



The Oregonian

Now this will be life at sustainable edge

Thursday, December 20, 2007

David Rosenfeld
The Oregonian

Imagine living in perhaps the most sustainable building possible: drinking rainwater, not using the pipes to the sewer and collecting waste from your composting toilet to fertilize a local forest.

Nine Portlanders won't have to imagine. That's how they'll live in the Kenton Living Building, to be built on the southwest corner of North Watts Street and Interstate, along the Interstate MAX line.

Construction won't begin until spring or summer, but the \$1.5 million project is already generating buzz. The designers won a leadership award for it in October at the Greenbuild International Conference and Expo in Chicago.

"This is not about starving in the wilderness," says Clark Brockman, a lead designer and associate principal of SERA Architects. "It's about changing the way we live and acknowledging there are limits. That's really the shift."

Carbon emission is tied more to buildings than anything else, he says, giving the project urgency.

The idea came in response to the Living Building Challenge designed by the Cascadia Region U.S. Green Building Council. The challenge includes 16 benchmarks, such as energy and water independence and buying habitat to compensate for the building's footprint.

When it's completed, the 4,500-square-foot Kenton building will have nine units, two shared kitchens and living rooms, plus private baths, pantries and mini-refrigerators.

The setup will help meet the net-zero-energy equation -- and foster cooperation, says Peter Wilcox, who will own the building and who is president of Renewal Associates, the project's developer.

"The real interesting story will be the story of the first year and the year to follow, how the residents learn to live in a truly sustainable building in a truly sustainable way," Wilcox says.

Each resident will be limited to 18 gallons of water a day. That's no more than a five-minute shower, five uses of the bathroom sink for 15 seconds, four uses of the kitchen sink for a minute and five toilet flushes.

In fact, plans call for not using a drop of tap water aside from an initial fill of a cistern. Residents also won't use the city sewer system -- that is, if they live according to plan and if state and city officials give them permits.

Other features include a rooftop solar-power system, an onsite dry cleaner that uses sand instead of toxic chemicals and other low-tech innovations such as a basement clothesline. Rents, Wilcox says, will run about \$625 a month. The forest where waste will be spread hasn't been chosen yet, he says. Stacy Stebbins and her boyfriend, Liam Madigan, contacted Wilcox to be considered as renters. Stebbins says they already live in an environmentally conscious way, though monitoring every turn of the tap would step it up a notch.

"The challenge itself makes it intriguing and interesting to us," Stebbins says. "We partly want to do it to show people that it's not that hard. You don't have to change your daily activities; you just have to pay more attention to them."

Still, they know they aren't there yet. The pair will time their water use and monitor their electric bills in coming months. "We're up to the challenge," Stebbins says.

A handful of Portlanders already drink filtered rainwater, but granting the right to a multifamily building will need the approval of state regulators.

Developers also plan to reuse "gray water" -- from the washing machine and household sinks and tubs -- to flush the toilet and irrigate the garden, something else that would require state approval, possibly legislation.

Eco-friendly building materials will, of course, be used to the fullest, much more so than Leadership in Energy and Environmental Design standards, a nationally accepted benchmark for green buildings.

"It's not a question of if everyone can live this way," Wilcox says. "It's a question of when. We're going to have to."

Portland News: 503-221-8199; portland@news.oregonian.com

©2007 The Oregonian