



Division1 Architects transforms a dated row house into a modern paradigm of sustainable design

BY SHARON JAFFE DAN | PHOTOGRAPHY BY DEBI FOX

A Washington-based nurse recently built a residence in her native Switzerland, where eco-minded features such as geothermal heating and a green roof are not an option—they are a must.

So it should come as no surprise that she took a similar approach to renovating the Dupont Circle row house she and her husband, a DC attorney, have owned for 25 years. When the couple decided it was time to update and expand the early 20th-century property and its English basement apartment, they developed some bold plans with the architects at DC-based Division1. Not only did the owners task them with implementing solar power, geothermal and radiant-floor heating and the District's very first residential gray-water

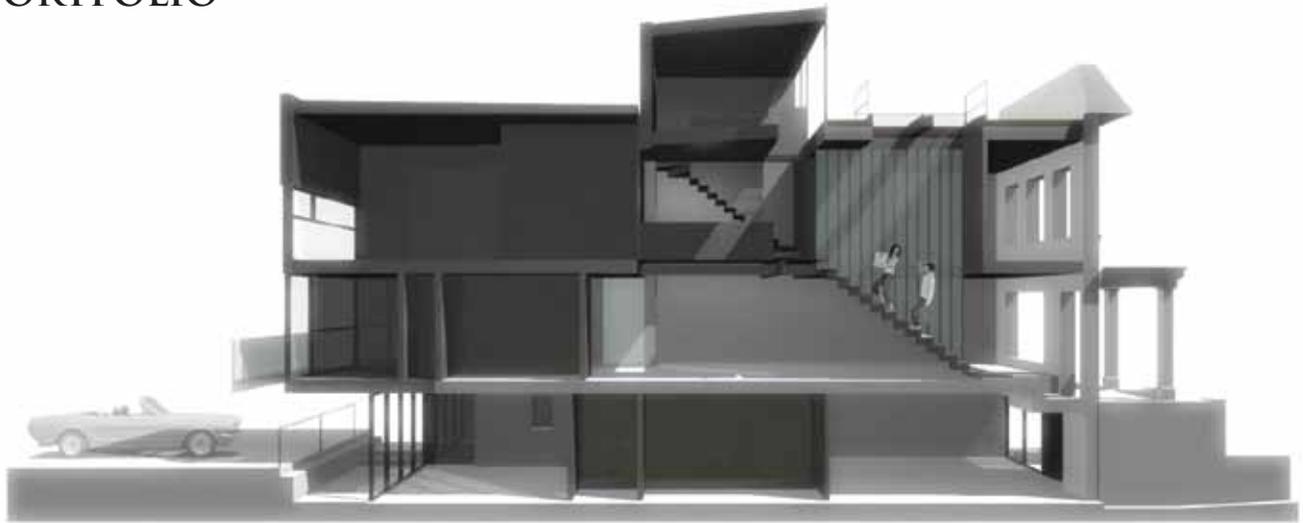


The home's exterior blends in with the historic neighborhood (top), so visitors are surprised to find such modern interiors within (above). The two-story living space culminates in an addition to the rear of the home, screened off by glass panels (above, background). Sleek white Porcelanosa floor tiles and a lacquered Snaidero kitchen (opposite) contrast with the exposed cement details and steel beams.

RENOVATION ARCHITECTURE: ALI R. HONARKAR, AIA; MUSTAFA ALI NOURI; JIN YONG KIM, Division1 Architects, Washington, DC. **RENOVATION CONTRACTOR:** DON MALNATI, Renovations Unlimited, Washington, DC.



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system, but they also challenged them to break new ground from a design perspective, transforming the interior from a series of dark, fragmented rooms into a modern, flexible space flooded with natural light.

Like many homes on its block, the original front porch had been removed years ago. "The house didn't look right without a porch," says Division1 principal Ali Honarkar. "It needed to have its parts back." In deciding to rebuild the porch, he disputes the notion that modern architects dismiss historic vernacular. "To us, good design is good design. The intention is to preserve anything that's worth preserving or restoring. We wanted to respect that this is a historic district." The new porch resembles others on the block except for skylights in its roof. "We wanted it to look clean," Honarkar explains, "but not necessarily stand out as a modern house."



