



The McKenzie House

1843 West 45th St. • Cleveland, Ohio

Construction Type: new

Completion Date: Summer 2004

Sustainable Sites

By building on a previously disturbed site in an urban neighborhood, the McKenzies were able to reduce urban sprawl and preserve green space.

Water Efficiency

Low-flow fixtures have been used throughout the house to reduce water consumption.

Energy & Atmosphere

Grid-tied photovoltaic cells allow the McKenzie house to produce electricity to meet some of its energy demand. Roof-mounted solar-thermal collectors further reduce energy consumption by using the sun to heat water, which is used in both the hot water tank and space heating. Abundant south-facing windows also allow the McKenzies to utilize passive heating in the winter, while an overhang shelters them from the summer sun. A gravity film and an air-to-air heat exchanger harvest the remaining heat from wastewater and air before it exits the home. Efficient lighting and windows further reduce the energy consumption.

Materials & Resources

Reused, recycled, and local materials have been used throughout the house's construction. A stained concrete slab floor reduces the need for flooring materials. Cement board siding is composed of recycled materials and has an extended life.

Indoor Environmental Quality

Low-emitting materials have been used throughout the house.