A Timely Way to Build
Think It’s Steel? Think Again.

Meet our new line of simulated steel moving glass walls and windows forged from aluminum. Design-forward, energy-smart, and very affordable.

westernwindowsystems.com
Explore the inspiration for Amy Kehoe’s own kitchen remodel at dacor.com.
Authenticity.
AND ALLURE.

Amy Kehoe x The Heritage Collection

“OFTEN, WHAT GIVES AN OBJECT AUTHENTICITY IS THE ONE WHO IS BEHIND THE OBJECT—ITS MAKER—AND ITS FINISH, ITS TOUCH. AN AUTHENTIC PIECE ISN’T “OF THE MOMENT” OR TOO CONTRIVED. IT’S SIMPLY SOMETHING YOU NEVER TIRE OF.”

- AMY KEHOE
Interior Designer/Co-Founder Nickey Kehoe

DACOR
LET THE SHOW BEGIN

NEW YORK | CHICAGO | LOS ANGELES
Showrooms Opening Winter 2018/19
Q. What roofing does an architect choose for his own home?
A. Metal roofing.

“We wanted our home to be as maintenance-free as possible. Metal is just a great option for residential construction.”

- Jack Carson, President, Carson Design Associates

With a lifespan of more than 50 years, a PAC-CLAD metal roof can be the last roof you buy. More than 45 colors available, including Energy Star-colors that can reduce heating and cooling costs.
CONTENTS

Features

26  CASE STUDY: A TIMELY WAY OF BUILDING
Lake|Flato Architects, Bensonwood, and Ingrained Woodworking collaborate on a new kind of custom home.

38  DESIGN LAB: ARCHITECTURAL PROMENADES
A trio of houses from Alterstudio, Hays+Ewing Design Studio, and Bates Masi+Architects choreograph structure and site in a dazzling dance of discovery.

Departments

10  EDITOR’S NOTE

12  PRO-FILE DESIGN
Obie Bowman is the poet of Sonoma.

18  PRO-FILE BUILD
Tedd Bensonwood’s factories want to build your next custom project.

22  AIA CRAN
A symposium of details sweats the small stuff.

70  RD PRODUCTS
Fresh products for your projects.

74  PARTI SHOT
E. Cobb Architects builds character into a hilly mountain site.
Give the Dryer Some Space

Today, you can place the dryer flush to the wall without crushing the exhaust hose or otherwise restricting airflow. Specify the Dryerbox® for safer, roomier and more efficient homes.

NEW Standard Installation Model 480
22 Gauge Aluminized Steel—Shown Painted

Actual Transition Hose without a Dryerbox

FOR MORE INFO CIRCLE 4

888-443-7937
www.Dryerbox.com

888-443-7937
www.Dryerbox.com

888-443-7937
www.Dryerbox.com

888-443-7937
www.Dryerbox.com
Connect the dots to reveal which specifier forgot to use redwood.

How do you feel when you build with strong, beautiful, and versatile redwood timbers? Happy, of course. That’s because redwood is the obvious choice. Find out more at getredwood.com.
Fourteen years ago, I gave architect Ray Kappe, FAIA, a lifetime achievement award for his work in residential design. He was 77 at the time, and as sharp and engaged in design as ever. So I wasn’t terribly surprised when he asked me if he could bring a young developer to the awards luncheon in his honor—“a guy who wants to work with me on a big project,” he said. Sure, I said. That guy was Steve Glenn, founder of the prefab company LivingHomes; and he and Ray did end up collaborating shortly after our luncheon in 2004. Two years later they completed the first LEED Platinum house in the country.

The house was Steve’s own home in Santa Monica, and he built it as modules in a factory—although it still required a fair amount of construction on-site to finish it out. Ray, a veteran of the ’50s merchant housing industry, had been interested in factory-built housing for decades but kept hitting a wall trying to make it work. Factories just couldn’t achieve the rigors of architecturally designed houses then and, 50 years later, it was still largely true.

Ray and Steve made inroads, however, as did other bright minds. Then the recession hit, stalling many of the best efforts. Prefab housing has limped along since then, never hitting stride as anything more than a niche enterprise—its promise very much unfulfilled. The weak link remains, as always, at the factory. The ones capable of fabricating an architect-designed house haven’t been able to reach scale to make the business side work, and the ones capable of scale haven’t been able to execute reliably on the designs.

