At Home in the Modern World

THE ENERGY ISSUE

Bright Ideas to Power Your Home



dwell.com

July/August 2010



PENDANT LAMPS WE LOVE

ROOM TO IMPROVE

Rethink Your Bathroom

ARE SMART HOUSES DUMB?

The New Pioneers

In the land of large mountain lodge wannabes, two California natives tuck Utah's first LEED for Homes-rated house onto the side of Emigration Canyon. "Our fireplace is going through a bit of an awkward phase," apologizes Anne Mooney, nodding at the hearth anchoring her family's great room. It's true: The shiny steel surface is mottled with constellations of orange-brown rust. The house's exterior, too, is surprisingly mutable. Cor-Ten-steel scales arranged in a harlequin pattern cover the boxy, rectangular structure, which is nestled in a canyon eight miles east of downtown Salt Lake City, Utah. Exposed to the elements, the scales have rusted to a deep reddish brown. During warm weather, the cladding expands and crackles, "like it's breathing," says Mooney.

It's fitting that Mooney should talk about her house like it's alive, because in a sense, it is. Mooney and her husband, John Sparano, are the founding principals of Sparano + Mooney !



Story by Jaime Gross Photos by Dustin Aksland Mooney and Sparano's house glows like a lantern against a backdrop of scrubby oaks, faux colonials, and "wannabe lodges" with more square footage but less eco-cred. The

home's northwest facade, facing the canyon and a 200-acre camp for individuals with disabilities, is glazed with sliding glass doors that open to merge indoors and out. Architecture, based in both Salt Lake City and Los Angeles. They designed the three-bedroom residence to be flexible and adaptable to the needs of their family, which includes their seven-year-old twin daughters, Claire and Audrey, and nine-year-old chocolate lab, Oso.

The changes evident in the untreated steel reflect "the nonstatic quality of domestic life," says Sparano. "Two people get together, they get a dog, have kids, the dog dies, the kids go to college, they get another dog, their parents move in. The house is just a frame for it all to happen in." The unfinished basement, for example, can become a rec room for their children and, later, a guestroom for out-of-town visitors. Later still, it can transform into an in-law for Mooney's parents, who live locally and help with childcare.

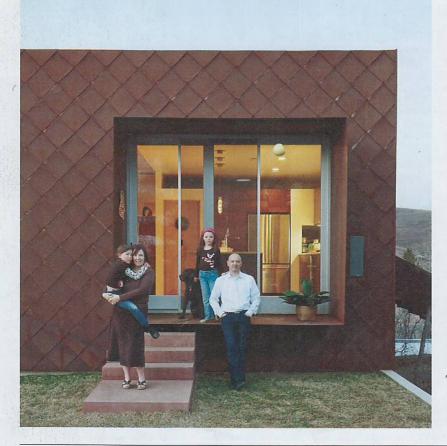
Though their neighborhood, Emigration Canyon, is known as one of the more politically liberal neighborhoods in Salt Lake City, architecturally it's still rather conservative. Emigration Canyon Road, which curves through a landscape of scrub oaks, native grasses, and wildflowers, is home to a smattering of modern houses by the late modernist John Sugden. But new houses here, as throughout the region, tend to be poorly designed, energy-inefficient, "wannabe mountain lodges," says Sparano.

At 2,500 square feet, Mooney and Sparano's house is easily one of the smallest in the canyon. In fact, in an effort to minimize excavation, maintain a compact footprint, and retain as many native oaks on the 1.25-acre site as possible, the architects designed and built it at the absolute minimum size



allowed by the local architecture review board. "Some neighbors have had a hard time with it," Mooney says. "Once, a woman saw me at the mailbox and said, 'Oh, you live there?'" Sparano elaborates: "People in the neighborhood have told us, 'We want big houses here.' The prevailing mentality is that houses should be big to retain real-estate value. The premium is on quantity and scale, not on design and spatial quality. But we're saying, 'Here is a model: We don't need a house larger than this. This is the perfect size.' We wanted to show there's another way of building in the West."

