ENERGY FEATURES

- 6.84 kW PV system, grid-tied
- 12 solar thermal flat-plate collectors - drainback system
- 6,000 gallon solar storage tank
- Sunspace greenhouse with distribution ducts and fans
- Double 5/8" sheetrock on some walls and ceilings
- Expanded foam insulation
- Extensive engineered HRV system
- Intake air to HRV through PVC pipe buried underground
- CFL lighting
- Energy Star rated appliances
- Power strips and occupancy sensors on applicable electric appliances
- 1" rigid foam insulation on perimeter walls, 2x2's and wall and ceiling members
- Greenblock ICF's in basement walls

GREEN FEATURES

- Fly ash content concrete for foundations and slabs
- FSC certified lumber for framing
- IPE/Pau Lope decking
- Formaldehyde free cabinets and carpet
- AFM Safecoat paint and stains
- Roofing made of 100% recycled carpet

Solar Harvest

Boulder's 1st Zero Energy Home

Eric Doub and Catherine Childs

More than ever, our nation needs less violent resource and foreign policies. And striving to build a home that will be cheap and easy to operate 50 years from now is one way to enjoy the coming transition from fossil fuels to renewables.

Applying to college in 1980, I wrote that studying nuclear energy for a school paper

> " … has been an initiation into energy research, and a synthesis of goals – of self-preservation and academics – that may be the most important thing that's happened to me yet.
>
> "Current events make it desperately clear: We're in transition to a post-petroleum civilization. War in the Middle East, the arms race, revolution in Third World countries all point to a reorganization of the planet's resources.And American lifestyles and consumption are at the center of the crisis. When good, obedient, middle-class Americans – those who guard the system – cannot buy gas or pay the heating bill or get enough to eat, our society will turn upside down. Historian Howard Zinn calls this the Revolt of the Guards. When this happens I want to be a citizen who knows, who has researched, who has hope: for a sane, decentralized, democratic energy system where the power is in the hands of the people and in biomass, efficiency, hydro, wind, solar, and cogeneration."

So when asked how I came to start Ecofutures Building, I sometimes say it's not my fault – I was brought up in north Boulder and just turned out that way. In 1982 I designed and built my first solar project, an attached greenhouse on my parents' house on 9th St. In 2005 Catherine and I are finishing Solar Harvest and expressing the same values but on a larger scale.

The process has been both exhilerating and challenging. "At every turn," Catherine says, "we find chances to push the limits in designing for comfort, health, durability, and beauty. It's fun but also a full agenda!"

A lot of work, indeed – leading to a harvest that we are delighted to share with our community!

Year Built 2005

Home Size 3300 Sq.Ft.

Architect/Designer
Homeowners and Ecofutures Building Inc.

Builder
Ecofutures Building Inc. (see ad page 15)

Solar Contractor
Simple Solar Systems, Joe Callahan (see ad page 10)

City of Boulder Green Points Profile 107 required, 161 received

RE-USE / SALVAGE FEATURES

- Minimized and recycled construction waste
- Salvaged hardwood flooring, doors, cabinets, sinks, and windows

Eric Doub and Catherine Childs and Family