



Kraus-Anderson Creates New Energy Efficient Headquarters



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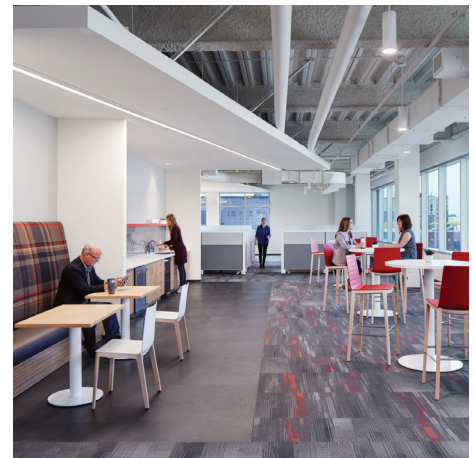
Matt Stringfellow,
Mechanical and Electrical
Systems Manager, Kraus-Anderson

As one of the largest integrated construction management and real estate development enterprises in the Midwest, Kraus-Anderson has been recommending energy efficiency to their clients for years. So when it came time to consolidate three different office spaces into a new 5-story, 100,000 square-foot headquarters in downtown Minneapolis, there was no question that they would build energy efficiency in from the ground up.

They worked with Xcel Energy's Energy Design Assistance (EDA) program to maximize energy saving opportunities that complemented the style and design of the space. The program provides computerized energy modeling to identify various efficiency measures available, potential costs, payback terms and rebates. The result of months of planning and construction, is a beautiful, spacious and energy efficient building that they're proud to call home.

The big picture

The new headquarters building is part of a block-wide development that includes high-rise housing, a boutique hotel, a non-profit micro-brewery and two levels of underground parking. The entire block is meant to create a unique urban experience within the heart of downtown that taken as a whole represents a sustainable addition to the city of Minneapolis.



Project Highlights

Project	Build new 100,000 square-foot headquarters to consolidate three locations
Estimated annual energy savings	715,000 kWh – electric savings 1,200 Dth – gas savings
Energy Rebates	\$141,772 from Xcel Energy \$4,240 from CenterPoint Energy \$146,012 total rebate dollars



Kraus-Anderson's company leadership determined the guiding principle used throughout the project would be "cost-effective sustainability." This principle influenced all decisions including space planning for customers and employees; building components, systems, and technology; and construction means and methods. As a result, the building is on track to achieve LEED Silver status for sustainability.

"Using EDA is standard process for us," says Matt Stringfellow, Mechanical and Electrical Systems Manager. "We wanted to do the best thing for our employees and demonstrate to customers that you can include energy efficiency in a cost conscious way."

Attracting and retaining talent was another goal. "It's a very competitive market for talent right now," adds Michael Hille, Executive Vice President, Kraus-Anderson Realty and Development. "We want to be the employer of choice. This office reflects the principles of our company, employees, and our clients, and it provides a competitive edge."

Must-haves

Kraus-Anderson began the design and programming process by inviting employees to participate in the planning with 12 focused committees. Over 100 KA employees participated, providing direct input and guidance into numerous building amenities, technology, workstation configuration, sustainability initiatives, among other features.

"The entire design and construction has been very thoughtful, from the building configuration to the air quality, making this an inviting and invigorating environment," adds Hille.

A top priority was a collaborative, open space environment, and using as much daylight as possible. On floors 2 through 5, where the majority of the office space is, conference rooms, smaller private phone rooms, and specialty workrooms are in the middle of the building, with offices and open space around the perimeter. Lower partitions allow for employee collaboration as well as letting daylight to reach further in toward the center of the building.

The windows for a majority of the building use both continuous ribbon-glass configuration as well as a glass curtain wall system to provide maximum daylight. The window glass tint color is dark enough to limit solar heat gain to reduce the air conditioning load, but light enough to provide enough daylight to enter the building to reduce the need for additional lighting. The same tint works to limit solar glare which improves comfort by reducing eye strain.

The electrical lighting consists of direct/indirect and pendant style energy efficient LED light fixtures. Continuous linear lensed strip LED light fixtures are used in a diagonal pattern throughout the building at strategic locations to add unique architectural interest. Daylight harvesting controls are used to save energy for the lighting by automatically reducing the light level output when sufficient daylight is available through the building windows.

"It's not just about saving energy anymore," Stringfellow says. "New, stricter energy codes are requiring energy efficiency across the industry. But now, instead of asking whether we'll incorporate energy efficiency in our projects, we're utilizing the Energy Design Assistance program to explore the various options and make smart, cost effective choices."

Indoor air quality was also a big priority. They chose low off-gas emitting characteristics in all of their interior finishes for flooring/carpeting materials, wood wall panels, and paints/adhesives.



Finally, the new building includes amenities that previous offices never had: an employee café with large windows to capture ample daylight, a multi-purpose training/conference room, a pre-function break-out space containing a service bar, a catering kitchen, and an employee fitness center with locker rooms. And a large outdoor patio located on the 5th floor complete with gas grille is the perfect spot for staff to enjoy fantastic views of downtown Minneapolis.

Everyone loves the new building, though there's debate over which feature is the best.

"I like the daylight design," Stringfellow says. "This is so much brighter and more cheerful. It really affects your psyche."

"Everything has been so thoughtfully created, from the building configuration to the air quality, to make this a welcoming and invigorating environment," adds Hille.

Multiple measures mean big savings

The biggest energy savers Kraus-Anderson installed in their new building are:

- High efficiency heating and cooling system (Two identical package rooftop variable air volume air handling units with natural gas fired preheating and direct expansion cooling with evaporative spray condensing)
- Windows/glazing
- Dimming and daylighting controls
- LED lighting system that was 30 percent more efficient than code
- Timer control of office equipment

The measures earned Kraus-Anderson Energy Design Assistance program rebates of more than \$146,000 and will save them an estimated \$80,000 per year in energy costs.

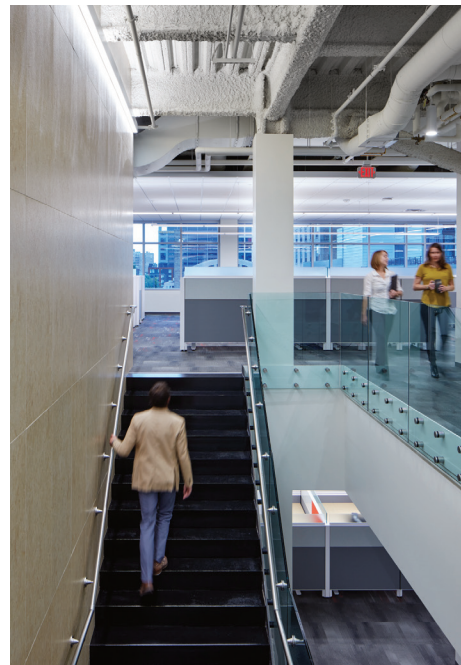


Next Steps

Stringfellow meets with his Xcel Energy representative on a regular basis and says he'll continue to look for other improvements to be made over time.

"We own the building and since we are a real estate company, we've taken a close look at long term effects but we know there will be adjustments we can make over time to save even more energy and money," Stringfellow says.

If you're planning a new construction, addition or major renovation project, visit xcelenergy.com/BusinessNewConstruction or call the Business Solutions Center at **855.839.8862**.



All photos courtesy: Corey Gaffer Photography