



A Green, Well-Lighted Place

by L. Catherine Hader

Shelley Cohen enjoys the new open living/dining/cooking space.

Boris Feldbyum Photography

Newlyweds and urban dwellers Mike Gala, AIA, an architect, and Shelley Cohen, an environmentalist, have transformed their two-story Cathedral Heights condominium from staid to stunning, upending its traditional Washington design. Within a six-story, 1977 condominium apartment building, they have realized their vision—a contemporary urban space, flexible for living and entertaining, affordable, and environmentally friendly in materials and construction.

On the first level of their unit, walls and bulkheads that once defined kitchen, dining, and living room areas have been minimized or eliminated. Parquet has given way to a sheen of pale bamboo flooring. White kitchen cabinets and counters have been replaced with a sleek system of wood, glass, concrete, and metal. Crown molding has vanished.

Custom cabinetry, designed by Gala in collaboration with Cohen, also opens up the space. These pieces eliminate the need for additional furnishings; they also afford convenience and flexibility by serving multiple functions, a model for urban apartments everywhere.

The peninsula that separates the kitchen from the living area, for example, doubles as a dining surface. In the living/dining area, the entertainment center consolidates and conceals the couple's electronics and storage. Its fireplace centerpiece adds warmth and visual appeal, and its niche above personalizes the space with a painting they acquired on their honeymoon in Australia and New Zealand.

Upstairs on the second level, the couple has created what they call the "ultimate functional living and storage space" of two bedrooms, two baths, and a utility area for washer, dryer, and kitchenette.

Here too they have integrated storage with their living space. Each bedroom has a full wall of custom-designed and -constructed cabinetry from ceiling to floor. Recessed halogen ceiling lights eliminate the need for lamps. "The victory of the upstairs is the storage space," says Cohen.

They also have utilized the existing layout to its greatest efficiency. Sliding doors rather than standard doors, open or closed, free up valuable space. They've further conserved space in the bathrooms, which back up opposite each other against a shared

central interior wall. Niches in the shower and bath walls hide shampoos, soaps, and sundries.

In the hall between the two bedrooms, sliding doors of "sparkle glass" conceal a compact space housing a washer, dryer, storage, and kitchenette. Sparkle glass—layered glass with textured inner surfaces—obscures visibility and masks fingerprints.

"The entire place is like a large piece of furniture," Gala says. "We've used every inch" to organize belongings and create maximum usable space.

A desire for daylight also drove the upstairs design. In contrast to downstairs, where they removed walls to open the space and flood it with light, privacy demanded alternate approaches to bring light to the interior.

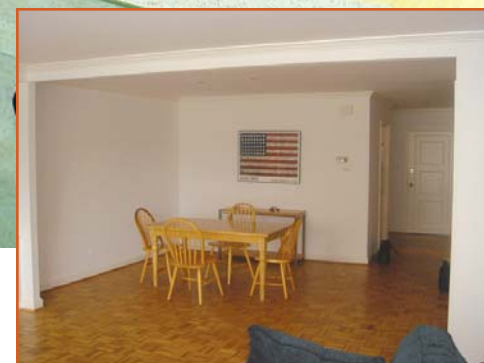
In another home, skylights might have provided the solution. On the fourth floor with two stories above and fixed exterior walls, however, the only possible solutions had to derive from what was in place.

Gala and Cohen found two: first, each bedroom, one on either end of the floor, has two windows on an exterior wall. To relay light from these sources to the interior, they opted for full length translucent glass panes in the sliding bedroom doors.

Second, they've inserted a narrow window of glass block in the shared wall between the bathrooms. Light is transmitted from one side to the other, yet the thickness of the block maintains privacy.

Throughout the project, the couple has used their professional experience to weave "green" elements into the overall fabric of the renovation. Gala routinely integrates energy- and resource-conserving measures with building design in his work. Cohen works with public and private clients to develop renewable energy and energy conservation projects.

With these backgrounds, they identified areas in which they could achieve the greatest environmental benefits and savings. Building materials and appliances were a natural focus; demolition also held potential savings. "You have to look at the project holistically," observes Cohen, "and decide what levels you want to reach. Then you try to find the processes, materials, and appliances that will help you meet your goals."

