

Environmental Center in Woodbury

Built with sustainability in mind



Sustainable Building

Sustainable building, sometimes called “green building” or high performance building is the practice of designing, constructing, operating, and maintaining buildings in ways that conserve natural resources and reduce pollution. It also means creating a building that is healthier and more comfortable for its occupants, consequently enhancing productivity.



Washington County Environmental Center in Woodbury

Planned, designed, constructed, and operated to minimize environmental impact and save money

The Washington County Environmental Center was designed and built utilizing the Minnesota Sustainable Building Design Guidelines, which the County Board adopted in 2005. The 24,000 square foot center, built in 2009, is located next to the Washington County Public Works South Shop at 4039 Cottage Grove Drive in Woodbury.

Sustainable Building Features

The following represents a partial list of sustainable features of the Environmental Center building and grounds.

Site

- Located near highest population area in County for driving efficiency
- Nearly 100% containment of stormwater runoff for the Environmental Center and the adjoining Public Works site:
 - Large stormwater retention/infiltration pond
 - Rainwater harvest system - rain water is captured from roofs, piped into a filtration system, and stored in tanks for partial irrigation of property

Air

- Interior finish materials selected with low or no VOC's to reduce off-gassing and improve indoor air quality
- Electric forklift in shipping/packaging area

Water

- Water usage for irrigation is reduced by as much as 25% with rain water harvesting system
- Flush valves allow custom water flow, determined by the user or time based on the usage of the toilet

Energy

- Rock/gravel roof material improves reflectivity which reduces utility consumption for cooling
- Energy Star ® rated appliances, computers, fax, and printer/copier/scanner, and E-PEAT silver rated LCD monitors
- Networked multi-function printer/scanner/copier for office functions
- Dyson Airblade™ hand dryers in locker rooms uses up to 80% less energy than warm air hand dryers
- Tinted glass allows daylight transmission with reduced heat gain
- Transparent, sun-reduction shades allow viewing while considerably diminishing heat gain
- High efficiency EER roof top units with an R410a (with 0 ozone depletion) in lieu of R22
- Occupancy sensors automatically activate lights when areas are in use and timers shut off lights when people are not in the spaces

- Daylight sensors turn off the lights, or lighting is not activated, when sufficient natural daylight is in the space

Materials

Recycled Content Materials:

- Concrete footings, floors and retaining walls – approximately 30% fly ash (a by-product of coal combustion)
- Steel joists – 96% raw steel materials
- Cold formed steel – 25% raw steel materials
- Steel decking – 70% raw steel materials
- Copper panels – 70-100% recycled building copper
- Roof insulation – 25% recycled content
- Aluminum curtainwall entrances and storefront products – 20% post-industrial recycled aluminum
- Acoustic ceiling tile panels – 72% recycled materials
- Porcelain wall and floor tile – 50% pre-consumer materials
- Lobby/Free Product Room tile – 70% recycled granite and marble
- Carpet – 12% post-consumer and 28% post-industrial recycled content
- Computer cabinet surface – ShetkaStone, 100% post-consumer recycled newspaper
- Asphalt paving – 5% tear-off (used) recycled roof shingles, totaling 70 tons
- Workstations – remanufactured and made from 85% recycled content
- Office chairs – 38% combined pre and post-consumer recycled content
- Stacking chairs – 21% post-consumer recycled content

Materials that can be recycled:

- Most of the building products, such as structural steel, concrete, glass, and aluminum are partially made from recycled materials and are nearly 100% recyclable.

Materials made from natural materials:

- Wood doors are manufactured with “Smartwood” guidelines, made from trees that are in certified renewable and sustainable forests
- Tabletops are made from *EcoSunflower Biocomposite*, a board material made from sunflower hulls, a rapidly renewable material

Waste

- Construction debris collected, sorted and recycled (off site)

Construction Manager: Jorgenson Construction Inc.

Architect: Oertel Architects