There are solid signs that’s finally starting to change. Katerra, a three-year-old startup focusing on off-site construction, just received $865 million in additional venture capital financing. And Plant Prefab, Steve Glenn’s two-year-old manufacturing offshoot of LivingHomes, recently announced an infusion of investment from Amazon’s Alex Fund.

There’s more disruption on the horizon. Last month, Airbnb announced that its innovation lab, Samara, will begin an “initiative to prototype new ways that homes can be designed, built, and shared.” In a press release, Airbnb co-founder Joe Gebbia states, “To meet the demands of the future, whether it be climate displacement or rural-urban migration, the home needs to evolve, to think forward.” That’s the buzz in California.

Meanwhile, earlier this year in New Hampshire, Tedd Benson, a custom builder with 45 years of experience, opened a 110,000-square-foot, state-of-the-art production facility for building components. Bensonwood has been a leader in off-site production of high-performance panels, components, and assemblies for years, but now is poised to go big with its knowledge, experience, and production capacity. You can see the new custom home it built with Lake|Flato Architects and Ingrained Woodworking beginning on page 26 of this magazine, and the profile of Tedd and his three companies on page 18. Maybe now the time is finally right for the prefab revolution.

S. Claire Conroy
Editor-in-Chief
claire@SOLAbands.com
Minimal Framed Large Panel
Sliding Glass Wall

cero’s ultra-thin lines create maximum light filled spaces connecting interior and exterior

- Consistent narrow 1 5/16” (34 mm) rails top to bottom
- Uncompromised roller system equals effortless sliding
- Four sill options engineered for American construction
- Adjustable height floor track for long-term precision operation
- Tested and rated for air and water infiltration and structural wind load

Explore our opening glass wall product families:
- Folding
- Sliding
- Frameless

Showrooms Nationwide
Visit NanaWall.com
800 873 5673

FOR MORE INFO CIRCLE 6
Tucked among the windswept grasses of Coastal California’s storied Sea Ranch community are dozens of poetic and earthy homes designed by Obie Bowman, FAIA. He has designed houses there and elsewhere in Northern California and Oregon for nearly 50 years, establishing a lasting legacy of sustainable, sculptural, and sensuous residential architecture. His buildings are highly personal and original, and deeply reflective of their owners and their settings. It’s no wonder he’s a local hero to all who love the natural world and wish to immerse themselves in its bounty. Each house explores anew how manmade materials, natural elements, human beings, and the landscape might coexist in a gentle, artful, and exciting way.

Don’t be surprised to find whole tree trunks as structural columns in an Obie house, or a kitchen clad in corrugated metal, or even a shower wrapped in giant boulders and topped with a glass roof. Passive heating and cooling are baked in, so to speak, with solar chimneys at the center of the building. Sometimes you’ll find a house buttressed from coastal winds by giant logs, or seemingly bermed into a meadow and covered in sod. Nature enters Obie’s buildings at every opportunity and his buildings, in turn, make majesty of the interaction.

His houses are not for everyone, to be sure. They are not for the faint of heart—those who wish to play it safe and build something that appeals to the masses. More often than not, they are also second homes—weekend houses in wine country, vacation houses by the seaside. As such, they can take liberties with program and execution—they are frequently an expression of the clients’ real selves, or their wished-for better selves. They can have an element of fantasy and whimsy, and a hefty dose of exuberance. Obie’s houses exhort their occupants to engage in the immediate world around them; they are not a passive backdrop for life, they are full-fledged participants in those lives. No two are alike, because no two clients and no two sites are alike either. Each prompts a unique and specific response that rises above adherence to any particular style of architecture.

The Poet of Sonoma

OBIE G. BOWMAN, FAIA
HEALDSBURG, CALIF.
“I have a lot of drive in me to find better solutions to the things that we’re doing,” says Obie. “I push myself and my office hard. We are dedicated to doing thoughtful work.” The office is very busy these days, so the push and pace are a bit exhausting. Although he has always had invaluable help from his wife, Helena, who serves as his office manager, he’s having a hard time finding architects to add to the team after downsizing during the recession.

“Most of our projects are in a natural setting, and I have an instant response to those.”
—Obie Bowman, FAIA

“It’s my biggest challenge. And every architect is in the same situation.”

