

The Harper Center

Sustainable Design Quick Facts



LEED Criteria Evaluation

The building has been evaluated against the [LEED criteria](#) to consider the potential for LEED certification. Although the building will not be submitted for LEED certification, it does very well in meeting the objective. The design team did not limit itself to just meeting LEED.

Relating to LEED certification, the following criteria were met:

- Constructed on a Brownfield site with the corrective action accomplished for construction.
- Utilizes existing parking facilities.
- Adjacent to public transportation and the University shuttle route.
- Spaces for bike racks that will be incorporated into the project.
- Showers for use by bicyclers and others taking advantage of the Fitness Center.
- Utilizes natural materials like wood and stone.
- Products like brick are purchased from the region to reduce freight costs and bolster the local economy.
- Connected to the district heating and cooling system to negate the need for stand-alone utility equipment.
- A significant portion of façade glass to include the open southern exposure for the grand staircase and the atrium which gets eastern sun; both of which promote the use of daylight.
- All carpets are manufactured with recycled content.



Nebraska and International Energy Code

Additionally, the design is in compliance with the Nebraska and the International Energy Code. The Code has directed the selection of window glass, exterior wall construction and roof insulation. These considerations will promote a comfortable building with even temperatures and natural lighting.

Additionally, products incorporated into the finishes will have reduced off-gassing of noxious chemicals to provide a higher quality experience in the building.

Along with the collaborative design that was mindful of energy conservation from the beginning, there have been several measures incorporated into the design to foster energy conservation. These items include:

- Using a dry type electrical transformer that has a NEMA TP-1 high efficiency rating.
- Incorporation of lighting controls for the atrium and public spaces that shut off lights not needed and allows for harvesting of daylight.
- Occupancy sensors are designed into offices, classrooms, meeting rooms and other spaces to shut down lights when the spaces are not being used.
- Spaces like classrooms are provided with multi-level light switching to allow for minimal use of lights.
- Florescent lighting will be accomplished with high efficiency lamps like T-8 or better.
- Carbon Dioxide sensors are incorporated into the heating controls system so the amount of outside air entering the building is sufficient for the health and comfort of the occupant but not so much outside air that it becomes additional work to condition the space.
- Variable speed motors are utilized on all fixed equipment like air handlers to reduce the amount of electricity needed for startup and for fan or pump operation.
- Use of a variable air volume heating and cooling system that by its very design save energy.
- Installation of a heat recovery wheel in the Ballroom to capture heat that might otherwise be exhausted from the building. The wheel also optimizes air conditioning by cooling incoming air.
- Additional attic insulation has been added to exceed the minimum requirements of the applicable codes.
- Instantaneous water heaters are used to reduce the amount of storage needed for domestic hot water.
- Temperature and other climate controls blanket the space to ensure optimization of the heating and air conditioning equipment without compromising comfort.

