



Creating a View

Architect Lewis Butler devised a bridge—extending from the yard to the residence—that allows the S-shaped driveway to weave underneath the house without obstructing views of the Bay. A five-kilowatt photovoltaic system on the roof is connected to the city's energy grid. Homeowner Helene Marsh initially predicted that it would provide for nearly 80 percent of their power needs, but after a year in the house, she reports a net zero balance on the family's electric bill.

Above & Beyond

An environmentally savvy homeowner takes the lead when creating her sustainable dream house high atop the hills of Tiburon.

By Bryan Anthony Photography by John Bedell Styling by Allegra Hsiao



Design Tip:
Light From Above

In lieu of electric lighting, a translucent ceiling is a playful and energy-efficient way to provide natural light to an otherwise windowless space.

Grand Plans

Butler calls the home's design flower-like, with the stem being the foyer (pictured) and main stairwell. The three petals consist of a master bedroom, a living-dining area and two guest rooms that double as offices. The design allows for the four different zones to be individually regulated by a central smart-house automation system, further minimizing energy consumption.





No Need for Sunscreen

The Bonelli windows are dual glazed, filled with argon gas and coated with Solarban 70, allowing 65 percent less heat to enter the house and protecting furniture, fabric and artwork from sun damage.

Usually a client will tell architect Lewis Butler that they want to build a LEED-certified home and then quietly fade into the background, letting Butler run with the ball. Helene Marsh was not the typical client. Butler, principal of Butler Armsden Architects, says that Marsh was so well versed in sustainable design that it made sense for her to take the lead on the project. “She wanted to use us for our architectural expertise,” says Butler. “She ran the hard science and physics angles, and it was our goal to incorporate them and make them beautiful.”

Marsh traces her initial interest in environmental stewardship to her experiences living in Prague in the 1990s. She moved to the Czech Republic in early 1990—only three months after the Velvet Revolution

and the fall of Soviet control—just as rapid industrial development was wreaking havoc on the local ecology. “I remember going cross-country skiing and where there should have been a lush forest, there were only these sickly looking two-foot-high trees. They looked as if they had been burned,” says Marsh. “It was due to the acid rain. Even the countryside was covered in soot and filth.”

In 1997, Marsh moved to Southern California, and in 2001, she enrolled in a master’s program at UC Santa Barbara’s Bren School of Environmental Science & Management. She took an elective in green building design, knowing that one day, if afforded the opportunity, she would build her own green home.

But to call the home that Marsh built in Tiburon more than 10 years later “green” would be a severe



Close to Home

Most of the building materials, furniture and accessories were sourced from within a 500-mile radius. The bedroom's artwork, *Expectant Days* by Philip Barlow, is from Hespe Gallery, which represents a stable of Bay Area artists. The Atomic chair, designed by WhyrHymer, is from San Francisco's De Sousa Hughes.

understatement. If a brand-new category of LEED Titanium were ever established, Marsh's residence would set the standard. For now, the home settles for the current highest rating of LEED Platinum (the designation requires a score of 92 points; that's 22 points lower than the 114 points earned by Marsh's property).

In 2007, Marsh moved to Marin County with her partner, Don Love, and her two daughters. They immediately began searching for the perfect site for their home—not an easy task for someone with big plans to make the smallest possible impact. Marsh rejected any location that would have required destroying a house of architectural significance or taking down a large home. (Either choice would have created extra waste and left behind a massive carbon footprint.) The site they finally selected proved ideal:

Bay views, sunny exposure and an elevated northeast orientation perfect for passive cooling from Bay breezes. It also had an existing structure (a modest 1940s ranch house) begging to be replaced.

Butler admits that there was no grand architectural concept going into the project: "The house was built for this site; the realities of the property dictated the design." And although Marsh appreciates the clean and unfussy form, to her the house is an efficiently functioning machine, one the whole family can operate. Her two daughters, Natasha, 16, and Alexandria, 14, know how to read the collection of gauges and meters along the side of the house and like to monitor their own water and energy consumption. "They both take very short showers," says Marsh. For two teenage girls, that just might be Earth changing.



Tear It Down, Build It Up
 Under the guidance of general contractor Michael McDonald, the original house was disassembled by hand. Clockwise from top left: Homeowners Helene and Don, who used rusty nails pulled from the old wood to fill a panel in the wall; leftover concrete from the existing foundation was broken into large rectangles and used as patio pavers; harvested rainwater fills an exterior water feature.