Fire rebuilds and renovations are part of the pipeline, certainly, but the booming economy in the San Francisco Bay Area is also spurring demand for new weekend escapes and full-time homes away from the city. When the housing market is confident, there’s more interest in inventive architecture like Obie’s. He knows this period could be fleeting, so he feels pressure to seize what opportunities he can. The downturn of 10 years ago is still painfully fresh in his mind. “The worst part was being an architect without having any architecture to do,” he recalls. “It was very difficult and stressful. So it’s difficult for me now to turn anything way.”

Still, the quality of work is as compelling as ever. Recent projects include a striking new house on a hillside in Sausalito. The Cope Residence embraces its dramatic bay views with huge canted windows, reminiscent of a ship’s bridge. “The area is so foggy and cool. After morning, the sun is gone behind the hill, casting the site in shade from 11 a.m.
on,” he explains. The best panorama is to the east, so those canted windows not only showcase bay and city vistas, they also prolong the amount of daylighting that penetrates the building.

On hot, sunny days, two “ventilation chimneys” usher heat up and out of the building with the aid of low-speed fans. “You don’t see the technique used that much anymore,” says Obie, “but it’s very effective. Joe Esherick had a skylight that opened for cooling his house, and it was a great idea.” An earthen roof also cools the building, while allowing it to meld with the hillside. Substantial retaining walls were necessary to provide fire truck access and turn-around clearance. Ultimately, Obie says, he really only had one area to place the footprint of the 4,000-square-foot house and 700-square-foot garage on the site.

There’s plenty of corrugated metal inside and outside the house, and lots of warm woodwork and exposed structure—all hallmarks of Obie’s work. “I really like the contrast and collaboration between our manmade materials and those that are completely natural—that range of materials is very interesting to me,” he says.

Obie’s palette is also on view in the recent Dover Guest House in Jackson County, Oregon, which began life as a corrugated metal utility building. The building retains its metal cladding, but is reworked to include two bedrooms, a living area, and a kitchen. The interiors are as rich and detailed as the exterior is humble—woods, metals, and concrete blend into robust, articulated spaces. Glass garage doors raise to connect the interiors visually and physically with the outdoors. “It is our intent not to adhere to any specific style or look, but to be compositionally inclusive with a variety of elements orchestrated into a single work,” he writes in his project description.

He puts it to us this way, “The idea, as we developed it: was we were just going to respond to things we needed to solve, without thinking they needed an aesthetic umbrella. We wanted to let them be a variety of things—contemporary mixed with heirloom and artifact. And we did that. When you look at it, it could look like a hodge-podge, but to experience it was rich and positive. That interests me more than belonging to any group or school.”
Each view from this modern mountain home heightens the experience of the changing daylight throughout the seasons of the year. Only Kolbe’s VistaLuxe® Collection could provide high thermal performance windows with clean, square profiles for elegantly framed views. Find your vision at KolbeWindows.com.

My Vision: Contemplate every view to connect with the outdoors.

— Warren Lloyd, AIA LEED AP
Lloyd Architects
Cabin Fever
Obie arrived at Sea Ranch nearly 50 years ago, after escaping the density and traffic of Los Angeles. In Southern California, he had been designing regional shopping centers surrounded by parking lots—work he now calls “very disturbing”—and would take nature bathing excursions to the countryside with Helena whenever they could. Finally, it occurred to them that they should relocate to the countryside for good, and they headed up to Northern California.

Obie’s first Sea Ranch commission was the now-famous Walk-In Cabins of 1972, a cluster of 15 simple, 600-square-foot hillside houses accessed by trails from a remote central parking lot. They were clad in redwood and oriented toward wooded and water views. Skylights brought additional natural light into the loft bedroom and central living area, and rafters were left exposed in the interior. They were the tiny houses of their day, intended as space-efficient, affordable entry points to the idyllic, almost utopian Sea Ranch community.

Obie went on to larger, more ambitious house commissions at Sea Ranch. One of his personal favorites is the 1987 Brunsell House, an earthen roofed building that disappears into its site. The house balances multiple opposing forces and concerns, ultimately creating an inspired family dwelling that preserves view corridors for neighbors to the rear of the site. Says Obie, “This is one house where I got it together as an architect—the site, the program plan, the budget, the contractor, and the issues with the design committee. There were so many things for a young architect to struggle with and fall flat on my face with, but I took a whole leap forward. It still has a special place in my heart.”

