

GREEN AND IRRITANT FREE

HUD builds green for sufferers of chemical sensitivities

Developed using US Department of Housing and Urban Development (HUD) funding in the early 1990s, Ecology House is the first affordable housing apartment building in the United States to be constructed and maintained for persons with MCS. The project was completed using readily available materials, with only 11% of the total development cost attributed to the special features required to accommodate persons with Multiple Chemical Sensitivities (MCS). It is expected future endeavors would have a lower percentage as many advancements have occurred in this arena in the decade since Ecology House forged new ground.

Every aspect of the project from site selection to long term maintenance was informed by the special needs and sensitivities of the residents. The attractive 11-unit affordable housing project sits on an urban site with easy access to public transportation and close proximity to health care. In addition to considering the impact on air quality, materials were selected based on durability and maintenance requirements to minimize the introduction of irritating chemicals in the future. It is not just what Ecology House is built with that makes it a healthier environment for the residents, but also how it's used and maintained. Residents and maintenance workers are well educated as to the impact of product choice on air quality with not even the merest whiff of bleach or scented detergents in the air.

The 11 apartments at Ecology House have been occupied since opening, and there is a lengthy wait list of people eager to live in this healthier environment. Ecology House resident for 11 years and Board Member, Connie Barker, will make her unit available for the tour. For the health and comfort of the residents, please refrain from wearing fragrances and scented products when visiting Ecology House.

"We felt like we were walking on Jell-O in designing and planning for Ecology House. The development team had difficulty meshing the widely varying needs of persons with MCS with code requirements and funding limitations. Ecology House is a true demonstration project from which other affordable housing developers can learn."

—Katherine Crecellius, development consultant



GREEN at a GLANCE

- ENERGY EFFICIENCY & RENEWABLE ENERGY
- House wrap installed under siding (Tyvek)
- Aluminum foil vapor barrier (R+ Innovative Energy)
- Insulated under slab foundation
- Attic ventilation
- Double-paned windows (Milgard)
- Hydronic radiant-baseboard heat
- Efficient boiler (Teledyne Laars)
- RESOURCE CONSERVATION
- Fiber-cement roofing (Hardishake)
- Steel siding with factory-baked enamel paint
- Integral color stucco siding
- High efficiency drip irrigation
- Urban infill close to public transit
- INDOOR ENVIRONMENTAL QUALITY
- No combustion appliances in apartments
- Radiant-baseboard heat eliminates forced-air vents
- No pressure treated lumber was used
- Blown-in fiberglass insulation with no formaldehyde binders (CertainTeed Insulate III)
- Zero-VOC interior paint (ICI Lifetime 2000)
- Designed to avoid adhesives
- Low-VOC caulking (GE 100%)
- Silicone Caulk)
- Tile and concrete flooring
- The grout left unsealed
- Plaster interior walls (U.S. Gypsum Imperial Plaster)
- Powder-coated aluminum fencing and railing
- High powered fans vent kitchens and bathrooms
- Whole house attic fans
- Baked-on enamel finished metal kitchen and bathroom cabinets
- Steel door with foam board insulation
- Whole-house water filtration system (Filtrine)
- Low-pollen, fragrance-free landscaping
- Integrated pest management for landscaping