



search...

Search

- [Home](#)
- [Topics](#)
- [People](#)
- [Buildings](#)
- [Green Facilities](#)
- [Events](#)
- [News](#)
- [Blog](#)
- [Buyers Guide](#)
- [Magazine](#)

[Home](#) >> [Buildings](#) >> [Utah's First LEED Certification in an Existing High-Rise Building](#)

Utah's First LEED Certification in an Existing High-Rise Building

by Kelly Lux

0

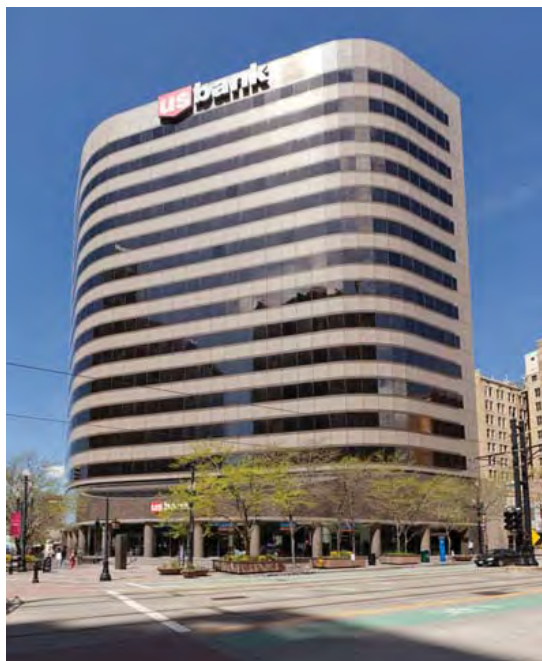
226

For nearly 30 years, Senior Property Manager Boyd McGee and Building Engineer Dan McGrew have maintained the 15-story 170 South Main Building in Salt Lake City.

"We are constantly maintaining the building – all buildings require continual upkeep," said McGrew of the 255,255 square-foot highrise. "It was a brand new building for us when we were brought on board in 1983. We have seen several remodels and replaced outdated equipment. In the time we have been here, we have seen everything turn over."

Their efforts have been instrumental in the continual function of the building, and most recently, McGee and McGrew proved their expertise in building management, earning the building Leadership in Energy and Environmental Design (LEED) Operations and Maintenance Certification and an Energy Star Rating.

About the Building 170 South Main was designed by HOK Architects and built by the Christiansen Brothers. The building's unique design and oval shape make it a landmark in the heart of Salt Lake City's central business district. The first floor houses a national bank and retail stores. With 98 percent occupancy, 170 South Main has a diverse tenant mix, including a number of law firms and commercial real estate, title, gas exploration and production, wealth management and insurance companies. The building is managed by McGee, McGrew and Tammy Rasmussen of Commerce Real Estate Solutions, an independently owned and operated branch of Cushman & Wakefield Alliance.



ETCGroup was selected several years ago to recommission 170 South Main. The relationship between management at 170 South Main and ETCGroup was instrumental in the pursuit of Leadership in Energy and Environmental Design. ETCGroup oversaw the management of the certification process, which includes completing and filing paperwork to the U.S. Green Building Council, said Dustin Campbell, LEED AP O+M and sustainability analyst with ETCGroup.



"We overtook the management of the LEED Certification," said Campbell. "In the end, they were able to save a bunch of money on their electrical bills, get Energy Star and LEED Certification."

Greening the Building While new buildings are designed to be energy efficient, dated buildings like 170 South Main often require major equipment repairs or replacements. Recent, sustainable upgrades to the facility were no simple task, taking nearly six years to complete the extensive and

Sign-up for e-News



Subscribe for e-news! Please enter your email address below.

Email*

First Name*

Last Name*

required

[Submit Query](#)

[Policy](#) | [View Past eNews](#)

complicated energyefficient renewal work, McGee said.

More than \$1 million was invested to upgrade the building equipment, in turn achieving significant utility savings and meeting requirements for the certifications. Most of the buildings systems were updated in the process, including the electrical, plumbing and HVAC systems.

Improved lighting designs, day lighting controls and plug load occupancy sensors were introduced into commons areas and tenant spaces to reduce electricity costs and cooling loads. The building control system was upgraded to allow for optimum HVAC operation and provide more detailed sub-metering. Ventilation energy recovery enhancements and upgraded controls in occupied spaces were installed to improve air quality and reduce energy required to condition outside air. Individualized, web-based power usage systems for each tenant were integrated to allow for more efficient management of power usage. In the restrooms, automated faucets, toilet flush units and paper towel dispensers were installed. And, with the help of ETCGroup, the entire building was retro-commissioned, optimizing building performance to reduce costs and enhance occupant health and comfort.

The 25-year-old chillers were perhaps one of the most significant upgrades to the facility. Tenants had to be prepped in advance for the replacement, which had to be done during a time of year that would least impact the building systems. The old chillers, located in the 420-stall parking garage underneath the building, had to be cut in half and hauled off. A new, concrete pad was poured for the new chillers, which were brought in by crane in 2010. The new chillers (McGee and McGrew's pride and joy) are York Centrifugal, using 134A Freon refrigerant, and include variable speed frequency drives.

A Team Effort Management's commitment to the environment was a significant factor in the movement toward LEED Certification, said Rasmussen. Additionally, tenants were supportive of the changes – realizing the environmental benefits as well as the financial incentives of greening the building.

Complete cooperation is essential in the LEED process, said Campbell. By having a list of equipment, including part numbers, brands and size, the process becomes much easier, he said. Facilities managers should develop a schedule of what they want to do to the building and when they plan to complete the tasks that will help them meet energy efficiency requirements. Management at 170 South Main was extremely cooperative, attentive and open to recommendations, making the whole process quite enjoyable, Campbell said. The management's commitment to the process is reflected in their dedication to 170 South Main.

"We are very, very proud of the LEED designation, and we like to put it out there. It is a great thing for us as management and as owners to obtain the award and be known among our peers for excellence," said McGee. "LEED makes a great building better. It is a good thing for the tenants and for the building as an asset. We will continue to maintain our LEED designation and aim for higher certification."



LEED Designation Many buildings in Salt Lake are LEED Certified. Only seven have received the LEED EBOM Certification in the state. And 170 South Main is the first existing high-rise building in Utah to be LEED Certified and verified by the Green Building Certification Institute. Certification was awarded in November 2011.

"To be a part of that is a tremendous opportunity," said McGee. "We are very, very proud of our building, and we like to showcase it."

The LEED certification is good for public relations, for the bottom line and for the environment, added Campbell.

"Energy efficient buildings are a good route to go because it is achievable for old or new buildings. It can be expensive, but the payback in energy efficiency and marketing makes it all worthwhile," Campbell said. "The overall best practices in LEED Certification are highly recommended, even if it is just to reduce a building's energy impact overall."

The glass-clad 170 South Main also received The Outstanding Building of the Year Award Office Building from 250,000 to 499,999 Square Feet from the Utah Chapter of the Building Owners and Managers Association – the building's second TOBY Award.

"The awards for 170 South Main recognize it as a real leader in Utah for the retrofitting and upgrading of existing buildings to meet modern energy and green conservation requirements," said Mike Lawson, president and CEO of Commerce Real Estate Solutions. "These certifications and awards are top criteria for many tenants today, and they reinforce the strong business case we have made for cost-effective energy systems that lower tenant occupancy costs."

Photos by Dana Sohm

Share Tools