Rosemary Garfoot Public Library

A Self-Guided Tour of LEED Features

Welcome to Wisconsin's first green library building. Since 1964 the Rosemary Garfoot Public Library has served as a central gathering place as well as a prime source of information for the community of Cross Plains. In committing to support a sustainable building project, the citizens, Board and staff have created a library that serves as an example of environmental responsibility. The building itself is an educational tool just as much as the collections it contains.

In order to ensure the highest quality of sustainability, the Library was designed using the Leadership in Energy and Environmental Design (LEED) Rating System. This system recognizes performance in five key areas: sustainable site development, energy efficiency, water savings, indoor environmental quality, and materials selection. Based on a point system, projects are awarded Certified, Silver, Gold or Platinum certification depending on the credits achieved.

The Rosemary Garfoot Public Library has achieved a LEED rating of Silver and is investigating a possible upgrade to Gold.

Before arriving at the building's main entrance, you encountered the first environmental feature of the Library, the ***RAIN GARDEN.*** Designed to soak up rain water from roofs, driveways and lawns, rain gardens fill with a few inches of water that slowly filter into the ground rather than running off to storm drains and, thereby, contributing pollutants to streams and lakes. Chances of local flooding are also reduced by rain gardens which allow about 30 percent more water to soak into the ground than conventional lawns. A second rain garden, located behind the Library building, will eventually be planted with native plants purchased with a grant from *Plant Dane*. Volunteer Master Gardeners, assisted by elementary school students, will do the planting. For more information about water efficient landscaping design, including rain gardens, visit the UW-Extension website at *http://clean-water.uwex.edu/pubs/index.htm*.

After entering the building through the timber framed lobby, you are welcomed by a beautifully crafted ***CIRCULATION DESK.*** The desk was created using silver maple wood from trees that were reused from the building site and a surface made from compressed, recycled paper. The floor mat you walked over in the lobby was made using recycled tires.

The ***COLUMNS*** and ***DISPLAY SHELF*** along the foyer wall were also created from wood recycled from the site. The ***CARPETING*** throughout the Library was made from squares of recycled carpet remnants. The squares can be replaced individually, so very little waste results from having to repair or replace a small area.

Beyond the centrally located desk, notice a bank of north facing ***WINDOWS***, designed to capture daylight while minimizing the heat of the sun. Look up from where you are standing, and you will notice the ***CEILING FANS,*** designed to reduce air conditioning output. Ceiling fans in the home are an energy efficient alternative to air conditioning in Wisconsin on all but the hottest days.

Motion sensor and photo sensor controlled ***LIGHTING*** throughout the entire building also contributes to the Library's energy efficiency. Electrical energy generation is the most inefficient form of power production. Fifty percent of electrical power generation is wasted through heat loss at power plants. The Library's integrated "cool day lighting" design is 40 percent more efficient than a traditional lighting system. At home, by using compact fluorescent rather than incandescent light bulbs, you can potentially lower your energy costs by 40 percent.

CORK FLOORING, derived from a rapidly renewable resource, was used to finish the floor under and around the Circulation Desk, and in the Reading, Reference, and Young Adult areas located along the back windows. ***WALL PAINT*** and adhesives used throughout the building were made from non-toxic, water soluble ingredients that do not add volatile organic compound gases to the environment, avoiding what was once referred to as "new car smell".

As you continue to your right, you will come to the ***STORYTIME ROOM.*** This room, as well as the Technical Services Room on the opposite side of the foyer, features a skylight ceiling design with baffles that filter the natural light as it enters the room. This room is also outfitted with a craft area

finished with recycled laminate flooring, wheatboard cabinetry, and a countertop covered by a recycled laminate. Notice the playhouse, custom built from Baltic birch plywood and finished with water-based polyurethane.

Continuing toward the northeast side of the building you will come to the ***RESTROOMS.*** Both are outfitted with high efficiency flush toilets that use only 1.1 to 1.6 gallons of water per flush and solar-powered, motion-sensitive sinks. The men's room contains waterless urinals that use a filtration system. These three features reduce water usage by thousands of gallons per year. You can save water at home by replacing old toilets with newer water efficient models or simply by placing a brick in the tank of older toilets to reduce the amount of water usage.

As you continue toward the ***COMMUNITY ROOMS,*** take note of the ***COMMUNITY KITCHEN,*** finished like the Storytime Room, with recycled vinyl flooring and wheatboard cabinetry covered by recycled laminate. Energy Star rated appliances such as the ones found in this kitchen are the most energy efficient available.

As you return to the central area of the Library you will pass by the Children's Area. On the shelves closest to you is a collection of environmentally-focused children's books. An adult environmental collection is located on the other side of the building, in the adult non-fiction area.

The southwest side of the building houses the ***TECHNICAL SERVICES ROOM, OFFICES,*** a ***STAFF ROOM,*** and two ***STUDY ROOMS.*** All cabinetry and counter surfaces are made from wheatboard and recycled laminates. In the first study room you will find two hand-built cabinets, generously created by a talented library neighbor for the Cross Plains Historical Society's displays. One cabinet is built from the reclaimed wood of a local ash tree. Note the beautiful trestle table crafted by an area artisan from a slab of silver maple, also taken from the site.

Several of the green features of the building cannot be seen. For example, the insulation is made from recycled blue jeans! Radiant floor heating along the windows is utilized to "wash" the windows with heat to prevent fogging. The building is outfitted with an AON Original Equipment Manufacture HVAC rooftop unit. Together with an efficiently sealed "building envelope", heating and cooling consumption in this building is reduced by almost 50 percent. The largest source of residential dwelling heat loss is a porous "building envelope". Some solutions to this problem include caulking, weatherproofing and insulation.

You can track the building's energy use by viewing the Rosemary Garfoot Public Library's website at www.scls.lib.wi.us/csp/. When you visit the homepage you will find a link for a Real Time Energy Report. This public display, sponsored by Madison Gas & Electric, provides hourly updates of the building's energy consumption, natural gas use, and a record of outdoor temperatures. More information about using energy wisely can be found at www.mge.com.

Another excellent source for information about green building is the U.S. Green Building Council www.usgbc.org. This website includes comprehensive information about LEED certification. A broad range of information on environmental issues is available in the library's environmental collection. For even more information or any questions at all, please feel welcome to ask a librarian!

Some selections from the library's environmental collection:

~ *Community Energy Workbook; a guide to building a sustainable economy.*
Alice Hubbard & Clay Fong. 1995

~ *Green Infrastructure; linking landscapes and communities.*
Mark A. Benedict & Edward T. McMahon. 2006

~ *The New Ecological Home; a complete guide to green building options.* Daniel D. Chiras. 2004

~ *Good House Cheap House.* Kira Obolensky, 2005

~ *Natural Home Heating.* Greg Pahl, 2003

~ *The Passive Solar House; using solar design to heat and cool your home.* James Kachadorian, 1997

~ *Green Clean; the environmentally sound guide to cleaning your home.* Linda Mason Hunter, 2005

~ *Toward Sustainable Communities; resources for citizens and their governments*
Mark Roseland, 2005

~ *Eco-refurbishment; a guide to saving and producing energy in the home.* Peter F. Smith, 2004

~ *Understanding Renewable Energy Systems.* Volker Quaschning, 2005

~ *Sustainable Construction: green building design and delivery.* John Wiley, 2005

~ *Ecological Literacy: educating our children for a sustainable world.* Sierra Club Books, 2005

Rosemary Garfoot Public Library ~ 2107 Julius St., Cross Plains, WI 53528
608/798-3881 ~ www.scls.lib.wi.us/csp/
Printed on recycled paper.

8/07