



E-House

The Elachee Visitor Center is home to a demonstration E-House that displays energy conservation and sustainable building practices.

This 12-foot by 20-foot building is a feature of Elachee's *All About Energy* program for students visiting Elachee on school field trips. This is a hands-on, brains-on standards-based exploration of renewable energy and energy conservation.

The E-House design includes solar panels, high r-value insulation, energy efficient windows and doors, a "green roofing" system and specialized landscaping that reduces or eliminates the need for supplemental water.

Designed by architect **Jack Bailey** and built by **Tipton Construction Company**, this invaluable teaching resource was made possible thanks to an **Appalachian Regional Commission (ARC)** grant awarded to **Elachee Nature Science Center, Hall County, Hall County Schools, Lanier Technical College** and **ZF Wind Power**.

The one-room E-House and surrounding landscape have a number of interesting features:

- Four **photo-voltaic** (electricity producing) solar panels that provide up to one kilowatt of power for the building's electrical needs;

- A cut-away display revealing a variety of **wall insulation types**;

- A passive **solar tube** that provides interior lighting equal to illumination generated by 12 100-watt bulbs;

- Three **solar thermal** (water heating) **panels** that meet the hot water needs of Elachee's Nature Preschool classroom;

- A **living green roof**, designed and installed by **Fockele Garden Company**, that helps reduce the amount of storm water runoff originating at the building; and

- A **certified pollinator garden**, courtesy of the **Hall County Master Gardeners**, surrounding the house with drought tolerant plants that also attract and support native species of insects and other pollinators.

At the 2013 dedication of this community resource, Hall County School Superintendent Will Schofield said, "If we're not careful we will be the first generation of Americans to leave fewer opportunities to our children than were left for us. Now, more than ever," he encouraged, "We better start to get our arms around this idea of what is sustainable for the generations to come. It's amazing what we can get done as a community if we quit worrying about who gets the credit."

Contact Elachee for more information regarding the E-House, our new solar panels or any of the other exciting new environmental education and conservation projects and programs.