Clockwise from top: A rendering illustrates how the architects orchestrated volumes to create the home's light-filled, open plan. The rebuilt front porch restores the home's architectural vernacular, since its original porch had been removed (before shot, on left); skylights ensure that daylight is not blocked out from the interiors. All three of the home's bathrooms are fitted with low-flow plumbing fixtures. A sunny bedroom overlooks the street.

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From the second-story bridge overlooking the main living space (above), the VIROC stairway leads up to a new third-floor space (right). From here, a glass floor—another trick of light—leads to the roof deck (below, right). Twenty-six solar panels are installed on the roof.

Once inside, however, the nod to tradition gives way to a modern interplay of form, light and volume. At its center, an open living area soars to a two-story height. Above, skylights, catwalks and exposed stairs marry raw elements with a sense of refinement. Beyond the kitchen, panels of translucent glass screen off a room that can serve as a bedroom or home office, created in a 14-foot addition suspended from the back of the house.

Honarkar and colleagues Mustafa Ali Nouri and Jin Yong Kim conducted careful light studies and built 3D models to get every detail right. They reduced the color and material palette to a minimum, which helps the narrow residence feel open and airy. Playing with stark white and steely gray, they contrasted porcelain tile floors from Porcelanosa and white lacquered cabinetry from Snaidero DC with exposed steel beams and VIROC—a sustainable cement composite used on the interior stairs and bridges.

Every decision hinged on how to filter the most natural light into the home. Polycarbonate panels screen the white tile staircase to the second floor, where catwalks connect two sun-filled bedrooms, each with its own bath. From here, VIROC stairs lead to a third-floor room and roof deck. Added windows and the front porch skylights even pour light into



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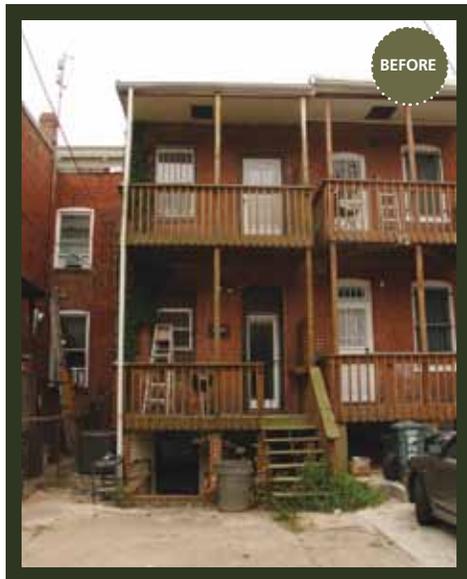
—ALI HONARKAR

the revamped basement apartment—which boasts a brand new IKEA kitchen.

Except for two rain barrels that capture water for use outdoors, there are no tell-tale signs revealing how eco-friendly the home is. “We wanted to design a house that’s green, but the green elements are not in your face,” says Honarkar. “It’s still all about the design.”

Solar panels power LED and low-voltage lighting and appliances. Spray-foam

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insulation and low-E windows by Pella and Fleetwood keep energy use to a minimum. “Gray” water from sinks and showers is re-used in toilets before leaving the house.

Division1’s first sustainable project, it involved copious research and countless visits to various permitting authorities. One of the greatest challenges was digging the 120-foot-deep holes for the geothermal system behind the home on an area the size of two parking spaces. Only one company in the area had a truck small enough to do the job.

The homeowner has no regrets about the extreme measures—and investment—she and her husband adopted to build green. “I’m convinced that in the future resources are going to be very precious. If we have the sun, why not use it to make your electricity?” she asks. “It’s just a little contribution toward the future.”

Ironically, the owners do not live in the row house—yet. The couple shares a larger home in Woodley Park and has rented out the Dupont house and its basement apartment for more than 20 years. Now that their youngest child has gone off to college, they are planning to move in themselves—or share it with their three daughters—someday. “We are not ready to downsize yet,” says the wife, “but it’s something we’ll do eventually. It just makes so much sense to use less space and have a trimmer footprint.” ❖

Debi Fox is a Washington, DC-based commercial photographer.



A modern, two-story addition (pictured here) was suspended from the original rear façade (left). It contains an office with balcony on the main level and a light-filled bedroom (below) on the second floor.

