



Built on a tight infill lot, the 1,447-square-foot house is located within short walking distance of public transit, retail services, and schools. Instead of a permanent irrigation system, a rain chain (lower left photo) drains water from the gutters into a 1,000-gallon cistern to be used for watering plants and for the backyard pond.



MERIT AWARD

THE SAGE
PRODUCTION, LESS THAN 2,000 SQUARE FEET
EUGENE, ORE.

During a recent Eugene, Ore., Home Builders Tour, The Sage, a small and ultra-sustainable demonstration home, showed attendees how green living and attractive design can go hand in hand.

The house, at the time the highest-scoring LEED-certified residence west of the Rockies, features an ultra-tight building envelope created with double 2x4 stud walls, separate plates to eliminate thermal bridging, Demilec Agribalance spray-foam insulation for R-32 walls and R-45 vaulted ceilings, a 16-SEER Trane high-efficiency heat pump, and all ductwork located within the insulated envelope. As a result, the house is 12 times tighter than Energy Star requirements.

In addition, a solar hot water system and a

2.1-kW PV system provide 40% to 50% of the home's energy needs.

The 5,000-square-foot infill site features drought-tolerant plants and a 1,000-gallon rainwater catchment system for irrigation.

Sustainable and local materials are present throughout, including reclaimed wood flooring, cork flooring, and recycled-content Squak Mountain Stone countertops. Accent siding on the exterior was crafted with remilled redwood benches that were reclaimed from a local outdoor amphitheater.

While modern, modest, and minimalist in aesthetic, the judges liked how the house feels much bigger than it really is, saying, "It's a nice little place with an impressive design and great HERS score." —Jennifer Goodman

DETAILS Project: The Sage, Eugene, Ore. | **Size:** 1,447 square feet | **Cost:** \$206 per square foot | **Completed:** June 2009 | **Certification:** LEED-Platinum
HERS Rating: 23 | **Architect:** Arbor South Architecture, Eugene | **Builder:** Arbor South Construction, Eugene | **Verifier:** Earth Advantage, Portland, Ore.
GREEN HIGHLIGHTS Energy: R-32 and R-45 open-cell Demilec Agribalance spray-foam insulation / 2.1-kW solar system and solar hot water / U-0.27
Weathervane Vantage low-E windows with argon fill / CertainTeed Landmark Solaris solar-reflective asphalt roofing / Trane 16-SEER high-efficiency heat pump/
high-efficiency fluorescent and LED lighting / KitchenAid Energy Star appliances / prewiring for electric vehicles | **Resources:** high fly-ash concrete foundation/
locally produced lumber and floor joists / FSC-certified oak cabinets / Pioneer Millworks reclaimed wood flooring / Sustainable Flooring cork flooring |
IAQ: zero-VOC paint / low-VOC floor finishes / Trane HRV | **Water:** drought-resistant xeriscaping / rainwater collection / Danze low-flow faucets and
showerheads / Kohler dual-flush toilets

✪ For additional images, floor plans, and a list of products, view this home at ecohomemagazine.com.