Kitchen for a

BY DON NAJITA

n 1962, a young couple built a small house on a hillside overlooking Honolulu. They've spent almost all their married life under its roof, raising four children and now babysitting their grandchildren. Although the original kitchen was small and separated from the dining room by a wall, it served their needs for many years.

As time passed, the homeowners found that they wanted to improve aspects of their house. Located near the main entry, the dining room had turned into a landing pad as people came and went. Despite the open feeling in much of the house, the kitchen was dark and disconnected, with inefficient storage. Finally, the house was hot, and the extra heat created while cooking proved that the original cooling scheme wasn't working. When I was asked to renovate the kitchen, the couple stressed that they wanted the space to work better, but they didn't want to change many of their longtime habits. Moreover, they wanted to age gracefully in their house.

Day in and day out, a kitchen is asked to support a range of activities, and although all kitchens share some common elements, we use them in our own unique ways. To understand how my clients used their kitchen, I studied their habits and kept these patterns in mind as I planned the renovation. To maintain their mental map of the kitchen, the

new sink, the built-in breakfast table, and the laundry remain in their original locations. I also preserved key landmarks, including the locations of the silverware drawer and the light switches. Some changes, though, just made sense.

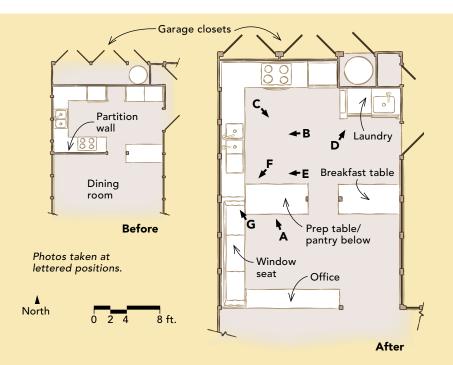
The range was relocated to support a direct-vent hood. This change also allowed me to move the partition wall that separated the kitchen and the dining room and to rework a breakfast table on one side and add a pantry and prep station on the other. My clients prefer to sit while they prepare meals, so I designed a table-height prep surface over the pantry.

The renovation also needed to address the physical nature of aging. Memory and vision fade, reaching becomes difficult, and arthritis can make simple operations painful. For easy living, I designed shallow storage that keeps items visible and reduces the need to hunt through shelves and dimly lit cabinets. An open bottle rack adjacent to the range provides an easily accessed area for oils, vinegars, and other frequently used items. Pantry bins below the prep table use Accuride's two-way drawer slides ("Sources," p. 61), which

Designed for durability. A custom-made stainless-steel sink with integral backsplash and apron is easy to clean and complements the bamboo cabinetry. Photo taken at A on floor plan.

A LITTLE MORE SPACE MADE A LOT MORE KITCHEN

Although the new kitchen borrowed 20 sq. ft. from the garage closets, it stayed within the house's footprint. Removing the partition wall between the kitchen and the dining room made way for a pantry and prep area, and a small office. It also allowed the kitchen's counter surface to grow from just 20 sq. ft. to more than 40 sq. ft. According to the homeowners, the result is dramatic. The kitchen, which once was cramped and difficult to use, is now generous enough to accommodate several cooks and helpers comfortably at once.



FINE HOMEBUILDING

Drawings: Paul Perreault



allow the bins to be pulled out on both sides of the pantry.
Other than the dish cabinet above the prep table, I avoided

controls. All the lights are operated by paddle switches. **Durability and sustainability go hand in hand**

overhead storage.

In the 1970s, my clients were among the first residents of Honolulu to install a solar water heater, so I wasn't sur-

I also selected ergonomically comfortable hardware and

fixtures for the kitchen. The exterior doors have lever han-

dles. The sink faucets are single-lever units by Grohe, and

the Thermador range is operated with soft-touch electronic

Ighting. Above the sink, an Artemide light fixture ("Sources," p. 61), typically found in architecture studios, offers limitless positions for crystalclear task lighting. Photo taken at B on floor plan.



The Moso bamboo used to make Plyboo grows to maturity in just four years and is harvested by hand. Unlike trees, bamboo root systems produce new shoots for decades.

Plyboo shines as a cabinet and finish material. The panels are free of voids, and when cut, the edges can be finished without edgebanding. The singlespecies composition of the panel results in uniform movement due to moisture.

