

SUN SENSE

TEXT AND PHOTOGRAPH BY CHERYL HARTZ



Solar panels collect heat for the Mohney home.

In our first green issue last June, *Yavapai* featured Ron and Claudine Mohney's home under construction. We returned to Sedona to see if the finished product lived up to expectations. It did – and then some.

Ron was all for building green, but Claudine wasn't sold on the idea. Through architect Paul Cate, they came up with a compromise that didn't sacrifice comfort and style.

Siting the house for southern exposure allows for passive solar heating and provides extensive natural lighting. Exterior solar blinds are automated on south windows. Compact fluorescent light bulbs occupy light fixtures for "the single biggest impact a homeowner can make" on saving energy, Ron said. Solatubes run through two stories to bring light to the darkest spaces.

The house also includes radiant floor heating, incorporating heated water from solar panels behind the house. Those panels also provide water for the

tankless domestic hot-water system. "We never had a problem with having hot water in the dead of winter on cloudy days," Claudine said.

A pellet stove using recycled wood products provides backup heat, and acts as a cozy fireplace between the kitchen/dining and living areas.

Built of RASTRA blocks of recycled Styrofoam on the lower level with SIPs (structural insulated panels) on the upper floor, the 3,700-square-foot house practically is soundproof – an unexpected plus – and snug.

What Ron said may be the largest installation of solar panels in an Arizona residence – all 60 of them – sit on the first-floor roof, providing electricity. For excess power storage, 56 car batteries sit in a small room off the garage. "It runs the whole house, and draws from the grid only if we have two cloudy days in a row," Ron said. A special hybrid air-conditioning unit also can run off solar power.

The couple put in all ENERGY STAR appliances, along with low-flow toilets.

Most flooring is tile, but the bedroom carpet is made from recycled soda bottles, and the stairway and upstairs are bamboo. Wooden doors are from sustainable forests, and inner partitions use partially recycled steel studs.

Most landscaping is xeriscape, but a small lawn stays green because of reused gray water captured in a 1,300-gallon tank.

Because of all the green techniques the Mohneys have incorporated, they can enjoy that green grass guilt-free. ▽

RESOURCES

Architect:
Cate Design
Cottonwood, 928-634-4980

Exterior Solar Blinds:
Window Wonders
Sedona, 928-282-6297

Floors:
Creative Flooring Designs Inc.
Sedona, 928-204-5542

Solar:
Verde Sol-air
Camp Verde, 928-567-5315

Sedona Solar
Sedona, 928-203-1117

Xeriscaping & Gray Water System:
Arizona Botanical Gardens
Clarkdale, 928-634-2166