



ENERGY STAR® Home Energy Rating System (HERS) Scale



Confirmed HERS Performance Rating  **-3**

4,600 SF | 5 bedrooms, 3 baths
Built in 2005 | Boulder, Colorado

We built this award-winning home to prove that sustainable, high-performance construction is not only possible but the most viable way to future-proof our homes against rising energy costs.

Electricity

Grid-tied 8.74 kWh roof-mounted PV array producing ~12,586 kWh per year

Heating

- (12) 4x8 roof-mounted Novan flat plate solar thermal collectors provide all space, water and spa heating needs
- 6,000 gallon "heat battery" recycled

dairy tank hooked up to roof-mounted solar thermal collectors provides domestic hot water and radiant floor heating

- 20 gallon electric water heater serves as cloudy cold snap backup system

Cooling

- Earthtubes deliver 65-75° F air through Energy Recovery Ventilator (ERV)
- Coolerado supplies whole house with super-efficient air conditioning (runs on 1/3 power used to run a hairdryer!)

Advanced Energy Design

- Very tight, super-insulated building en-

velope with double drywall interiors

- Triple-pane windows
- High passive solar heat gain via south-facing sunspace. Heat distributed throughout house via fans and ducts.

Green & Healthy Materials

- High fly ash content in all concrete
- FSC-certified wood for framing
- Formaldehyde-free cabinets & carpet plus low-odor wood finishes
- Low-toxic, water-based & sealant-free finishes and low-solvent adhesives
- Salvaged and eco-preferable flooring