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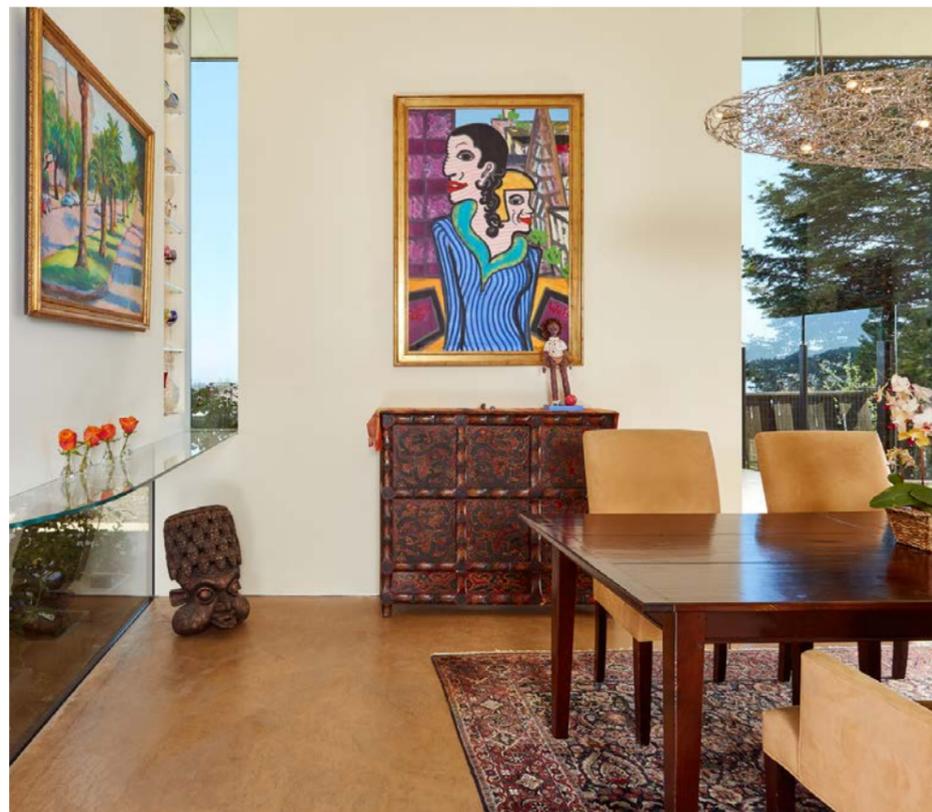
PLUSHOUSE

LINDY SMALL ARCHITECTURE

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Lindy Small Architecture was hired to design a modern, size-appropriate, zero net energy house on a south-facing lot in the Oakland hills, with views of four bridges, the Farallones, and Tilden Park. It doesn't get much better than that for an architect.

The first step in the design process is always finding the source of inspiration for each particular project: Making the project embody the spirit of the client, as well as the spirit of the site and the program. In designing the PLUShouse, Lindy Small, AIA, began with the tangible, which led to the intuitive:

- The site: a small, 6500-square-foot lot facing due south, with Bay views
- The client: extraordinarily bright, talented, interesting, and forward-looking; a musician, a pilot, a software designer, and a dog owner
- The program: a 2,100-square-foot house with no stairs, acoustically designed for musical events
- The intangible: intuition, trusting the balance between thought and instinct

Initially, two things inspired Small about her client. She is a musician (as is the architect) and a pilot (both rotating and fixed-wing). These two interests informed the design as well as the spirit of the house. The architect began by putting some of her thoughts and words onto paper. Phrases such as choreography of views, spaces flowing gracefully into one another, and light orchestrated over time stood out in her notes. Small was also inspired by the lyrical and sculptural nature of music and having every aspect of the home considered and crafted together.

These thoughts and the homeowner's interests became a springboard for the design of the PLUShouse. The images of air currents and the roof of the house as a wing (both fixed and rotating) became essential to the design, as did the acoustics for playing music. ➔

An important requirement of the PLUShouse was that it be on one level, with no stairs. It was quickly determined that a single-level, 2,100-square-foot house with a garage could not fit on the lot. The most viable option was to locate the garage below the house, with an interior stair from the garage leading up into the house.

To comply with the "no stair" requirement, an exterior looping ramp connects the street and garage level to the entry of the house. Once inside the house, a boomerang-shaped interior ramp presents a gradual unfolding of the house, exposing Bay views as the ramp ascends from the entry to public spaces. The guest room on the entry level (lower end of the ramp) has physical and acoustic privacy from the public spaces and master suite, which are located on the upper ramp level. The salon, part of the public space at the top of the ramp, was designed for a grand piano, with performance space for a woodwind quartet (of which the architect became the French horn player).

Both acoustics and solar orientation were critical in the design of the salon. Bookshelves wrap around the salon for acoustic value, and the roof kicks up to create nonparallel planes and admit high northern light. Protected light is admitted from high windows facing east, and expansive views of the San Francisco Bay are visible through the living and dining rooms. In the client's words, "The sound in the public space, courtesy of the shape of the ceiling, has a clear, bright expansiveness. Music surrounds you."

Another important requirement for the PLUShouse was that it be zero net energy. Photovoltaic panels on the roof (the house is 100 percent electric), recycled gray water, radiant heat, and rainwater captured in a 16,000-gallon water tank under the driveway combine to exceed the zero net energy



requirement. Hence, the house is named the PLUShouse.

The PLUShouse was a team effort between client, architect and builder. The client initially considered being the general contractor: "I learn quickly and well, and I am not afraid to tackle big projects," she said. "But as I began to study, almost immediately, I realized that I could spend a year learning about systems, or I could hire an expert, who would point me toward other experts. So I consulted with my FA (fabulous architect, favorite architect, or famous architect, whichever suits) and after some chatting, I did the smart thing. I decided to hire a builder, Drew Maran Construction, to be the general contractor."

Still, the homeowner was intimately involved in all aspects of the building process, from understanding the complexities of the house systems (water, heat, electric, remote control systems) to being a viable part of the construction crew. She wore her pink tool belt and helped out every day on the site, including eating lunch with the crew. She was actively involved in every decision regarding the project. The PLUShouse was a truly dynamic process, resulting in a house that responded to and exceeded all the client's wishes and desires. d



Previous page: Salon, living and dining rooms open onto west garden facing the bay. A steel cantilevered trellis modifies the west sunlight. Solar panels on the roof cannot be seen. The garden is irrigated with recycled water and captured rain water.

Clockwise from lower left: Dining Room with low window (at left) providing views of a rose garden, a glass cantilevered shelf folds into a narrow window, and a large window provides views of the San Francisco Bay.

Large sliding glass doors allow for passive cooling and the best of Bay area indoor/outdoor living.

Ramp leading from entry door to public spaces. Concrete floors throughout the house have radiant heat. Folded roof planes provide acoustic value for music, and high north and east facing windows balance light.

The client and Architect playing a duet in the salon. The kicked-up ceiling, indirect north light, and wrap-around bookshelves provide excellent acoustics and light quality.

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