

SunShower house harvests rain and solar power

November 03, 2011 2:45 AM Mary Ann Travis
mtravis@tulane.edu

In the Lakeview neighborhood off West End Boulevard on Harrison Avenue, in an area still a little bare of trees because of the slam of Hurricane Katrina, a SunShower House is going up. Designed by Tulane architecture professors, it is being built by hand. Constructed with Steel Structural Insulated Panels, the house will withstand hurricane winds up to 160 miles per hour.



The SunShower house's "form tells its story," says Judith Kinnard, architecture professor. Its roof forms are designed to collect solar energy and rainwater. (Photos by Sabree Hill)



"A skill saw and electric drill are the only tools necessary to build this house," says Matt Larkin of Oceansafe.

Judith Kinnard, professor of architecture, and Tiffany Lin, assistant professor of architecture, won the [2010 REOSE Sustainable Design Competition](#) for the energy-efficient, two-bedroom house.

The model house is being collaboratively built by New Orleans companies Oceansafe, manufacturer of SSIP; The ReGen Group, sustainable design consultants; C&G Construction, the contractor; and Woodward Design + Build.

Building materials for future single houses of this design can fit into one shipping container that can be sent anywhere in the world. The house is not only hurricane-proof but also will not collapse in a 7.2 Richter scale earthquake. Plus, it is termite and fire resistant.

Of the Harrison Avenue house, Kinnard says, "It is always exciting to see a design from concept to execution. It is satisfying to move through the rooms and see how the light transforms the space."

The unconventional-looking house incorporates all the latest energy-efficient, water-saving technologies. On most days the house will generate more electricity than it uses, causing the meter tracking energy costs to run backwards.

The house's form tells its story, says [Kinnard](#). "The two primary natural resources that are being harvested ? solar energy and rainwater ? are highlighted by the roof forms."