Despite such personal and professional successes over the years, Obie says he’s never gotten the big, lavish custom home projects. “None of our projects has been very large or high end, but they’ve had decent budgets and great clients,” he says. Perhaps he stayed at Sea Ranch too long before moving his office to Healdsburg 25 years ago, he muses.

He would like to do more urban or suburban houses, as well. “Most of our projects are in a natural setting, and I have an instant response to those,” he explains. “I can size them up in five minutes—the value of the breezes, the angles of trees. I know I’m going to try to tailor what we do to the slope of the land, and I know quickly, conceptually how the house will be most comfortable in that setting. But there are similar challenges in urban work—how to harness the sunlight and breezes and create privacy from the neighbors.”

It’s clear Obie has much architecture left to do, and the creative energy to do it with. But even if those big commissions and urban houses don’t come his way, he’s happy with the work that does. Says our local hero, “The projects that come to me have a kind of poetry and earthiness I’m probably best suited for.” — S. Claire Conroy
Selecting colors has never been easier, faster or more fabulous. Get access to a suite of professional color tools from fan decks to color sample kits to our inspirational in-store color displays in more than 4,300 Sherwin-Williams® locations. We’ve got color covered. Now, so do you. Learn more at swcolor.com.
It’s not often talked about, but one of the biggest hindrances to securing a custom home commission for architects and builders is the lengthy construction timeline. It takes a long time to build a new house from the ground up, and not everyone is willing to wait the necessary two-plus years to see the process through. So, more often than not, buyers will settle for the “good enough” existing house, rather than suffer through the waiting period for their new custom dream home. Well, builder Tedd Benson has an answer for this problem, along with a host of other flaws in the way we deliver houses in this country: He calls it “montage,” but most of us know it as prefabrication.

Part of why he wants to distance himself and his companies—Bensonwood, Unity Homes, and the new spin-off Tektoniks—from the word prefab, and especially “modular,” is the motley achievements done under those labels—despite, often, the best intentions. The terms have been loosely applied to a myriad of project delivery methods and buildings of dubious quality and performance. His companies are focused on continual process improvement—on reaching toward the future of homebuilding science and construction and on creating the best, controlled work environment for his company’s 125 employees. To that end, Bensonwood opened a new, 110,000-square-foot factory in Keene, New Hampshire, this past spring. It’s equipped with state-of-the-art precision machinery from Europe with the capacity to process mass timber components, in addition to its regular suite of products.

Although he’s fully embraced the newest technologies in home construction, Tedd got his start resurrecting one of the oldest building methods in the country—timber frame construction. He fell in love with its beauty, intricacy, and durability while working as a custom builder in New England in the 1970s. There, he had the opportunity to remodel existing timber frame buildings and marvel at their great condition centuries after they were built. That led him to build new houses with timber framing and to share his learnings with other enthusiasts. He literally wrote the
book on timber frame construction—in fact, he wrote four of them—and was instrumental in reigniting interest in the building art.

Timber frames lend themselves to factory fabrication, which Tedd’s Benson Woodworking company (later morphing into Bensonwood Homes) embraced. Over time, the company grew the number of building components and assemblies it offered, as well as the types of construction it supported. Today, the company doesn’t build an entire house in its factories, but it can fabricate nearly all of its components and assemble them, with local talent, at a building site anywhere in the country. “There really is no practical limit to what we can achieve with regard to offsite construction,” he says. “We have incredible flexibility in what we can build and what we can contribute to a project.”

Iterating and Perfecting
Bensonwood, based in Walpole, New Hampshire, works with architects, homeowners, and other professionals to deliver bespoke buildings using its standardized assemblies. It can engineer entirely new assemblies, panels, and components, but the best performance results are from employing what the company has learned and engineered over multiple installations. If the architects who work with Bensonwood can learn its “rules,” or standardized kit of parts and dimensioning, they can benefit from 45 years of building science research (see our cover story on page 26 for an example).

This is the way it works in Sweden, Tedd points out, and other European countries. “In Sweden, architects are designing spaces and buildings—they don’t worry about envelopes and assemblies, because they can rely on companies to deliver those. In the same way, architects here have gotten comfortable with window systems, cabinets, and doors.

The challenge is for our architects to let go of trying to control everything. We’re totally invested in making really good envelopes, and iterating and perfecting them. The question is, ‘can we get architects to leave them alone?’ It’s a good industry conversation to have.”

