification plan developed in part by Peter Rojeski Jr., a professor at North Carolina A&T and coadvisor of the student branch.

The plan was based on three months of preliminary utility metering of the building and sub-metering of HVAC systems by Rojeski and a team of ASHRAE student branch members.

For the project, Ira Poston, ASHRAE Region V director and regional chair, arranged for Duke Energy Co. to install an Energy Profiler main electric meter, which allows online access to hourly demand and consumption data. In addition, Tony Santoro, Associate Member ASHRAE, arranged for Piedmont Natural Gas to install a gas sub-meter on the domestic hot water boilers and the hydronic heating boilers. Rojeski and the students installed electrical submeters on the chiller, chilled water pumps, condenser water pumps, and the cooling tower fan motor.

In order to monitor its operational performance, air temperature and humidity sensors were installed within each stage of the energy recovery, make-up air unit. A weather station, including a solar radiation meter, was also installed to monitor the performance efficiency of the roof-mounted solar hot water system.

The student members are enrolled in the Architectural Engineering Department. In addition to basic courses in HVAC systems design and lighting/electrical systems design, the department offers a course on green building design, and a course in commissioning and measurement and verification. The latter course was offered last summer and the students used the Proximity Hotel as their monitoring laboratory.

The University's participation in the Proximity Hotel project is sponsored by a grant administered by the North Carolina State Energy Office. The project is managed by the university's Center for Energy Research and Technology. The Center is overseen by Harmohindar Singh, who also serves as student branch advisor.

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