

Chattahoochee Hills, Georgia- Nest Cottage

Right size, efficient home in a small homes community.

Southface, a consultant in sustainable development, in partnership with the U.S. Department of Energy's Building America program, designed a community of 15 cottages in Chatahoochee Hills, Georgia, approximately 30 miles outside of Atlanta. The cottages are located in Serenbe, a modern urbanized village, which was only established in 2004. The costs of housing and demand for land in the Atlanta Metropolitan Area highlights the need for more efficient and sustainable development.

Cost and Design

- 1,100 square feet, with other cottages in the community ranging in size from 950 to 1,650 square feet
- \$220,000 construction cost, with higher costs due to solar panel installation, inclusion of numerous high-efficiency technology and design elements, as well as considerations for building on a slope
- 32 HERS Rating, meaning it is 68% more efficient than a standard new home
- Energy Star and EarthCraft Home Platinum certified
- Meets Building America savings goal of using 30% less energy than International Energy Conservation Code homes, saving an additional \$417 per year
- Uses a geothermal heat pump which draws water in from a nearby lake to heat and cool the house, with common infrastructure between all 15 cottages to save on construction costs



- All HVAC ducts exposed in conditioned space, reducing heat or cooling loss inside walls, the basement, or attic
- Oriented and designed to maximize use of natural light



Funding

- As a Build America test home for energy efficiency data collection, the funding mainly came from the U.S. Department of Energy, with support from Southface

Lessons Learned

- Small and right-size home design is not just for single-home construction, but can be the basis for a whole community of homes
- Building homes as a community with shared infrastructure can provide cost savings
- High tech energy efficiency elements can create lifetime savings, but can create higher upfront costs

Learn more

https://www.architectmagazine.com/design/case-study-earthcraft-cottage-home-in-georgias-chattahoochee-hill-country_o

https://www1.eere.energy.gov/buildings/publications/pdfs/building_america/serenbe_nest_cottages.pdf