With his other company, the six-year-old Unity Homes, Tedd has answered the question himself—by designing and offering his own set of houses, engineered to the high-performance standards championed by Bensonwood. Its goal isn’t to preempt what architects do, but to offer a more affordable, predictable, and quicker alternative to full custom design and construction. “I love the high-end custom projects, but not every client can be a patron,” he points out.

Above: Bensonwood has a history of building forward-thinking prototypes, including KieranTimberlake’s award-winning prefab Loblolly House on Maryland’s Eastern Shore.
And with his brand new company, Tektoniks, he’s gone in the opposite direction—simply providing his components to larger-scale multifamily and commercial construction projects led by developers, architects, and commercial builders.

“At our factory what we’re really producing is panelization, and that suite of building assemblies is available for Bensonwood projects, Unity projects, and Tektoniks. They aren’t substantially different, but they may be thicker or thinner. We’ve basically distilled those families of assemblies to get dependable building performance and to manufacture them efficiently,” he explains.

What’s left to conquer? A kind of Unity Homes for high-end residential. Rest assured, that’s in the works. The plan is to launch a platform of architect-designed houses built with the high-performance components Bensonwood companies have engineered. What excites Tedd about the initiative is the opportunity to make houses that can meet even more demanding levels of energy efficiency and resource conservation. At present, the factory is capable of making a house to Passivhaus standards (and has on several occasions), but the Unity Homes mission to remain affordable precludes the extra cost involved.

More is Less
Why have so many companies doing seemingly similar things? Tedd has a big factory and a lot of machines to keep busy. Unlike several factories in other parts of the country, his enterprise is not underwritten by venture capital money. “We are bootstrapped with local bank financing, and they attached everything including my dog,” he jokes. Quips aside, there’s a strong structure underpinning Bensonwood companies, decades of know-how, and deep relationships with great custom builders and architects across the country—qualities most of the shiny start-up prefab companies don’t have. Tedd Benson himself is a name brand and a reliable known quantity. What he understands better than anyone is that to bring costs down for his high-performance components, he needs to ramp production up.

“Building one single-family home at a time has its limits in terms of scaling,” he says. “And that’s one of the benefits of Tektoniks and reaching into multifamily and commercial work. The more we can scale up production, the more that helps us with the supply chain to bring costs down. As we look to scaling the benefits of offsite fabrication, we do need to reach toward standardization. Panelization, 3D components or pods—if we can standardize the micro and macro organization of them, then we can really provide the industry broadly with some cost-competitive and highly improved building shells and building components.”

That’s not to say Tedd wishes to abandon the highly specific custom work Bensonwood is capable of doing. He thinks of it as research and development that can trickle down through the other companies. “Custom work and offsite fabrication are very compatible,” he notes. “In our offsite facilities we have access to CNC machining and other precision tools, so complexity and uniqueness are not an obstacle and, in fact, they’re kind of an invitation.”

Tedd Benson is ramping up when most veteran custom builders might be ready to lighten their load. That’s because building well isn’t just a passion for him, it’s a social justice mission. He’s appalled by the prevailing construction standards and lax building codes in this country, and he truly believes we can and should do better.

“People are spending their life savings on poorly built houses. We want to make the best possible home available, and to make it more affordable and accessible,” he says. “In Europe, prefab is associated with better-quality buildings; they understand factory built is how you get better.”—S. Claire Conroy
YOUR REPUTATION STANDS ON A NAME

So Does Ours

Generation after generation, Marvin Windows and Doors has built our reputation through dedication – the same dedication you build into every home. Together, we share a commitment to design, personal attention and the unparalleled ability to customize. As partners, we both draw from these strengths, to build a reputation that can be shared.

DISCOVER THE MARVIN DIFFERENCE AT MARVINWINDOWS.COM
Since the emergence of modern architecture a century ago, architects have faced many new challenges: the integration of new technologies, new materials, new concepts of space and form, and even new relationships between architecture and nature itself. All have led to new ideas and meanings of construction. The modern architectural detail became an expression and celebration of the new—an authentic successor of traditional ornament. Modest in scale, low in cost, and accessible to adventurous clientele, residential architecture was a natural laboratory for exploring new ideas. One cannot imagine modern architecture without Rudolph Schindler’s Kings Road House, Le Corbusier’s Villa Stein, Frank Lloyd Wright’s Usonian Houses, or Mies van der Rohe’s Farnsworth House.

