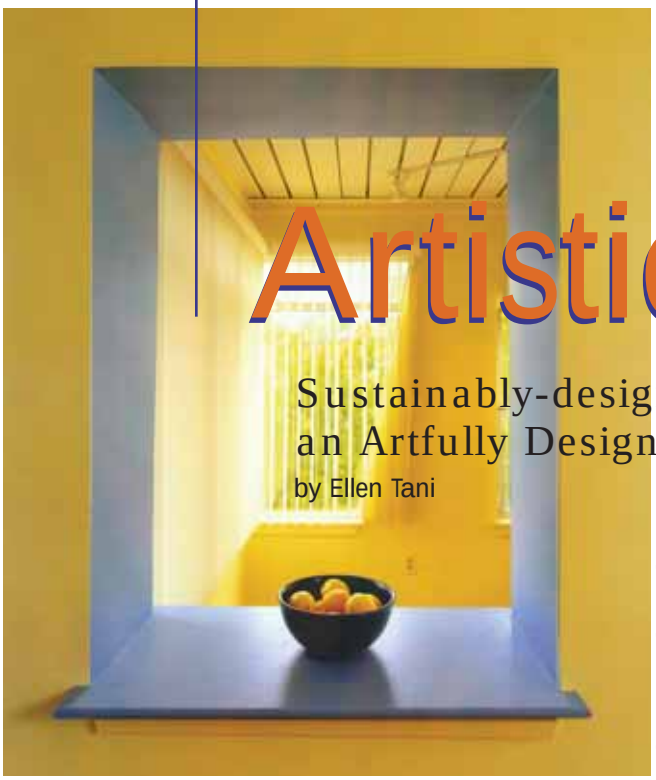

Artistically Green

Sustainably-designed Artists' Housing and an Artfully Designed Sustainable Home

by Ellen Tani

Taylor Design & Photography, Inc.

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Sustainable design often conjures up "crunchy granola" houses with ugly rooftop solar panels, dim lighting, concrete floors, and a fervent commitment of the occupants to hemp and wheatgrass. Two recently completed projects—one a multi-family building for artists, the other a single-family home—overturn common preconceptions of green design. They show that sustainability can be affordable, that "extreme green design" can be the most effective, and that sustainability can be achieved without sacrificing aesthetics. They also show that sustainable design can produce fun, affordable, and beautiful places to live.

Sustainable, Affordable, and Creative

An affordable housing complex that has won eight awards in three years, the Housing Initiative Partnership (HIP) Artists' Housing in Mount Rainer, Maryland, is the result of a public-private partnership that turned a community nuisance and eyesore into twelve fun, affordable apartments for artists.

The renovated building, designed by Wiencek + Associates Architects + Planners, PC, of Gaithersburg, is the first new artists' housing in the Gateway Arts District of Prince George's County, the product of a county sector plan aimed at reinvigorating communities along U.S. Route 1 that includes Mount Rainier, Brentwood, North Brentwood, and Hyattsville. By creating a district specifically dedicated to artists and cultural organizations, the County hopes to spur economic growth, strengthen existing arts resources, and cultivate distinct and coherent community identities along the nondescript commercial corridor.

Creating live / work spaces for artists was viewed as critical to the formation of the arts district. Wiencek + Associates considered local history, art, and environment as design parameters. Adaptive reuse of an existing building in a walkable neighborhood, streetscape improvements, and environmental preservation are only the "baseline elements" of their sustainable design process. The architects preserved the building's architectural character but added two studio bays along the street that appear to be extruded from the original masonry wall. The outer walls of these bays match the existing building exactly in terms of brick color and window pattern, while the side walls are glass curtain walls, shielded from the summer sun at each floor by a steel brise soleil. The "extruded" brick wall of one of the bays is angled sharply along one edge from the ground to the roof, from which the curtain wall emerges as a form in its own right. The effect signals that the bays are new, not historic. Inside, studio spaces are vibrant, colorful, and lively. Open floor plans accommodate a variety of living and working styles, maximize light exposure, and help minimize heating and cooling loads. Careful attention to interior details and finishes, including such resident-artist needs as light courts and mess sinks, distinguishes the building from others in the affordable housing sector. Many green building materials were selected for durability and long life, reducing maintenance and replacement costs. Existing wood floors were sanded and refinished, while bathroom tiles made of recycled glass and car windshields add color and texture.

Energy-saving sustainable features benefit residents in the form of lower utility bills, an important but often overlooked component of making housing affordable. Existing operable windows were replaced with double-pane insulated units filled with argon gas and finished with a low-emissivity (Low-E) coating that reduces solar gain in summer, while tankless hot water heaters, highly efficient HVAC systems, and a green roof (the first in Prince George's County) help minimize energy consumption without sacrificing comfort. Planted with

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sedum and a bird house to attract local wildlife, the green roof doubles as residents' only common area, since the compact site allowed little outdoor garden space and the limited floor area precluded an indoor community room. Exterior landscaping incorporates a bio-retention pond for stormwater management, while wind sculptures, birdhouses, and colorful garden pieces reveal the building's artistic identity.

