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Zero-energy home is going to college

■ The house may become the office of the Northwest Solar Center and will be used as a test classroom for students at Shoreline Community College.

By **KATIE ZEMTSEFF**
Journal Staff Reporter

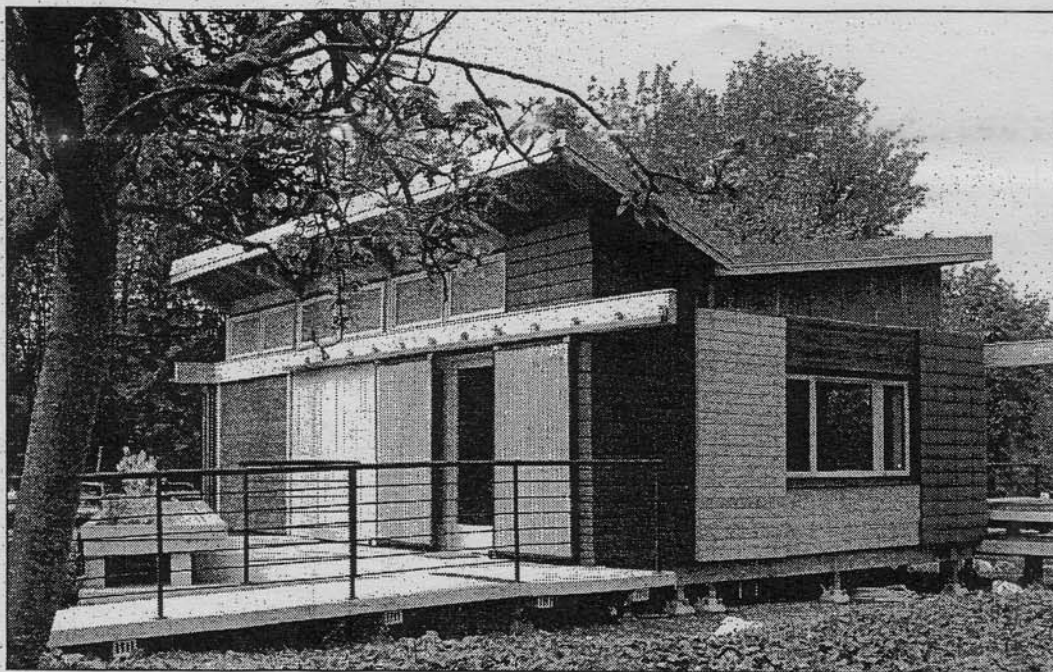
There will be a housewarming party on Thursday for a student-designed, zero-energy home that is moving from a storage shed in Magnuson Park to become a model of energy efficiency on the campus of Shoreline Community College.

The Solar Decathlon home was built and designed by Washington State University students for a national competition that called for a 500-to-800-square-foot building powered completely by solar energy. The two-year project was part of the 2005 U.S. Department of Energy's Solar Decathlon competition.

Judy Yu, director of communications at Shoreline Community College, said the house cost WSU about \$250,000 and was paid for mostly by cash and in-kind donations.

The house is a model of efficiency not only because of its energy source but also because of its integrated systems, she said. The heating and air conditioning, refrigeration, hot water, lighting, appliances and communication systems are integrated for optimal energy savings.

The refrigerator, Yu said, is about 10 times more efficient than a traditional one. Excess



The Solar Decathlon home was built and designed by Washington State University students for a national competition in 2005.

Image courtesy Shoreline Community College

heat from the refrigerator is used to heat water.

"(The appliances) all contribute to the overall function of the house," she said.

The structure is made of recycled and environmentally friendly materials. Mat Taylor, WSU faculty advisor for the project, said the flooring is fast-growing eucalyptus wood, the decking is a wood and plastic composite, the structure base is made of wood that is usually burned or composted and the insulation is highly efficient so the house retains heat in the winter and stays cooler in the summer.

The house was a collaboration between students in different departments at WSU, including some from architecture, engineering, interior design and construction management.

It was built and shipped to Washington, D.C., and spent two weeks on the National Mall. Then it was disassembled and brought back to the state, where it has been stored in a shed, gathering dust ever since, Yu said.

Originally, the plan was to install the house at Magnuson Park but financial constraints kept it in the shed.

Shoreline Community College officials decided to resurrect the structure, but Yu said the "rescue mission" has been a long journey. The house had to be reconstructed and updated to meet code requirements. Students who worked on the house returned to help with the effort.

The completed project will be celebrated on Thursday at a public dedication ceremony.

Speakers include State Rep. Maralyn Chase, D-Shoreline, Lee Lambert of Shoreline Community College and Mike Nelson of the Northwest Solar Center. The event will be at 2 p.m. at the Campus Theater on the west side of the Shoreline Community College Campus at 16101 Greenwood Ave. N.

The house may become the office of the Northwest Solar Center and will be used as a test classroom for students at the community college. Taylor said it will provide a "white board" where students can test systems, such as how solar panels work in cloudy climates.

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