

Chattahoochee

NATURE CENTER



A Greener Discovery Center

self-guided tour

The Discovery Center was built to meet LEED (Leadership in Energy Efficient Design) standards set by the U.S. Green Building Council and is currently under review for LEED certification. The result is a building that uses less energy and is designed to reduce long term impact on the environment.

The tour begins on the upper level of the Discovery Center at the Admission Desk.



Discovery Center

1. A Green Beginning

You are standing in a LEED Certified building— one of a handful in metro Atlanta. This tour will highlight just a few of the many environmentally friendly and energy efficient materials and processes used in the construction and operation of the Discovery Center.

Some innovations are easy to see but some are not so obvious. For example:

- Nearly 75% of the waste generated during construction was recycled.
- Many materials used in the construction of the building were obtained regionally (within 500 miles of CNC).
- Over 15% of the air in the building is fresh air thanks to a pressurized HVAC system.

If after the tour you have additional questions, CNC's knowledgeable staff will be happy to help you.

2. Recycled Materials

- Admission Lobby and Bathrooms

Take a look at the admission countertop, stairwell beams and bathroom countertops. Recycled building materials were used whenever possible.

- The admission counter is made of recycled sorghum pulp. Sorghum is often used as animal feed and is the primary ingredient in molasses.
- The two-story tall "reeds" rising from the stairwell are made of Paralam, a building product made of wood scraps that are pressed into sheets and laminated together.
- The bathroom countertops are made of recycled detergent bottles.



Sorghum

3. Interior Decorating - River Resource Gallery

The carpeting and the paint throughout the building are made using low VOC (volatile organic compounds) emitting materials. This means that they give off very little of the chemicals often found in new materials, thus improving air quality within the building.

Carpeting donated by Interface, Inc

4. Natural Light - River Resource Gallery

Nothing is more energy efficient than free, natural light. On sunny days windows and Solatube™ skylights bring so much light into the Discovery Center that the building's fluorescent lights are unnecessary.

Solatubes™ amplify the natural light by using special parabolic lenses. These lenses focus and magnify sunlight, all without spending a single kilowatt of energy.

To further save energy, the galleries and rooms have light and movement sensors.

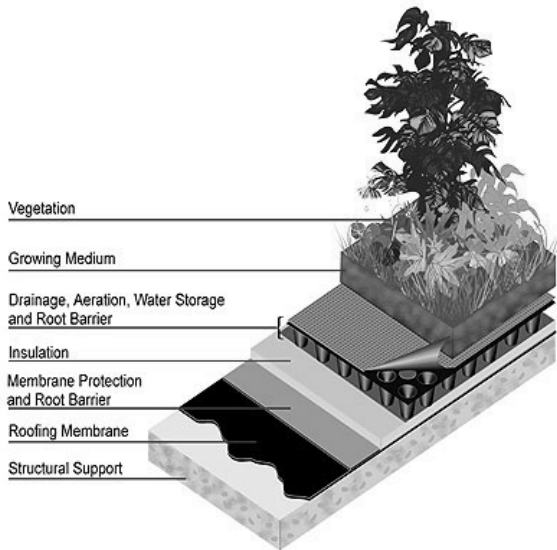
During the day, light sensors detect when there is enough natural light and turn off building lights. At night, movement sensors make sure that the lights turn off when everyone has gone home.

Solatubes donated by Solatube, Inc



5. Green Roof - Green Roof Terrace

You are enjoying a one-of-a-kind green roof. This roof garden was created using plants found natively on the rocky outcroppings of Stone Mountain, Panola Mountain and Mount Arabia and include Confederate daisy, Moss verbena, Prickly pear cactus and Broom sedge. These plants can thrive in extremely shallow soils and are highly drought tolerant. More than a pretty garden, the soil and plant roots capture rain water which slows water run-off during storms. The plants also reduce the amount of heat that is absorbed by the building and radiated back into the environment. This greatly reduces CNC's contribution to the "heat-island effect" created by man-made structures.



Green Roof was made possible by the Home Depot Foundation

6. New Life for Old Bags - Green Roof Terrace

Look down- did you notice that you are not standing on wood decking? Below you are thousands of old plastic grocery bags and hundreds of pounds of sawdust. This Trex Decking uses the old plastic bags, wood pulp and sawdust that would normally end up in a landfill. Through a heating and pressing process, these materials are transformed into a highly durable building material.



7. Blue Water? - Through River Resource Gallery and out side door

As you exit the building, notice the reservoir built into the wall just outside of the doors. Rain water is funneled to this reservoir from the slightly inclined butterfly roof. This water is collected into underground cisterns (you can see their black, round lids below) that can hold up to 4,600 gallons of rainwater. All of that water is used to supply our low flow toilets and occasionally irrigate the gardens. By employing these cisterns, CNC is able to reduce the amount of water that we use from local water treatment plants and, ultimately, the river. If you find blue water in the bathroom toilets, you know that the cisterns are doing their job.



Low Flow Toilets donated by Toto USA

8. Recycling in Concrete - Follow path down hill to lower Discovery Center Entrance

A LOT of concrete was used in the construction of the Discovery Center. The concrete used in the building and walkways is made of abundant local materials and the excess was easily recycled. Some of the sediment that makes up the concrete in the floors and walkways may even incorporate concrete from the old Discovery Center. The concrete used in the Discovery Center and new walkways also contains a surprise green feature- fly ash. Fly ash is a by-product of coal burning power plants. The fly ash takes up spaces in the concrete that is usually filled by water in the mixing process. More fly ash means that less water was needed to create the building and walkways.

9. Recycled Exhibits - Complete your tour in the Nature Exchange

Even the exhibits include recycled materials, low VOC paints and glues and careful water use. If you look carefully, you might even find recycled animals. As you wander through the *Discover your Wetlands* exhibit, look for 13 animals made from recycled materials. Want to get started? Look to the left above the river tank and you will find a friendly turtle made from a bicycle helmet and golf club heads. What other recycled

**We certainly hope that you enjoyed your tour of the Discovery Center.
We look forward to your next visit!
www.chattnaturecenter.org
(770) 992-2055**