VALID VICTORIAN
AN 1869 WORKINGMAN'S COTTAGE IS SUSTAINABLY RENOVATED INTO A SPACIOUS FAMILY RESIDENCE—WITH ITS ORIGINAL CHARM INTACT.

Text: Lydia Lee  Images: Paul Oyer
San Francisco is known for its "Painted Ladies," Victorian-era homes with elaborate architectural flourishes, often painted in vivid colors. But many of these homes did not start out as grand mansions. Around the turn of the 20th century, the city was built up with modest row houses, often with false fronts to make them appear grander. Built in 1868, the dwelling at 5162 Sutter St. was one such example.

It was just the sort of house that Josh Magal was looking for. In 2008, after 15 years of doing product marketing in the high-tech industry, he started his own development company. "It's a disaster to renovate historic homes and to update them with a modern floor plan and minimize their carbon footprint. "When I get started, I saw all these great houses, and they were all contemporary," Magal says. "They felt so cold to me. They didn't seem like cozy and comfy spaces that would be supportive of what you do as a family—they didn't read "weekend brunch.""

After successfully tackling his first couple of projects in the city, a 1900s Edwardian and a 1909 Colonial Revival (you can follow his adventures in sustainable remodeling at architectural.com), Magal looked at homes in Noe Valley, one of the city's most desirable neighborhoods. With two bedrooms and one bath on its east side and over a basement, the 1,600-square-foot structure at 5162 Sutter St. had never been substantially renovated. Magal saw its stunning, flat-fronted Italianate facade and porches as possibilities for expansion. He purchased it for less than $484,000, and undertook a LEED Platinum-certified gut rehab, which included significant foundation work and state-of-the-art sustainable technologies. The renovation cost well over a million dollars and ended up taking a year and a half. But all of the work paid off. The house sold in just four days for $8.8 million, at a substantial premium above the asking price.

On the project, Magal had the help of San Francisco architect Jonathan Feldman, AIA. "We were on the same page in terms of sustainable building practices," says Feldman, who has two other LEED Platinum projects to his credit and five more in the works. "He pushed us in places, and we shared what we knew, so it was a really good collaboration. He'd been fighting the fight himself."

Feldman started his practice, Feldman Architecture, in 2003 by renovating old Victorians; after working on about a dozen of them, he came to know their weaknesses well. "Victorians are often heavy and dark and confining," he says. The relatively small size of 5162 Sutter made that particularly challenging. "It was a really tiny little Victorian," he says. "Now it has a generous, open floor plan and a connection to the yard. Everything is bright and light-filled. We put a lot of building into a very small house, and made it feel big." The resulting home has five bedrooms and four baths, but is just 2,400 square feet.

The team excavated the basement level 40 feet behind the house, into the upward-dipping lot, to create a substantial lower level. The street level now has a garage and two

BY THE NUMBERS
Building size: 2,400 square feet
Lot size: 2,400 square feet
Completion date: March 2012
Number of permanent occupants: 4

Percent of the home that is daylighted: 10
Percent of the home that can be ventilated or cooled with operable windows: 10

Total water used (galons per year): 21,000

Total energy used (kWh per square feet): 5.1
Percent total energy savings 50 percent based on energy from 75/4 standard requirements

Third-party green certification: LEED Platinum
Total appraiser loan: $1 million
Energy provided by solar panels on Master

Both the ground-floor kitchen and great room were opened up, the master suite was moved up to the expanded backyard, and French doors from Sierra Pacific.

Installed & Done: Featuring high-grade, argon-insulated wood windows. In the kitchen, custom VDO-free, painted cabinets with 100% certified doors are paired with Corian countertops. Fixtory

Tile: Debra Sisneros Hae, and engineered 6-inch White Oak FSC-certified plank flooring. From the front of the house, the new first floor remains usable because of a 10-foot setback and a biax front on the home.
Outside, the home's original concrete patio was opened up and reused to build a dry-stack wall in the yard. Original roof beams were repurposed into planter boxes, and chimney brick gained a new life in the patio floor, as seen on the upper deck (left). Also used is Concordia Atlas brick.

The main floor was dramatically reconfigured. From the front door you can see through the living and dining areas to the backyard via glass-folding French doors. This level also has a small bedroom office.

The three added a third floor, hidden from the street by a 24-foot setback and the home's tall false front, which contains the master suite and a second bedroom suite.

Like many houses from the Victorian era, the home originally had lead-painted trim and doors, which were replaced. But Mogul made a point of salvaging what he could, including roof joists, which were turned into planter boxes; windows, which became glass fronts for kitchen cabinetry; chimney bricks, which were used to give the patio off of the back bedroom; and old concrete-aggregate pavers, which Lewis turned into a dry-stacked stone wall to create a raised bed at the back of the yard.

To reach LEED Platinum, there were "a million little decisions," Mogul says, including the use of all FSC-certified lumber flooring, low- and zero-VOC sealants and sealants, and R-24 and R-40 insulation with Everlast, a formaldehyde-free fiberglass insulation. The team also pushed the home's envelope in a few places. The home uses an air-source heat pump for heating and cooling (Mogul contemplated a radiant heat-pump system, but decided against it because of expense and lack of experience with contractors). The home is the first residential project to use Aquatherm Green Pipe, a completely recyclable polypropylene pipe, for hot and cold water throughout the space.

Mogul also put high-efficiency solar panels from Sunirae Barsky on the cool roof made of white thermoplastic polyolefin. Each panel has its own microinverter that converts direct current into alternating current, operating independently for optimal efficiency. "As a developer, it makes sense for me to install a basic set of microinverters, which the owners can add on to easily down the road," he says.

Evidence of Mogul's past career contemplating the user experience can be seen in the home's most minimal functions. "The kitchen has dimmable LED lighting, which Mogul loves. He's still on the hunt for LED lighting that changes to a warmer color temperature as it dimms. "Dimmable LEDs are missing that emotional component, which I think gets back to firefight," he says. "Home is such an emotional concept, with so many layers."