

Washburn Center for Children:

New, Energy-Efficient Space Lets the Light Shine on Kids

Washburn Center for Children is the state's leading children's mental health center, caring for a wide variety of children's needs such as attention deficit disorders, trauma, behavioral problems and anxiety.

Serving more than 2,700 children a year, the Center's staff is always focused on providing just the right environment to help children be their best.

Between 2004 and 2010, the number of children and families receiving mental health services and support had more than doubled as the nonprofit strategically grew its programs in order to better meet the community's mental health needs. CEO Steve Lepinski and staff realized the need for a newer, more spacious facility.

They knew immediately that they would build energy efficiency and sustainability into the project, with a goal of achieving LEED Gold certification. After a successful capital funding campaign, they broke ground on a new facility that would include efficiency, sustainability and a healthy, welcoming respite for clients, families and staff.

Choosing efficiency

Lepinski worked with the architect, general contractor and Xcel Energy to make sure they had everything they needed to build efficiency right into the plans.

Several strategies were identified by Xcel Energy's Energy Design Assistance program, which provides computerized energy modeling to identify various efficiency measures available, potential costs, payback terms and rebates.

As part of the program, some participants can opt for a daylighting study to help them identify ways to save. Lepinski and his team learned that installing daylight sensors would help them use less electricity as lights remain off when there's enough daylight in the building. They further reduced their lighting needs by installing high-efficiency lighting and controls, which provided a 20 percent savings compared to code.



The mechanical was next. Xcel Energy funded a study to evaluate their HVAC options. Based on the report's recommendations, they installed water to water heat pumps and added energy recovery ventilators to expand their savings by capturing and reusing heat recovered from the building. They opted for the system which resulted in the lowest annual energy costs, lowest annual emissions and the lowest energy use intensity, or EUI.

Finally, installing high-efficiency windows that included glazing provided another 11 percent of their overall kilowatt savings. To top it off, they added solar panels to supplement energy consumption.

All of these combined measures resulted in an annual energy cost reduction of almost 35 percent.

“We were committed to do whatever we could in terms of efficiency, and we received \$5 million dollars from the state bonding bill that came with sustainability requirements to really keep us on track,” says Lepinski.

In addition to efficiency, they built on a redeveloped brownfield site where contaminants were remediated. They minimized pollution due to construction activity through a comprehensive erosion and sedimentation control plan and continually save water through low-flow water fixtures and a water efficient irrigation system.

The building is now a model of efficiency, environmental stewardship and the perfect place for children to thrive.

Everything they want

Efficiency and sustainability meet style and function in the new space.

Washburn Center’s main entrance opens into a two-story, sun-lit atrium. Indoor and outdoor spaces were thoughtfully intended to foster therapeutic healing for children. Curved glass walls lead to views of a storm water garden. Stairways reveal panoramic views of downtown Minneapolis.

Classrooms have individual bathrooms, and there are observation rooms and the latest technology throughout.



Efficiency highlights

- Estimated annual energy savings: **407,433 kWh**
- Estimated peak energy reduction: **41%**
- Estimated annual energy cost savings: **\$38,825**

To ensure that natural light reached every room in the building, the footprint was deliberately designed to be only 48 feet deep. Every therapeutic room is drenched in natural light. As a bonus, the use of natural daylight reduces the need for lighting, adding to the overall energy savings.

“It’s really been amazing both from a staff and community perspective that we could design a building to do exactly what we wanted it to do,” says Lepinski. “A community member paid us a compliment simply by telling me, that just walking into this building makes her smile. That’s exactly what we wanted.”

For more about Xcel Energy’s Energy Design Assistance program and rebate offerings, visit xcelenergy.com/Business or call the **Business Solutions Center** at **1-855-839-8862**.

