

5

REMODEL

Brumbaum Residence

# HILL HOUSE TRANSFORMATION

*A more open layout and ample daylight enliven a dark and boxy 1950s house*

Builder Paul Cerami teases that the Brumbaums used to have “one of the ugliest houses in Berkeley.” He can get away with the ribbing not just because he’s a friend of the homeowners, Sandy and Paul Brumbaum, but because the transformation has been so successful. The 1950s building was dark and dank, with cramped spaces that didn’t connect well to each other.

The decision to stay and remodel was in part because Paul walks to BART for his commute to work everyday and the location of the home is ideal, 50 feet from the trailhead to Berkeley Paths. After a thorough remodel and second-story addition, the home is “open, airy and bright,” Cerami said, crediting the architect with doing a beautiful job with daylighting and the overall design.

From the start, the Brumbaums made clear their commitment to building green, going so far as to write into the contract that they and Cerami would do as much as possible to make the home easier on the environment. The Brumbaums intended to install a photovoltaic system, but a site evaluation by a local PV installation company concluded there was too much shade.

But the Brumbaums found no shortage of ways to reduce reliance on fossil fuels. In addition to the standard strategies—better insulation, high performance windows, efficient equipment and appliances—they installed a wood-burning masonry heater in the main living area. “It’s basically a huge mass of concrete and brick,” Cerami explained, which serves as a heat storage bank. A short, hot fire heats the mass, which stays warm for 24 to 36 hours and gently radiates enough warmth to heat the home’s upper levels. “They have one fire a day,” Cerami said, “and the furnace doesn’t even go on upstairs.”

*“We wrote a clause into the contract committing us and the contractor to keeping the interests of our children’s children in mind by making our best effort to build green.”*

—Paul Brumbaum, homeowner

HOME STATISTICS
<b>ORIGINALLY BUILT:</b> 1953
<b>REMODEL COMPLETED:</b> 2007
<b>ORIGINAL SIZE:</b> 1,859 SF
<b>SIZE AFTER REMODEL:</b> 2,551 SF
<b>ARCHITECT:</b> Gary Earl Parsons Architect
<b>BUILDER:</b> Cerami Builders



## GREEN at a GLANCE

### ENERGY EFFICIENCY & RENEWABLE ENERGY

- Skylights and windows added and layout modified to improve daylighting
- Blown-in fiberglass insulation in attic (Johns Manville)
- Insulated foundation and slab
- 92% efficient, zoned, forced-air furnace (Bryant)
- Heating system and ductwork installed within conditioned space
- Masonry heater (Temp-Cast)
- 92% efficient tankless water heater (Rinnai)
- Double-pane, low-e, metal-clad wood windows (Loewen)
- Energy Star® 4.3 gal/cycle dishwasher (KitchenAid)
- Energy Star® <25 cu ft refrigerator (KitchenAid)

### RESOURCE CONSERVATION

- 60% recycling of construction waste
- Reused existing framing and siding on site
- 40% fly ash concrete (Central Concrete)
- Foundation drainage system (MiraDrain)
- Earthquake retrofit
- Engineered lumber: headers and beams
- Framing lumber: 10% reused existing, 90% FSC-certified wood (Certified Forest Products)
- 60% FSC-certified plywood sheathing (Certified Forest Products)
- Recycled-content structural steel moment frames
- FSC-certified cherry cabinets (City Cabinet Makers)
- Paper composite kitchen countertop (Richlite)
- Bamboo flooring (Plyboo)
- Built-in recycling center
- Reused existing deck lumber for new deck

### WATER CONSERVATION

- WaterSense dual-flush toilets (Toto Aquia)
- Upgraded existing faucets and showerheads to current code
- Turf-free, native and edible landscaping
- High-efficiency irrigation system

### INDOOR AIR QUALITY

- Energy Star® bathroom fan timer controlled and vented to the outside (Panasonic)
- Kitchen range hood vented to the outside (Vent-A-Hood)
- No-added formaldehyde batt and blown-in fiberglass insulation (Johns Manville)
- No-added formaldehyde cabinet boxes (Meditate II)
- Sealed combustion furnace (Bryant)
- Shoe storage at entrance