Central Oregon

CENTRAL OREGON TOUR OF SOLAR HOMES & RENEWABLE ENERGY AND GREEN BUILDING FAIR

Sponsored by the Building Green Council of Central Oregon, a 3EStrategies project

Saturday & Sunday
October 4 & 5, 2003
10:00am to 4:00pm

EVENT DESCRIPTION

The tour is an opportunity for people to visit 19 homes and businesses in the Central Oregon area. Tour will be a 2 day Renewable Energy and Green Building Fair, held as part of the Bend Fall Festival in downtown Bend.

TOUR HIGHLIGHTS

15 homes and 4 businesses will be on this year's Tour, providing real life working examples of:

- Passive solar design
- Solar photovoltaic systems
- Solar hot water heating systems
- Radiant floor heating
- Straw bale construction
- Healthy home products
- ...And much more

TICKETS

FREE. Even a free lunch on the guided Van Tours!

FOR MORE INFORMATION, CONTACT

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Glick Home

An energy independent dream comes true

When Peter and Nancy sold their manufactured home and decided to build a custom Dutch Colonial, they knew from the start they wanted a beautiful, yet resource efficient design. It was their dream, a "last home we'll-ever-live-in project." What they ended up with on their lush riverfront property is a blend of modern day functionality and Old World charm.

The unique rooflines of the Dutch Colonial Style provide the perfect roof angle for the 20-120 watt photovoltaic panels as well as the solar hot water panels. With radiant floor heating as the primary heat source, the glycol based solar hot water panels preheat the water for the floor as well as for domestic uses. The Solar water system, at an approximate cost of $5,000 minus the $1,500 state solar energy credit, provides efficient and practical use of the sun's rays. Some deciding factors that motivated the Glicks to incorporate active solar into their new home were for insurance against grid power outages as well as the satisfaction of selling power back to the electrical utility.

Not wanting to stop with the active system, great care was taken with the design of the home to maximize the passive solar potential. South facing windows bring in lots of natural daylight, reducing the need for electrical lighting as well as passive solar heat, which is stored in the ceramic tiles on the south side of the house. The comfort and cooling of the home is greatly enhanced by opening skylights as well as strategically placed windows in the interior walls between the rooms, which when opened, create convective airflow. Gambrel eves, which allow sun in for winter warmth and shade in Summer, also add character to the design. Propane gas is used for the 75-gallon water heater for backup hot water, fireplace, cook top and dryer. Last year they spent approximately $900 for propane. This amount should be significantly reduced as the radiant floor controls will be finely tuned this year. Maximum insulation contributes immensely to the heating and cooling efficiency of the home, with no need for air conditioning. Modern appliances like a low energy Neptune stack washer and dyer; temperature-sensing faucets that don't waste hot water and an

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FEATURES/SPECS

- 2,400 square feet, 3 bedrooms, 3 baths, 2 stories
- Home theater & Hot Tub
- Passive Solar including south facing windows and ceramic tiled south wall thermal mass, skylights, natural convection.
- Radiant floor heating with glycol based solar hot water panels preheat the water for the floor as well as domestic hot water uses
- 75-gal propane water heater for backup
- Indirect heat exchanger w/ 85-gal holding tank
- 48- volt electric system tied to the grid with a 2.5 kwh Xantrex inverter and backed up with 16, L16 deep cycle batteries for times of grid outages
- Energy efficient appliances including a Neptune stack washer and dryer, temperature sensing faucets that don't waste hot water and an Amana refrigerator with a bottom freezer