In 1938, Czech-born American architect Antonin Raymond, along with his wife and partner Noémi Pernessin Raymond, published the book, “Architectural Details.” Printed in Tokyo, with its beautifully designed, handmade grass-cloth cover and spiral metal binding, the volume stood out from other publications on contemporary architectural detailing. It consisted of 530 drafted illustrations and more than 250 photographs, all based on the Raymonds’ work over 18 years of practice in Japan.

Relying nearly entirely on images, the Raymonds created a visual primer of design that crossed cultural boundaries—and language limitations—to serve as a valuable practical tool in showing how modern buildings and their all-important details could be efficiently and elegantly constructed. “Architectural Details” was influential in promoting awareness and knowledge of the Raymonds’ work in Japan throughout the United States. Distributed in America in 1939 and reprinted in the new edition in 1947, it gave Antonin an opportunity to travel and lecture to important architectural schools, including MIT, Princeton, Yale, and the Universities of Michigan and Minnesota. The esteemed mid-century San Francisco Bay regionalist architect Joseph Esherick said that the Raymonds’ book had served as an invaluable source for him and a generation of young designers interested in modern architecture: “It was the first really good book of any kind useful in detailing for what we were trying to do.”

Now 80 years after the Raymonds’ book, an architect’s responsibilities have grown tenfold. Environmental concerns have set new ethical and ecological criteria. Green roofs, rainscreens, solar and wind power, geothermal heating, and cooling—and a whole host of next-generation materials and systems—have risen to meet these demanding new standards. Home automation, advancements in lighting, sound, and entertainment systems have transformed the designer’s role from master builder to master coordinator. The assembly and detailing of the home’s interior have become as complex as the building’s structure and envelope. All the while, new digital design and fabrication tools continue to expand the possibilities, and perhaps the limits, of architectural expression. All this must be imagined, coordinated, and detailed.

This past summer, in celebration of the 80th anniversary of “Architectural Details,” the Raymond Farm Center in New Hope, Pennsylvania, in collaboration with AIANY Cultural Facilities Committee and sponsorship from the AIA Custom Residential
Architects Network, hosted a one-day symposium on the history, theory, and evolution of modern residential architectural detailing—from the early 20th century to contemporary architecture today: “DETAILS, details, Residential Architecture Assembled and the Prose & Poetry of Construction.”

Among the speakers was Edward R. Ford, professor emeritus at the University of Virginia and author of many books, including “The Details of Modern Architecture” (MIT, Volume I 1990; MIT, Volume II 1996). We report here on his talk, “Intolerance: Craft in the Age of Digital Perfection,” the first of a four-part series about the symposium.

“Craft in our culture is usually equated with precision, if not perfection, but meaningful craft is more often the opposite. The craftsmanship of imprecision, of inaccuracy, and incompleteness is far more integral to the best architecture of any period including the digital age.” –Edward R. Ford

Edward Ford started the conference by recounting his first encounter with the Raymonds’ “Architectural Details” in a used bookstore; he found himself both intrigued and a bit perplexed by it. The book is profusely illustrated but without much text. Displaying one of the early pages on roof systems, Ford flatly stated, “It goes from thatch and logs, and on to bamboo at the top, and down to concrete and steel at the bottom, with some other things you can do in-between. There is no rating system by which to judge what system is best for what purpose, or whether it is about history.” But to Ford, it was obvious the book was about craft. Craft was something Ford said he has consciously avoided in the past. Indeed, the word itself carries a lot of ideological baggage. “To some, craft was whatever quality that traditional architecture had that modern architecture had destroyed,” Ford noted. “To the modernist, craft was this ornamental incrustation that you put on useful objects that made them less useful. To the laymen, and to many architects, craft was about agility (in making)—it is about skill, it is about expertise.”

Ford then projected an image of Gian Lorenzo Bernini’s Apollo and Daphne, where Daphne is turning herself into a tree to escape her assailant’s clutches. Ford stated that one’s reaction to such work is more astonishment and admiration than just aesthetic pleasure. Ford rhetorically posed, “How can this guy possibly do this in marble?” Although this is obviously a work of art, it is also evident that this is about craft as well.

