Coordinated Water Leak Repair Protects Krannert Artworks

In May, F&S repaired a chilled water leak at Krannert Art Museum, which if left unattended could have threatened millions of dollars of artwork.

The team planned extensively by running practice simulations and monitoring weather forecasts because the repair necessitated shutting down the museum's air conditioning. Without air conditioning, humidity in the galleries cannot be regulated. And, "if humidity levels rise above 50 percent, mold can start to form on the artwork," said Claudia Corlett-Stahl, acting senior associate director of the Krannert Art Museum.

Since the pipe was not in an easily accessible area, F&S estimated that the air conditioning would need to be shut down for 15 hours or more. To minimize the threat of humidity, plans were made for overnight work. As the time approached for the work to begin, F&S Project Coordinator Tim Mininger monitored weather reports and corresponding temperatures to pick the best night. With no rain looming, and overnight temperatures forecasted to be in the low 50s, May 22 was chosen.

F&S and Krannert personnel monitored temperature and humidity throughout the work. If necessary, they had fans available. They also were prepared to use a temporary fix for the leak if the air conditioning needed to be turned back on before work was finished. However, everything went according to plan. By 8 a.m. the next morning, the chilled water unit was repaired.

For their effort, the project members received the F&S Team of the Month award for demonstrating customer focus and operational excellence. The team consisted of sheet metal workers, refrigeration mechanics, insulators, electricians, high voltage electricians, temperature control mechanics, drivers, energy management control center staff, and building maintenance personnel.

Christopher Hall Cuts Energy Use in Half

Making energy conservation effortless was key to Christopher Hall's third-place wins in the Energy Conservation Incentive Program (ECIP) in 2013 and 2015 and its present plan to cut energy use further.

"The steps we've taken are basically good choice nudges, so people actually have to opt out of energy savings," says Brenda Koester, Assistant Director of the Family Resiliency Center in Christopher Hall.

The ECIP encourages energy conservation through building improvements or occupant action. The top four buildings in each category with the greatest reduction in energy use compared to the previous fiscal year receive financial awards for facility improvements of their choosing.

Koester credits Darcy Meents, Human Development and Family Studies' (HDFS) assistant head of business, with getting the ball rolling by asking people to turn off lights in rooms they weren't using. This cut the building's annual energy costs by more than 30 percent in 2013.

From there, F&S' Karl Helmink suggested to Koester that the building undergo occupancy scheduling. That is, adjusting the heating and cooling systems to operate at reduced levels when people aren't around.

No one noticed the overnight heating and cooling reduction. Nor, did they notice their computers entering sleep mode sooner thanks to HDFS IT manager, James Kim.

Combined, these changes reduced Christopher Hall's energy costs by an additional 25 percent in 2015. To further increase savings, Christopher Hall underwent recommissioning this spring. Recommissioning optimizes existing heating and cooling equipment and controls to maintain comfort. Now motion sensors automatically shut off lights and adjust room thermostats when staff leave their offices.

HDFS Assistant Professor Brian Ogolsky and other Christopher Hall staff chose to build a bike rack with the building's Energy Conservation Incentive Program award funds.

So far, Christopher Hall is on track to cut its annual energy bill nearly in half in just six years.