



Year Built 2006
Home Size 3490 Sq.Ft.
Contractors:
Namaste Solar Electric
(See ad on page 23)
Blue Sky Energy Solutions
(see ad on page 17)
 Westwind Architecture
 Porchfront Homes by Paragon Builders

Greener-Greenberg

Greening Suburbia

Alan Greenberg & Catherine Greener

People who decide to build green homes do so for many of the same reasons; to reduce adverse impact on climate change, to minimize the negative impact of extracting and using natural resources, and to live in a healthy home. We're no different. When we found a new construction subdivision home we liked we were excited to find out that the builder was willing to work with us to build a green home.

One of our goals was to significantly reduce our green house gas emissions by minimizing our carbon footprint. The heart of that effort was the installation of a geothermal heating and cooling system, solar panels to produce electricity and icynene soft foam insulation. The geothermal system heats or cools the house by exploiting the year-round temperature of the ground, without the need for a traditional furnace. The 5.1 KW PV system will generate approximately 600 kilowatt hours per month, providing more than enough electricity to run the geothermal system. The icynene insulation minimizes air leakage in the house increasing the efficiency of the HVAC system.

If more subdivision homes were built like ours, it would significantly reduce the need to build new coal-fired and

nuclear power plants, the need for rolling black-outs in the summer, and our dependence on natural gas and heating oil. We think we proved that you can green a subdivision house at a reasonable cost, especially when weighted against future energy prices. It may be cheaper for a builder to construct a conventional house, but the builder doesn't have to pay for the heating and cooling bills. We were also able to minimize and stabilize our future heating costs by not relying on natural gas prices. We look forward to cold winters and hot summers in our PV powered geothermal heated and cooled ultra insulated house.



Catherine & Alan

ENERGY FEATURES

- 5.1 kW PV system, grid-tied
- Ground-source pump heating and cooling system
- EPA-certified wood fireplace
- Icynene insulation
- Low-E windows
- Sun tube for daylighting
- CFL lighting
- Energy Star appliances

WATER FEATURES

- Xeriscaped yard with drip irrigation
- Dual-flush toilets

GREEN FEATURES

- Oriented Strand Board (OSB) sub-floor
- OSB and gypsum wall board
- Engineered lumber joists and trusses
- Low-VOC paint and construction adhesives
- Bamboo wood flooring
- Recycled PET plastic carpeting
- TREX recycled wood/plastic composite decking

RE-USE/SALVAGE FEATURES

- Construction debris recycled - wood, metal and cardboard