

CASE STUDY:

A GREEN APPROACH TO TRADITIONAL DESIGN

A San Francisco Edwardian undergoes a renovation that integrates green building practices with traditional design.

“We care about our personal role in climate change – about being part of the solution.”

– MARYAM MOHIT, *homeowner*

When Maryam Mohit and Erik Blachford bought a three-story Edwardian house on the edge of San Francisco’s Presidio in late 2007, they knew it would have to be extensively renovated before they could move in. From the start, the couple was committed to bringing environmental awareness to their remodeling decisions.



ENERGY USE

Energy Star appliances, formaldehyde-free insulation, energy-efficient windows and lighting, and new skylights were all easy steps to boost the home’s energy efficiency. A new energy-efficient boiler provides heat for both domestic hot water and the home’s new radiant heating system. On the roof, a 2.4-kilowatt photovoltaic system offsets much of the household’s electricity use, further reducing their carbon footprint.



INDOOR AIR QUALITY

Mohit specified that low-VOC paints be used throughout the home. To reduce the exposure of construction workers and the family to carcinogenic formaldehyde, Larsen used formaldehyde-free insulation as well as plywood and medium-density fiberboard (MDF) with no added formaldehyde. In the bathrooms, exhaust fans with timers automatically remove moisture and provide ventilation.



PROJECT STATS

LOCATION: **San Francisco, CA**

GREENPOINT RATED SCORE: **121**

YEAR BUILT: **1905**

ORIGINAL SIZE: **3,610 square feet**

NEW SIZE: **4,910 square feet**

PROJECT SCOPE:
Expand and reconfigure to accommodate contemporary family use patterns. Integrate green finishes and energy-efficient systems with original Edwardian design.

ARCHITECT:
Sutro Architects

BUILDER:
Larsen Builders

INTERIOR DESIGN:
Adeeni Design Group

GREENPOINT RATER:
Kevin Beck

WHOLE HOUSE LABEL





RESOURCE CONSERVATION

In the first phase of the renovation, the couple brought in The Reuse People, an organization that deconstructs buildings and sells any usable components. When the builders removed the main deck to make way for the addition, they stacked the deck boards and reused them later when rebuilding the third-floor deck.

They matched original molding with new molding custom made from Forest Stewardship Council-certified wood. For the kitchen countertops, Mohit chose FSC-certified wood and stainless steel, whose durability attracted the mother of three.

All the new concrete for the foundations, driveway and sidewalks contains a high volume of flyash, a byproduct of burning coal to generate electricity. Using flyash in concrete keeps it out of landfills and reduces greenhouse gas emissions associated with conventional cement production.



Skylight lets in natural daylight and helps reduce energy use.



WATER CONSERVATION

To reduce water use, Mohit chose a water-efficient dishwasher and clothes washer, and dual-flush toilets. An on-demand recirculation control pump reduces time spent waiting for hot water at the faucets.



All new wood is FSC certified.



COMMUNITY & LIVING GREEN

The home's urban setting earned it GreenPoint Rated points. The neighborhood is well served by public transit, and shops, restaurants, neighborhood services and other amenities are in easy walking and bicycling range.



Low VOC paints and energy efficient windows.