# Northwestern | sustainNU

# 630 Emerson

### **Green Building Profile**

The campus residence at 630 Emerson opened in 1928 to serve undergraduate women. In 1981, it became home to Hobart House, the Women's Residential College. The residence houses 50 students in a mix of single and double rooms. The building includes several lounge spaces, a kitchenette, a library, a computer lab, and an exercise room.

In 2013, the building underwent major renovations, and in February 2015, it earned Leadership in Energy and Environmental Design (LEED) Silver certification from the U.S. Green Building Council (USGBC). The project also included the renovation of 626 Emerson, which is currently home to the Phi Mu Alpha Sinfonia, the world's oldest and largest national fraternal society in music.

### **Green Building Highlights**

The LEED Certification process used for this project (New Construction and Major Renovations v2009) was based on a 110-point scale. The 630 Emerson renovation project received 51 points, earning Silver certification.

- **Sustainable Sites:** The building has close access to two train and bus lines.
- **Water Efficiency:** With the installation of efficient plumbing fixtures, water consumption was reduced by 30 percent.
- **Energy and atmosphere:** 70 percent of the electricity to power the building is procured through green renewable energy sources.
- Materials and resources: 98 percent of the buildings structural elements were reused as part of the renovation.
- Indoor environmental quality: Low-emitting paints, flooring, and agrifiber (a mineral-free particleboard) were used to maintain indoor air quality.





#### What is LEED Certification?

Leadership in Energy and Environmental Design (LEED) certification is a U.S. Green Building Council program that recognizes building designs that are resource efficient and cost effective while providing a healthier and greener lifestyle for building occupants.

### **Green Building Features**

# Sustainable Sites 16 out of 26 possible points

The renovation project minimized its impact on the site by staying within existing boundaries and avoiding the need for additional development of the surrounding land. The building is in a walkable neighborhood that is close to many essential services such as banks, grocery stores, and libraries. Public transportation is available, with proximity to the 'L' and Metra train lines and bus stops. Covered bike storage was made available to residents. Solar reflective materials were used to prevent the heat island effect.

#### Water Efficiency 6 out of 10 possible points

With the addition of efficient plumbing fixtures, water use was reduced by 30 percent. The landscape was designed not to require permanent irrigation systems, preventing excessive water use.

#### **Energy and Atmosphere** 10 out of 35 possible points

The renovation project resulted in a 14 percent decrease in energy use. The HVAC systems are free of ozone-depleting compounds like CFCs and halons. Additionally, Northwestern committed to purchasing 70 percent of the electricity for the building from renewable energy sources for two years.

### Materials and Resources 7 out of 14 possible points

Throughout the renovation, efforts were made to reuse existing materials as much as possible. Overall, 98 percent of the structural elements and 70 percent of the nonstructural elements were reused. The project reduced its environmental impact by diverting 77 percent of construction waste from the landfill. As for building materials, 97 percent of the wood and wood-based materials were certified as sustainable by the Forest Stewardship Council.



# Indoor Environmental Quality 7 out of 15 possible points

Safety procedures were in place during construction to maintain air quality for construction workers. The project team used paints free of volatile organic compounds (VOCs), low-emitting flooring materials, agrifiber, and wood products that do not contain urea-formaldehyde. Temperature controllability is available in all shared spaces and rooms to enhance user comfort.

# Other Credits 5 points

Additional points were earned for exemplary performance in green power and certified wood usage. With proximity to two rail lines, the project also earned bonus points for public transit access. Additionally, the building received credit for having a LEED Accredited Professional on the project team.

### For More Information

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#### Learn about LEED certification

www.usgbc.org/leed