They're setting another important precedent, too: Their house is the first residence in Utah to earn a LEED for Homes rating. Though the application and inspection process was rigorous and expensive, adding 5 percent to the overall budget, Mooney and Sparano felt it was important to receive official LEED certification as a way of educating the public and furthering the cause of green modern architecture in Salt Lake City and beyond. "In Los Angeles, there are lots of people building LEED houses," says Mooney. "Here, we can be a bit of a trailblazer and show that modern buildings really lend themselves to well-considered sustainable design." Im



The house is clad with scales made of Cor-Ten steel that have weathered and rusted over time and create framed views into rooms like the kitchen (bottom). In the living room (top), the canyon vistas share center stage with the wood-burning fireplace (attractive despite going through an "awkward phase") and a rare quarter-grand piano from the late 1800s, a Mooney family heirloom. The polished concrete floors are radiant-heated, powered by a small, highly efficient boiler in the basement.



The architects and Utah-based builder Benchmark Modern integrated a broad swath of eco-friendly features into the project, from dual-flush toilets that save an estimated 48 gallons of water per day to radiant-heated concrete floors powered by a tiny, high-efficiency boiler. There's a rainwater collection system hidden below the garage that is used to irrigate the drought-tolerant, native landscape around the house. The exterior steel cladding has a high percentage of recycled content and comes with a hidden bonus: Mooney and Sparano can attach nearly anything to it with magnets, including house numbers and a holiday wreath. "You can do a lot with magnets," Mooney observes. Indeed: They've used them to affix their daughters' art to the metal fireplace; to suspend bars of glycerin soap over the master bathroom sink; and to clad a bathroom wall with a bright yellow,

backlit sheet of acrylic, which clings to the steel frame via magnetic double-sided tape, easily swappable should they crave a new hue.

The family uses barely any energy during the day. Ten-foot-high, doubleglazed, low-emissivity glass doors keep the kitchen, dining room, and living room bright. In good weather, they accordion back to let the canyon views, scents, and breezes into the house. Ample cross-ventilation allows the airflow to act as natural airconditioning. In rooms without windows, such as the pantry and guest bathroom, the architects installed Solatube skylights, which efficiently collect and channel daylight from the roof into otherwise dark spaces (see sidebar, p. 65). Interior and exterior curtains close on tracks to cut sun exposure on hot days and provide thermal resistance. Eventually, when their budget allows it, the architects III



Sparano works in the dining area (top), where books about travel, architecture, and food, as well as framed architectural drawings from his grad school days, line the back wall. The hollow glass-walled light fixture is from Ikea; every few months, the family fills it with a different season-inspired item, such as pinecones in the fall and feathers in the

winter, as pictured here. In the living room (bottom), Claire and Audrey demonstrate the magnetic quality of their fireplace by hanging artwork next to the wreath.



plan to install solar panels to cut their electricity use to zero.

Mooney and Sparano's quest to open Utahans' hearts and minds to the beauty of modern green design may be slow going, but they've got at least two happy converts to date. Audrey and Claire are thrilled with their new house, especially its stairs-still a major novelty, after moving from a singlestory bungalow in Venice, Californiaand the smooth concrete floors, which they slide across on roller skates and in socks. Recently, Audrey was asked to draw a house in school. "She drew a brown rectilinear volume surrounded by pitched-roof houses," Mooney says. "Her friends said, 'That doesn't look like a house!" Mooney suspects the friends will change their minds after a play date—and the new perspective will likely grow on their parents, too. In





In warm weather, the family slides open the doors (top left) to draw in cool canyon breezes. The antique cherry wood furniture in Claire's room (top right) once outfitted Mooney's childhood bedroom. In the kitchen (bottom), Ikea cabinets are customized with Carrara marble tops (perfect for pastamaking, says Sparano) and chrome pulls.

Green Lights

To draw light into windowless interior rooms, Mooney and Sparano installed Solatube Daylighting Systems. The tubular devices, available in 10- and 14-inch diameters, collect and redirect daylight through six acrylic and polycarbonate domes on the roof. The



light then travels through highly reflective tubes and is diffused into the rooms via dual-glazed acrylic lenses in the ceilings. The materials used to make the tubes prevent heat gain and loss and UV transmission. From inside the house, the lenses resemble average light fixtures. They even have optional built-in dimmers for when the daylight is too intense and optional electric bulbs that can be flipped on at night.

"It's great for small spaces where you wouldn't want a two- or threefoot-deep skylight, and it's easy to install without making any structural changes," Mooney raves. The tubes can be fitted with angled adapters that allow 90-degree turns, so the skylights can be installed in rooms without direct roof access. To bolster the brightening effect, Mooney and Sparano painted their walls and ceilings white. The setup is so effective that for their first few weeks in the house, the couple kept trying to flip the switches off, only to remember they already were.