Ford’s next image was of a Michelangelo drawing, Madonna and Child, featured in the recent exhibition at the Metropolitan Museum of Art in New York. He said it is one of those works you really need to be standing before to appreciate. “You can actually imagine the hand of the artist moving the chalk as he slowly defines the image.” But what is most moving to him, he said, is its incompleteness, with some parts fully realized to near photo-real and others just barely scratched lines. “You literally see the process of how this thing was created.”

Ford then spoke of Vittorio Gallese, professor of human physiology at the University of Parma, Italy, and professor of Experimental Aesthetics at the University of London. In his book, “Motion, Emotion, and Empathizing in Esthetic Experience,” Gallese expounds upon his work with mirror neurons. His definition of a mirror neuron “is a neuron that fires both when a person acts and when the person observes the same action performed by another.”

When you lift something, you feel the weight, and that feeling is a bunch of neurons firing off in your brain. According to Gallese, some of those same neurons fire when you see someone else lift something, as well. One empathically feels the weight. This is actually an old idea in the arts. Art historian-critic Heinrich Wölfflin theorized that “we understand an Ionic column because we know what weight is like.”

“Physical forms possess a character only because we possess a body… We read our own image in all phenomenon.” —Heinrich Wölfflin

Gallese’s work establishes the scientific evidence confirming Wölfflin’s intuitive reasoning. “If you are watching a film of Jackson Pollock painting, you can feel what the action of painting would feel like,” and Ford went on, “and when we see the result—the painting itself—we feel it as well.” This for Ford has an undeniable implication when it comes to craft. Ford postulated, “What works for the brush, works for the chalk, works for the chisel,” while showing an image of a Norwegian log cabin wall where you see every mark of the hewing tool. Buildings have their history of the act of construction, but often today their histories lie hidden, covered up or polished away in their finishing. To Ford, this idea of the history of the assembly of a building made legible may be a new way to think about architecture detailing—“details as embodied history.”

For more on this lecture, see the full story on residentialdesignmagazine.com

John DeFazio, AIA, is an architect and planner, and director of the Raymond Farm Center for Living Arts & Design. He teaches at Drexel University in Philadelphia and at the New York Institute of Technology in New York City.
Real projects start with the industry standard

Before starting the project, Adrian Smith + Gordon Gill Architecture will ensure their design of a new condo tower, Una Residences, is protected with AIA contracts.

**AIA Contract Documents used:** B109-Owner/Architect Agreement for a Multi-Family Residential or Mixed Use Residential Project.

**Learn more about the Una Residences project at aiacontracts.org/rd-una**
Travel just 1 ½ hours north of Manhattan, and you are worlds away from the cacophony of the city. Imagine the golden sun-drenched landscape of a Hudson River School painting—peaceful, beautiful, and timeless. This is the context for Lake|Flato’s Clinton Corners Residence, a complex of three structures on a 2-acre lakeside property, and the architects’ latest foray into prefabricated construction. While the project uses the DNA of the firm’s Porch House program, it is its own new hybrid species.

The Porch House was conceived as a module-based system, adapted to each site through linking “porch” elements—interstitial connectors that could be open or enclosed or a mixture of both. The porch elements gave the firm the flexibility to adapt the modules to the site in felicitous ways. Bill Aylor, AIA, who’s lead the program with Ted Flato since its inception, has explored a number of means of delivering the modules.

The initial thought was they should be built in a factory to ensure quality and reduce cost. Ultimately, says Bill, the firm has never built two Porch Houses in the same way—for a variety
The clients wanted an expansive, inviting great room to absorb extended family and friends. It connects through a glass vestibule to the private, two-story bedroom wing.

...of reasons. Chief among them has been the difficulty of finding top-flight factories that can deliver the standards and the geographic reach required by the firm and its discerning clientele.

Although located in the Hudson Valley of New York state, the Clinton Corners commission came to Bill and project architect Evan Morris through Texas ties. One of the clients has roots in the state and had always admired the firm’s work. When the couple approached the architects about building a weekend/vacation house on picturesque Upton Lake, they were eager for a quick build. Everyone began with the idea that the Porch House process might be a solution.

As design development progressed, it became apparent that the Porch House program would accommodate some of what the clients wanted, but not all. Where it fell short, or rather too small, was in the great room. The clients sought a spacious, almost barn-like open plan kitchen/living/dining room that could host large gatherings of friends and extended family. The prefabrication module delivery system would not work for this portion of the project. So, the team set about devising another means of getting the entire project—which also included a bedroom wing and a separate guest house—done quickly and to the high performance standards of the Porch House program.

