



A hybrid of straw-bale construction and timber framing, this Eugene home has a long-lasting metal roof and deep overhangs to keep moisture away from the super-insulating straw inside its walls.

Go ahead, huff and puff all you want

Eugene's first permitted straw-bale house, a cozy eco-charmer finished in 1997, gracefully endures the Northwest's bluster.

By Vanessa Salvia
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Photos by Collin Andrew

Thanks to that old story “The Three Little Pigs,” conventional wisdom holds that only a glutton for punishment would build a house of straw. But it’s time to take a match to that old cliché, particularly when the building material is bales of rye grass.

A 1½-story home on a tucked-away cul-de-sac in the Friendly Street area was Eugene’s first straw-bale dwelling completed with proper permits from the city. And despite big, bad wind gusts

and endless rain, the house has endured four owners, rental tenants, dogs and grandchildren, and is still as beautiful as the day it was finished in the spring of 1997.

Jack Yousey and his wife were the first homeowners to build on Tiara Street, in what was an intentional neighborhood of eco-friendly homes. Though he sold the straw-bale home years ago, he now lives next door.

Builder James McDonald of Eco-building Collaborative of Oregon, the Youseys and a team of volunteers spent the winter of 1996 — a year of record rain — building the home.

Straw, stucco and style

The team began perfecting their technique, stacking straw bales of rye sourced from a local farmer and plastering walls around them, on a 200-square-foot tool shed before completing the 1,700-square-foot, 3-bedroom home.

The stucco on the tool shed was mostly done by the volunteers as part of a straw-bale building workshop, and finished by a craftsman specialist. The straw is not load-bearing, so the home actually is a “hybrid” of bales and timber framing.

Keeping the straw bales dry was crucial. Crews worked quickly during

the rainy weather, and kept the straw covered with plastic. “An unsustainable amount of plastic,” Yousey jokes. “And you really need to know that you’re not going to have leaks. This is a 60-year roof, it’s metal, it’s recyclable, and it’s one of the areas where we splurged.”

Four-foot eaves shelter the stucco from rain, and the home was carefully sited and planned to maximize southern exposure for light and heat in the winter.

Regular monitoring of the humidity in the 2-foot-thick walls — via probes that are inserted in spots around the home — ensures that the straw remains dry. And after 17 years, it still is.

Conduits for wires and plumbing run through the bales. The straw framing created deep window sills for nooks of books and plants, plus lots of light.

The living room's charm is enhanced by a wood stove and a deep, warmed bench carved out of the plaster. To the upper left of the bench is the "truth window" — an opening through the plaster covered with glass, allowing a glimpse of the straw inside the walls.

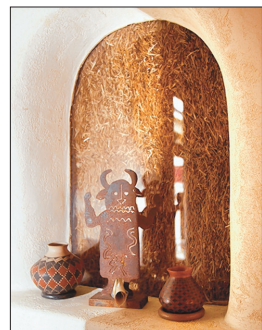
The concrete floor is colored an earthy reddish brown, with inset ceramic tiles that were custom-made by the architect, Shea Bajaj, who now lives in Seattle. Bajaj also created metal brackets — which are at both structural and ornamental — on the interior post and beams.

Ahead of its time

Sue Schumacher and her husband, Lloyd Hamilton, the fourth and current owners, are still benefitting from the thoughtfulness that went into the home's design.

The home's original refrigerator is still in use.

In the upstairs bedroom, teal carpeting made from recycled plastic bottles still looks fresh.



This "truth window" offers a peek into the straw walls from inside the house.

The solar panels for heating water and the ventilation system in the attic reduce their bills to a "miniscule amount" in the summer. "There's no air conditioner, but you walk

in and it feels like it's air conditioned," Schumacher says.

Cleaning the plaster walls does present some challenges. Stains can be rubbed off gently with sandpaper. Schumacher would like a little more light, and eventually she'd like to add colorful paint, but any paint she chooses to use must be breathable.

"The southern windows are great," she says. "I really appreciate all the touches that went into the home, especially the timber matched with the plaster. The word organic is overused, so I really don't like to say that, but the plaster gives a more natural sense of things. Our sensibilities are more attuned to that roundness. For me it's a more intimate feeling."

Many of the home's features, such as a bathroom floor of Marmoleum (a composite of natural ingredients), dual-flush toilets and smart utilization of space, are common for green building design now, but 17 years ago, these concepts, combined with straw-bale construction,



were unfamiliar. "The project was a stretch for the city," Yousey says. "The inspector didn't understand it," adds McDonald. And the lenders had difficulty finding comparable properties by which to price it.

Another challenge: "Remodeling a house like this is harder," Schumacher says. "You need a lot of up-front thinking, careful planning, because it's not easily changed."

Why did the Youseys do it? "We were reckless," laughs Yousey. Not really. "We did enough research that we felt confi-

dent that it would work."

In fact, it's worked so well, now straw-bale construction is more accepted as a building method for any number of structures, such as greenhouses, garden walls, studios, sheds and more, each made of an affordable, natural, easily sourced and superb insulating material that can last as long as any other house.

Even in the blustery Northwest.

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Clockwise from top: A wood stove, red-hued concrete floor and a deep bench formed into the plaster wall form a cozy living room scene; James McDonald of Ecobuilding Collaborative of Oregon revisits the home he built 17 years ago as Eugene's first permitted straw bale residence; and the sculptural qualities of the thick plastered walls can be seen in this bedroom.

At the Good Earth show

Ecobuilding Collaborative of Oregon (exhibit 201) is among the vendors participating in the Jan. 18-20 Good Earth Home, Garden & Living Show at the fairgrounds in Eugene. Find a variety of sustainability-oriented builders specializing in new construction and remodeling in the exhibitors directory on Pages 5-7, and locate the exhibit numbers on the map, Page 5.