

The Cleveland Prototype Housing designs will demonstrate sustainable building practices by integrating a number of strategies into one very sensible design solution: using recycled, low-polluting materials and controlled ventilation equipment to preserve natural resources and support environmentally progressive industries. By efficiently using inner city land, this development will help revitalize downtown areas while reducing traffic, pollution and energy use from commuting.

The prototype houses use a systems approach to advanced housing design to meet the following goals: **increase affordability, improve health and safety**, improve comfort and increase durability and resource efficiency. These homes will reduce the health risks from fossil fuel com-



bustion by using power vented combustion appliances. Air tight construction techniques allow for ventilation in its most energy efficient manner. The **benefits** also include local jobs, less environmental impact and reduced energy consumption.



## Cleveland Prototype Housing

Building Science Corporation with  
Betsy Pettit Architects  
Cleveland, Ohio 1999

2247 sq. ft. four bedroom plus loft, 2 1/2 bath

### Specifications

- R-30 blown cellulose attic insulation
- R-23 walls with 6" fiberglass batts, 1" EPS sheathing and advanced framing
- Advanced framing (2 x 6 @ 24" o.c.) creates less thermal bridging, more room for insulation, more efficient use of lumber, and less construction waste
- Unvented crawlspace with R-10 perimeter insulation provides permanent access for any future mechanical upgrades or repairs and, as a conditioned space, provides ample storage possibilities
- Air retarder system
- Water saving plumbing fixtures
- Compact fluorescent lighting
- Low-E insulating glass with thermal break
- Combination heating and hot water system
- Controlled ventilation for air quality and humidity control
- Non-VOC emitting paint
- Job-site recycling
- The use of universal design features makes the living space on the first floor more fully accessible for anyone with a disability