HIP Artist's Housing not only succeeds as a creative, sensitive, and affordable design solution and community improvement, it also sets an example as architecture that goes the extra mile to promote sustainability. Though no supplemental funds were included in the budget for sustainable features, the architect and developer were able—with creativity, ingenuity, and a little extra effort—to create an environmentally sustainable and financially responsible affordable housing complex. With an uplifting design to match its program, HIP Artists' Housing sets the bar high for affordability, sustainability, and design excellence in the Gateway Arts District.

Sustainable Design to the Limit

The Hutchins Residence in Takoma Park, Maryland, is an exceptional example of sustainable design as both process and practice. Bill Hutchins, AIA, who designed the renovation and addition to this 1890s bungalow for himself and his family, is a walking, talking model of sustainable design philosophy. And his home reveals that, far from imposing a Spartan existence on its adherents, sustainable living can be luxurious.

It's clear that Hutchins has not forgotten what it's like to be a child—to experience a constant and vital engagement with the world. His design process draws equally from spontaneity and intention. With the technical know-how to utilize energy-efficient systems, the social conscience to support local businesses, and the ability to embrace impromptu design inspiration, he has created an extraordinarily eco-friendly home that reflects the character of its inhabitants and sustains and involves the local community. This is "green design to the max," with no unsightly rooftop barnacles or other "crunchy granola" trappings to give it away.

The house unfolds like a song in an expressive and poetic series of moments. Playful yet thoughtfully integrated peculiarities—a wire piggy tail protruding from a ceiling beam, a countertop mosaic of tile samples, an interior wall clad in weathered shingles, a sculpted steel stair railing—begin to convey the big idea. Whimsy, vitality, and spontaneity are essential to the design of this house.

The soft, mottled walls are made of straw bale with earthen/lime plaster, providing high-efficiency thermal protection all year. The interiors emanate warmth with rich honey tones, soft textures, and intimately carved spaces. As one passes from room to room, it's as if the inside of a tree has been peeled off and applied to the walls. The lustrous wood floors, ceiling beams, and walls are either existing or were obtained from Community Forklift, a local business that sells surplus and salvaged green building materials. Hutchins used a simple

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wood-planing technique to bring old wood back to life, revealing a new layer while preserving the structural integrity of load-bearing elements. Nearly all newly-incorporated materials were salvaged: framing lumber, windows and doors, plumbing fixtures, stone for terraces, even Silestone.

A rustic stove heats 90 percent of the house with no carbon dioxide emissions by burning corn, a renewable resource. A biodiesel-fueled radiant floor system provides any remaining needed heat, and is the sole source of heat for the 600 square-foot basement apartment. The heating bill for an entire year—for a house that is over 3,500 square feet—is only $300.

Hutchin's commitment to sustainability doesn't stop at the front door. The same biodiesel fuels the family's cars, which are rarely used in place of the Metro, only one block away.

In his everyday activities and in his architecture practice, Hutchins strives to live the motto "Think Globally, Act Locally" by supporting local businesses. As an active member of the Corn Co-op (an organization of corn stove users), Hutchins visits the silo regularly to buy fuel for his house. For construction, he hired local laborers (students as well as professional crews), and even organized community work days where volunteers traded a day's labor for a day's worth of hands-on education in sustainable building practices.

Though the two are not typically considered in the same context, historic preservation is a sustainable design strategy, since by definition it extends the useful life of existing building materials, reducing the need for harvesting and manufacturing new materials. The location of Hutchins' late-19th century bungalow in Takoma Park's Historic District mandated that the existing structure remain largely unchanged when viewed from the street. By removing the second floor (whose wood was refurbished to create the new floor), Hutchins converted the existing 700 square foot space into a large, double-height front room that serves as an art gallery, living room, and community meeting space. For what he could not change in the front of the house, he more than made up for in the rear, with a 2,700 square-foot addition that houses two home offices, a kitchen, a basement apartment, and three bedrooms (three generations share the home, seeking the maximum appropriate density for their residential neighborhood).

Behind the house is another ecosystem entirely. A beautiful and sophisticated stormwater management garden, complete with retention pond, wetlands, a rain garden, and permeable pavers, is the last element of the project. In addition to its ecological function, the garden provides a soothing and beautiful view from the open-air sleeping porch, a luxurious yet simple space that opens from the master bedroom.

"I have done architecture with a capital A," says Hutchins. "I worked for 13 firms before I went out on my own, from the major players to the small two-man shops. But I came to a point in my career where architecture felt hollow. I wanted a deeper relationship with places and people." And so emerged a conscience that honors the relationship between humans, their environment, and the soul of a home. "We tend to live in buildings as we ride in powerboats, unconsciously flipping switches on and off," said Hutchins, "rather than considering them as sailboats: vessels that can, through our engagement, put us in more intimate relationship with the elements and loved ones with whom we live."

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