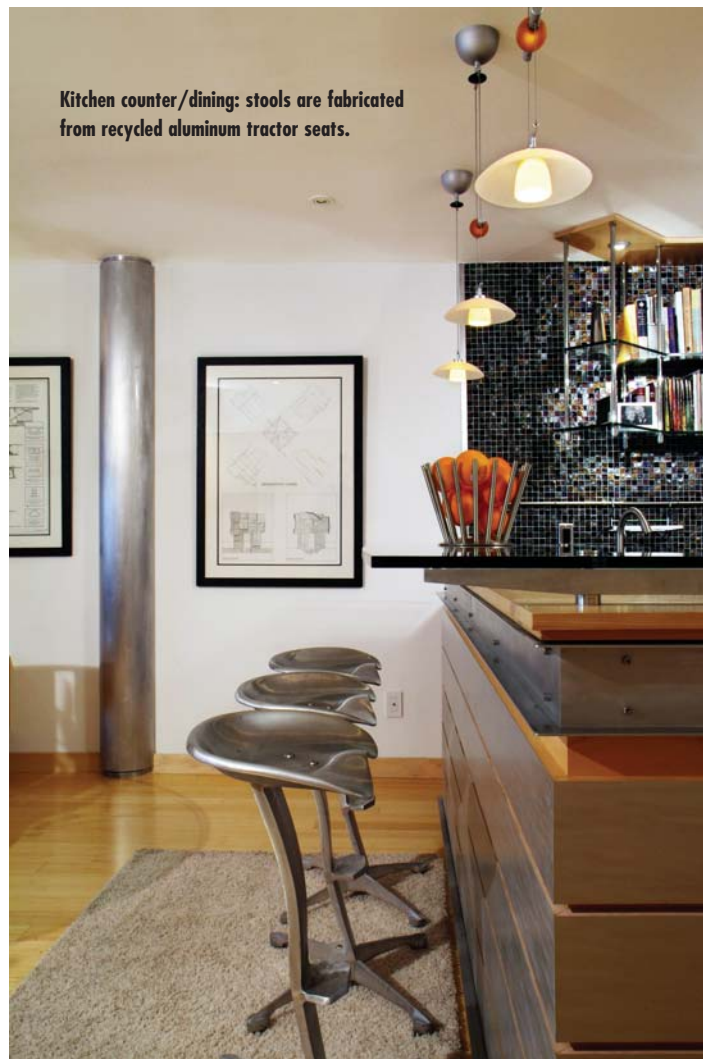


Before: View from living area toward kitchen.



Boris Feldblyum Photography

Upstairs, looking toward the master bedroom, sparkle glass doors slide to reveal or hide utility area.



Boris Feldblyum Photography

Kitchen counter/dining: stools are fabricated from recycled aluminum tractor seats.



Boris Feldblyum Photography

Master bath: glass block transmits daylight to and from adjoining bath in guest bedroom.



Boris Feldblyum Photography

Sustainable Solutions

- Demolition.** Drywall, fixtures, and appliances not slated for reuse were donated either to local families or to organizations like GreenHOME (www.greenhome.org) for use in low and moderately priced housing.
- Walls.** Low VOC (volatile organic compound) paint. Quick drying. No detectable paint odor the day the condo was painted. Tile in upstairs baths is manufactured using environmentally friendly practices.
- Flooring.**
 - Kitchen: Cork tile. Harvested without harming the tree; regenerates quickly. Anti-bacterial, sound retardant, and “give” under pressure make it ideal for any heavily trafficked area and for chefs standing for long hours in the kitchen. Affixed to the concrete slab floor with non-toxic, water-based glue; sealed with an environmentally friendly sealant.
 - Living/Dining Area, Bedrooms, and Upstairs Hall: Bamboo. Strong, durable material; regenerates quickly when harvested. Installation same as cork.
 - Area rugs of 97% recycled bottles.
 - Suppliers of bamboo and cork tile flooring were difficult to find in the first phase. Experienced installers were scarce as well. Now the materials are more available.
- Countertops.** Pigmented, polished concrete; mixed, poured, and cured in the local shop. Ingredients—sand and other inert materials—considered to have minimal impact on the environment. Finished product similar in appearance to polished stone.
- Cabinets.**
 - Kitchen: Constructed with sustainably forested maple, certified by the Forest Stewardship Council (FSC).
 - Living Room: Constructed from recycled pine chips pressed into a lightweight, durable material.
 - Bedrooms: Constructed with sustainably forested maple, certified by the FSC (other than wood veneer in closets).
 - Baths: Constructed with sustainably forested walnut, certified by the FSC.
 - Cabinets were sealed with environmentally sound products.
- Kitchen Back Splash.** Recycled glass tiles, purchased from a local distributor.
- Appliances.** The most energy- and water-efficient models on the market including dishwasher, refrigerator, oven, and a low-flow toilet. Slightly more expensive than standard appliances, offset by quick recovery of costs through energy savings.
- Lighting.** Energy-efficient lighting throughout. Open plan maximizes interior daylight downstairs. Upstairs, glass doors and glass block window between bathrooms bring daylight to the interior.
- Wing Wall.** Construction leftovers—chiefly FSC-certified wood and laminated metal—were used to construct a functional storage space near the entrance.

Using sources including the internet, product showrooms, and magazines, the couple researched and identified ways to lessen their environmental impact. Most products were readily available locally. *See sidebar.*

The renovation was six months in the planning as work and daily life permitted. Construction, phased by floor, totaled 14 months.

With the renovation now behind them, the seasoned Gala and Cohen assess what they’ve accomplished and what they’ve learned about renovations and green design.

For renovations in particular they suggest adding a 10% contingency cost for “hidden opportunities”—unforeseen conditions that demand a creative response—and another 10% for changes. Even the best planned and designed details, once constructed, may disappoint in execution.

They also recommend being familiar with the drawings. As client or architect, you need to assess whether the construction reflects what was drawn. If something is in the drawings, it should be in the construction, and vice versa.

For those contemplating sustainable design, they found green products to be comparable in price to traditional building products, with one possible exception: wood certified according to Forest Stewardship Council guidelines, they estimate, is roughly 20% more expensive than other wood. They also suggest that contractors should be chosen with care. “We found resistance from some contractors,” says Gala. “One contractor, unfamiliar with the materials we had specified, questioned whether their quality would affect his ability to execute quality work.”

What they’ve come to appreciate most about this experience is the way everything has come together, the result of extensive planning and research. Together they’ve built a strong foundation to sustain them through the future. 🌱

Gala/Cohen Residence
Architect: Mike Gala, AIA
General Contractor: Ferris LLC
Custom Millwork and Cabinetry: Denniston Industries