

Studio-E Architecture's Oregon Passive House Makes Use of Recycled Materials

ARCHITECTURE



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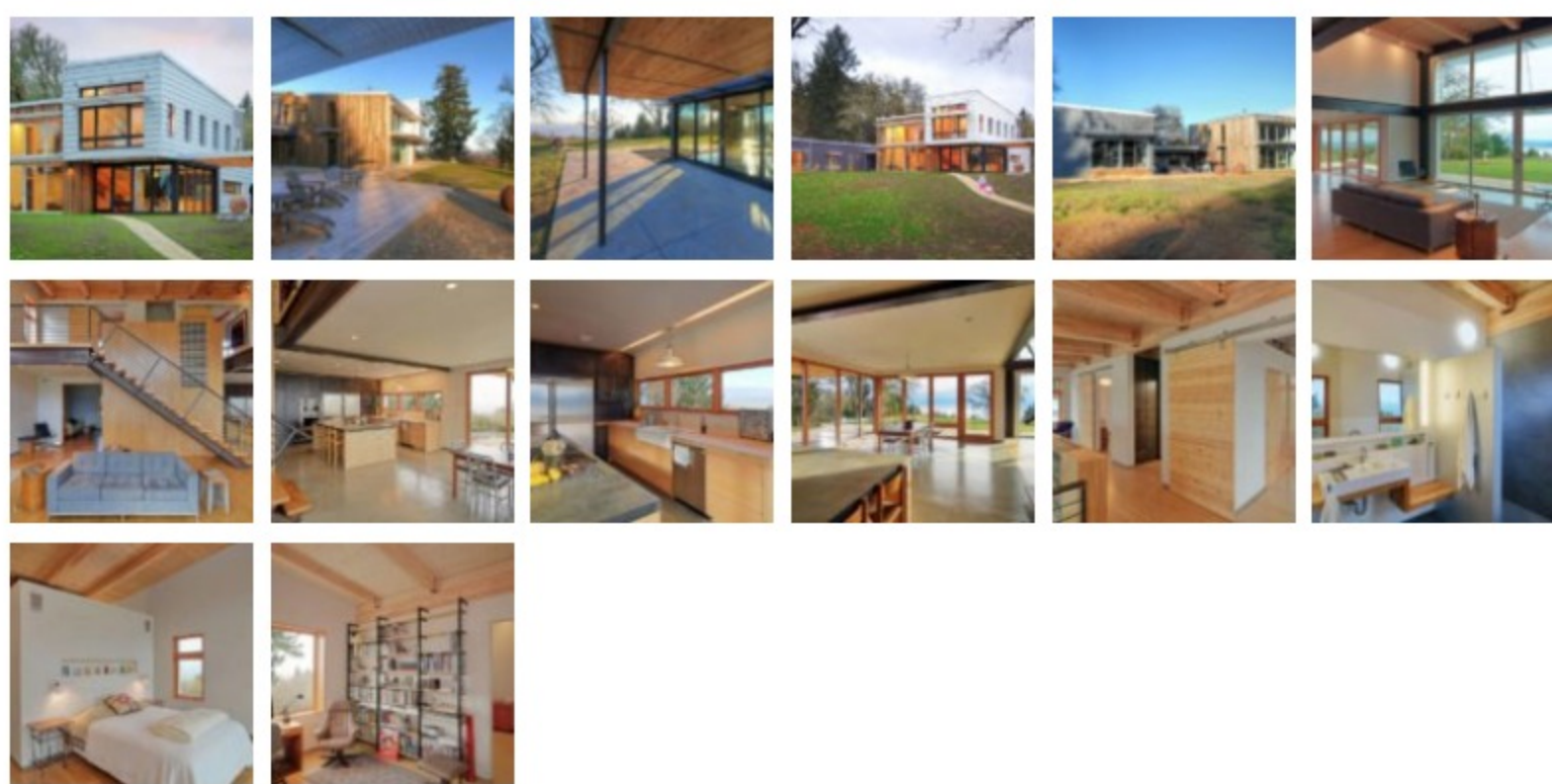
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by Bridgette Meinhold

VIEW SLIDESHOW

This **certified passive house in Fern Ridge Lake, Oregon** uses a minimum amount of energy to provide a comfortable climate. But that isn't all; the home also makes use of a ton of recycled and reclaimed materials like barn wood, felled wood from the site and recycled steel. Designed by **Studio-E Architecture**, the solar-powered **passive home** is the perfect spot for an artist, a software engineer and their daughter.



The Fern Ridge Lake Residence is located on a 40-acre site on a bluff outside of Eugene, Oregon. The home is joined by an artist studio, a three-car garage and a number of outdoor living spaces to enjoy the outdoors. Studio-E Architecture designed the home to be as energy efficient and healthy as possible. Certified as a passive house with the **Passive House Institute US**, the home features 12-inch thick walls and a tight thermal envelope to all but eliminate energy loss. A HRV ensures that minimal energy is lost while bringing in fresh air into the home. While low VOC materials are used throughout, fresh air is still very important to maintain a high quality indoor atmosphere.

Both photovoltaics and solar hot water provide sun-powered energy for the home and a geothermal system provides whatever else is needed for heating and cooling. As for materials, the exterior is clad with corrugated metal, fiber-cement boards and 80-year-old reclaimed barn wood. Inside, you'll find stair treads **reclaimed** from black oak tree that was knocked over in a storm years ago. Recycled steel is used for the structural beams and the kitchen countertops are recycled from lanes of a former bowling alley. The result is both modern and rustic and the home enjoys ample views of the surrounding landscape.

+ Studio-E Architecture

Via **Jetson Green** and **GreenSource**

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