Cabinetmaker Jesse Makainai worked with Plyboo for the first time on this project. He says the exceptionally stable panels hold screws well, but he recommends drilling pilot holes and working with sharp crosscut blades and router bits. Unlike veneered plywood, there is no danger of sanding through the surface layer, and with its consistent grain structure, Plyboo takes finishes well.

prised that they agreed to an ecologically friendly kitchen remodel. Among the criteria that we considered were lifecycle costs, energy and resource consumption, and longterm durability.

For the kitchen to last, we had to consider two factors: moisture and termites. One of the most difficult choices to make was the cabinet material. I settled on Plyboo. In the manufacturing process, Plyboo's bamboo sheet products are treated with boric acid, rendering them pest-resistant.

Like the cabinets, the one-piece stainless-steel sink and countertop was designed with durability in mind (photo p. 59). In the salty and humid Hawaiian climate, sink installations can fail rather quickly from rot caused by trapped moisture at the joint between the sink and the countertop. The integral backsplash and apron also were designed to prevent failure at the junctions with walls and cabinets. Also, the sink is easy to clean.

The built-in tabletops are from Counter Productions ("Sources," below). Made from concrete with recycled-glass aggregate, they are super tough. I chose wine and beer bottles, car-windshield glass, and a tiny bit of violet glass for the custom color mix. The minimal maintenance and easy cleaning rival that of stone, without the ecological impact of quarrying. Throughout the kitchen, corrosion-resistant stainless-steel fasteners were used.

The kitchen floor is Armstrong's Marmorette natural linoleum ("Sources," below). Composed of cork and wood flour mixed with linseed oil and pigments, the floor is nontoxic, easy to maintain, and soft underfoot.

Almost 85% of the material from the renovation, including tongue-and-groove siding and shipping crates, was salvaged for use in other projects. In fact, the renovation was finished without a site Dumpster.

New windows for passive cooling

Before the renovation, the average afternoon temperature inside the house was more than 90°F—higher when my clients turned on the cooktop or the oven to make dinner. I used two design elements to cool the house without air-conditioning.

First, I replaced the old asphalt and tar roof with a recycled aluminum roof over a radiant barrier. Then I reconfigured the windows to promote natural ventilation. By replacing the existing louver/jalousie system and some of the fixed picture windows with operable awning units, I was able to create openings that can be tuned to catch prevailing winds, moving warm interior air outward while bringing cool trade winds in. The tinted glass allows the homeowners to open the curtains and enjoy the view.

The renovation also included the installation of a photovoltaic system on the roof. Together with energy-efficient appliances and lighting, the existing solar water heater, and passive cooling strategies, the house now produces more energy than it consumes.

Don Najita is the principal designer at JOINT Studio in Honolulu (www.pilipono.com). Photos by Brian Pontolilo, except where noted.

SOURCES

Cabinet material Plyboo; www.plyboo.com Corner-cabinet

hardware Häfele

www.hafele.com/us Part No. 546.17.917

Counter Production www.counterproduction .com Light fixture
Artemide
www.artemide.com
Tolomeo Suspension
Marmorette flooring
Armstrong
www.armstrong.com
Two-way drawer slides
Accuride International

www.accuride.com

Part No. 2002

Four innovative solutions to kitchen-storage dilemmas



LAUNDRY AREA

A washer, a laundry sink, and cleaning supplies are concealed inside the closet. On the outside of the cabinet, shallow shelves keep commonly used cooking supplies close at hand. Photo taken at D on floor plan.



CORNER CABINET

Blind-corner cabinets are difficult to arrange for useful storage. Where a lazy Susan won't do the trick, you can use Häfele's sliding corner-cabinet hardware ("Sources," left). When the door is opened, the mechanism pulls the contents into view. Photo taken at E on floor plan.



PANTRY BINS

Stainless-steel restaurant-buffet pans are ideal for produce and other pantry items. The bins are easy to remove and clean. Accuride's two-way slides ("Sources," left) allow access from both sides of the prep counter. Photo taken at F on floor plan.



Where nothing conventional will work, be creative. Personalizing the kitchen for avid readers meant using this empty space for newspaper and magazine storage. Photo taken at G on floor plan.

