

# Taking the "LEED" in sustainable home design

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The idea was planted during a backyard conversation between neighbors. Fostered on the fertile soil of a shared vision for a more sustainable future, that idea is now sprouting into the "greenest" house in Kitsap County.

"We're pushing the edges with this," said Bainbridge architect Russ Hamlet, who teamed with his neighbor Lisa Martin, who is also a developer, to build a solar-powered home in Rolling Bay. The residence is expected to earn Kitsap County's first residential Leadership in Energy and Environmental Design (LEED) certification, which serves as the national standard for earth-friendly building design.

The 1,850 square-foot home will consume fewer resources during construction, make use of recycled building materials and produce the home's annual energy supply.

"It's carbon neutral and energy neutral," said Hamlet. Solar panels are expected to generate eight kilowatts during summer days, which is more than enough for a typical home of its size. Puget Sound Energy (PSE) will absorb the surplus and pour it into the region's power grid. "During the summer you'll get to watch the power meter run backwards," Hamlet said. "PSE will bank that energy and comp (the homeowner) during the winter when the solar panels aren't getting as much sunlight. So, overall, it'll generate 100 percent of its power."

Incorporating solar panels, recycled materials, soy-based insulation, and engineered to use 25 percent less lumber in the building's inner framework, the home is aiming for at least a "silver" LEED rating. Two certification



Architect Russ Hamlet and developer Lisa Martin teamed up to build Kitsap County's first LEED-certified, sustainable home in Rolling Bay.

grades are higher than silver, but both are uncommon in smaller buildings.

Administered by the U.S. Green Building Council, LEED certification requires a high level of energy efficiency, water conservation and the use of recycled materials. Five buildings in Kitsap County are registered under the LEED program – but all, like the IslandWood environmental learning center on Bainbridge Island, are large-scale business, government or nonprofit centers. The Valley Road house will likely earn the county's first certification under LEED's residential pilot program, according to Alistair Jackson, a consultant who rates LEED buildings in the Puget Sound area.

The house harnesses the sun's energy in a variety of ways, making it a standout model among the four dozen homes statewide undergoing LEED certification.



Workers apply a soy-based foam insulation into the home's walls.



The house's frame uses carefully-placed planks to reduce overall wood use.

"They've really paid a lot of attention to solar – much more than most," Jackson said.

The home's final touches are now underway. Hamlet expects the home will enter the market in the late summer or early fall.

"So far the house has met or exceeded all of our goals, but we are still waiting on the LEED testing, and of course the real test of a spec house is how well it sells," said Hamlet.

While Hamlet and Martin want the house to sell, money wasn't the only motivation for building it. Both said they're driven by a strong desire for a different kind of "green."

"We want to build homes that are healthy for people and the planet," said Martin.