

THE GREEN HOUSE

Architect Matthew Bialecki believes that sustainable, energyefficient design and materials can transform the American home

BY JAMES ROPER PHOTOGRAPHY BY MATTHEW BIALECKI, AIA

f you look at Matthew Bialecki's website, there's a quotation that says it all: "Living green is more than a label. It's a healthy way of living." The word "green," whether it applies to architecture or any other endeavor, has come a long way since the 1970s. Green building, for instance, no longer means living in a yurt while eating granola and having mind-numbing conversations about solar energy.

Those clichés simply don't apply anymore. Today there's a real sense of urgency about the environment. The planet is in peril and we seem to have finally grasped that reality.

Now some architects are proving that part of the solution can begin at home—literally. Sustainable building practices are one answer, says Bialecki, and he's been demonstrating this for more than 20 years with new construction and historic renovation projects in the Hudson Valley. "As a kid, I never realized how lucky I was," says Bialecki, looking back on his childhood in the South Bay area of Los Angeles near Palos Verdes—the so-called "Hollywood Riviera."

This California kid—"with my surfboarding, skateboarding friends"—played in a paradise, a green oasis geographically sheltered from the sprawl of Los Angeles. It was an idyllic existence—and environment—that had a profound effect on him. Besides the beauty of the natural environment, the area offered, in Bialecki's words, "a treasure of architectural design and experimentation." This included the outstanding mid-century work of such architects as Lloyd Wright, the son of Frank Lloyd Wright, and Harwell Harris.

After high school, he headed for California Polytechnic State University in San Luis Obispo where he entered the College of Architecture and Environmental Design. The very name illustrates a holistic approach: architecture and environment were almost one.



"The landscape was amazing—the sky, the rolling hills—the look of Old California was still there," he says, explaining how San Luis Obispo itself was almost a case study in how to grow sustainably and avoid sprawl. He credits people such as Kenneth Schwartz, a former town mayor and also a former dean at CAED. "He was instrumental in developing land plans that preserved surrounding open space—to this day they still serve the city so well," the architect explains.

It was clear to Bialecki that "You can't be green if your own community isn't sustainable." He would never forget this valuable lesson. Today Bialecki is passionate when he talks about his approach to designing a sustainable structure.

His top priority is a high-performance "building envelope," meaning floors, walls, and roof. Then there's the "engine" of the house—state-of-the-art, high efficiency building systems—heating, cooling, electrical, and plumbing.

And the house should be integrated into the landscape. As he explains, there is a science of "proper solar orientation, placement for utilizing prevailing wind and solar orientation, and utilization of topography for berms and drainage."

Or, in other words, "A better box with a super efficient engine parked lightly on the landscape."

Sustainability also means people need to consume less and take responsibility for their environment. For starters, turn down the thermostat and consume less. The goal should be a zero net energy house, one that produces as much energy as it consumes.

Sustainable building materials—that is, natural materials for flooring, walls, and structural framing—are also a factor. The materials also should be healthy—never toxic.

In addition, Bialecki encourages people to buy locally when possible. "Why should someone in our area, for instance, buy Western pine or stone from Italy or Brazil when there's bluestone from New York State and Eastern pine—a beautiful, pale wood." He adds that across the country there are indigenous products available to homeowners.

He is encouraged by the work of the U.S. Green Building Council, a non profit organization that promotes environmentally responsible and healthy buildings. One of the ways it accomplishes this is through LEED (Leadership in Energy and Environmental Design), a rating system for the design, construction, and operation of high performance green buildings.

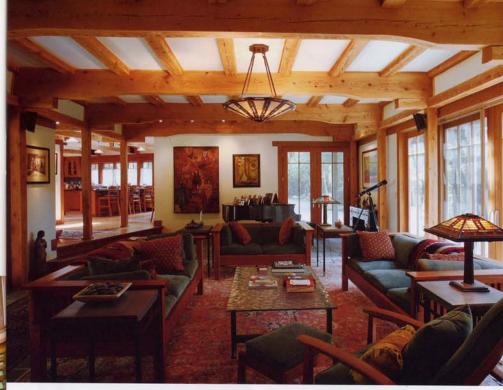
But when the architect talks about what he describes as the current mass-produced, or developer home, he sounds



Facing page, top: The Vidich-Stein house's warm and inviting living room. Below: This Craftsman-style house in Ulster County, New York, sits comfortably in a landscape of trees and stone walls. Passively cooled, it makes use of the architect's umbrella roof system and rain-screen wall technology. This page, right: The Allbright-Smith House in Ulster County, New York, won an American Institute of Architects Award for Architectural Design in 2004. It was designed with sustainable building materials and features a variety of green building technologies. Below: This open-riser staircase in Matthew Bialecki's own home features a single support beam made of rough-hewn oak; the railing is constructed with hand-bent brushed aluminum rods.







frustrated. "What you have is the equivalent of a 1950s gas guzzler," he says, noting their ever-increasing size and lack of energy efficiency. "Often what today's homes lack is a sense of intimacy and comfort."

As for his clients, many of them came to him after they looked for homes to buy, and were disappointed by what was on the market. "There isn't anything that feels like me," "they told him." 'Nothing embodies my ideals, how I want to live."

So it should be no surprise that Bialecki admires the work of Sarah Susanka, architect and author of six best-selling books, whose "build better, not bigger" approach to design is reflected in the title of her first book, *The Not So Big House (Taunton 1998)*.

Matthew Bialecki's appreciation for design and fine craftsmanship extends to interiors and furnishings. His Ultimate Bungalow Furniture Collection is, in fact, a tribute to brothers Charles and Henry Greene, whose Gamble House in Pasadena, California, is considered one of the finest examples of Arts & Crafts architecture. •

James Roper is a freelance writer and editor who covers design and architecture.



For more information about the work of architect Matthew Blalecki, visit his website at www. bialeckiarchitects.com. See the "Sustainable Design" section to learn more about the firm's sustainable design approach, including such topics as its trademarked "umbrella roof" system, radiant heating, thermal mass, and thermo-siphon. To learn more about the U.S. Green Building Council, check its website at www.uspbc.org.

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