Fortunately, in his decade-long quest to build a network of Porch House-capable factories, Bill had struck up a relationship with prefab pioneer Tedd Benson and his New...
Hampshire-based Bensonwood company, just three hours north of Clinton Corners. “I’ve been talking with Tedd since about 2009,” Bill recalls. “We were always eager to do some work with them because of their capabilities, but also because I thought they were very cool people. At the time the Clinton Corners project came up, I had just been at a conference with Tedd where he gave the keynote address.”

Bensonwood doesn’t do modules, it builds high-performance panels, components, and structural systems, so the company had not been an obvious partner in the Porch House program. But for this particular hybrid project, it made sense to Bill, Evan, and the rest of the design team to explore a collaboration.

“The goal of the Porch House program has been to streamline the delivery process for design, so we have more time to focus on the details.”
—Bill Aylor, AIA

Custom Origins
What makes Bensonwood so different is its deep roots in craft-intensive custom building, combined with the high-tech savvy of the best European factories (see our Pro-File on page 18). Bensonwood built a name for itself as a leader in timber frame construction, a technique that was dying out before Tedd took up the cause. Now Tedd actually runs three interrelated companies focused on prefabricating building components and assemblies. Bensonwood is the high-end custom residential branch of the business; there’s also a new company called Tektoniks, which provides advanced components to developers and architects for larger commercial and residential projects; and there’s Unity Homes, which builds high-performance houses based on a flexible platform of home plans.

Unity Homes’ houses are intended as a more affordable alternative to pure custom homes, leveraging the efficiencies of a kit-of-parts approach to delivering customizable houses. Each core plan has been engineered for rigorous energy efficiency, healthy indoor air quality, and resource conservation. This trio of goals aligns precisely with what Lake|Flato has been striving for with the Porch House portfolio.

The shared goal for both Bensonwood and Lake|Flato on this and possible future projects is to marry the strength each brings to housing—Bensonwood’s building performance chops and Lake|Flato’s design prowess. On the Clinton Corners project, they explored where the sweet spot might lie between an
advanced factory’s system of engineered components and a renowned architecture firm’s aesthetic rigor. Also in the mix, of course, were the programmatic and design goals of the client. On all sides, such a collaboration required a great deal of trust and confidence in each member of the team.

“We were thinking of this as our discovery period,” says Tedd. “To find out where the inhibitions are for architects using our system.”

Says Bill about his fellow architects, “We don’t want to take pencils away from people who want to obsess over every detail. The goal of the Porch House program has been to streamline the delivery process for design, so we have more time to focus on the details. In Bensonwood, we have a great box delivery partner.”

Big Moves
For the Clinton Corners project, Bensonwood’s factory took care of the building envelope and the timber framing. That freed the architects to go high-touch on everything else: site planning, interior architecture, and all the details that bring custom quality to a house. The local custom builder was also liberated to play to his company’s strengths. Jason Jones of Ingrained Woodworking in Rhinebeck, New York, handled all the site work, project management, and skilled craftsmanship that is still an essential part of the process.

“Jason is a very good contractor,” says Bill. “He had worked with Bensonwood before. And his end-grain woodworking is a big part of the success of the project. He was on top of things and had subs we could all depend upon. He worked really hard on the screen elements and coordinated the two separate window systems we used.”

“He’s the kind of custom builder who wears a toolbelt,” adds project architect Evan Morris. “He self-performed a lot of things. It was great for us because in talking with him, we were talking directly with the guys making the cuts and doing the work. Ultimately, adding the factory-built process to custom building may help keep more guys like Jason in business. The small builders don’t have the scale to compete on price for big materials orders. This frees them from the envelope.”

The challenge for architects in using prefabricated envelopes and assemblies such as Bensonwood’s is in moving so many design decisions forward in the process. “We had the weather-tight envelope on site early,” Bill explains. “And that meant we had to have the specifics of the window plan decided earlier than we typically like to. That was one of the interesting things we were faced with. I personally kind of like that approach
At the heart of the great room is the Henrybuilt “gray machine,” containing the kitchen, powder room, closed and open storage, and mechanicals. Centralizing these functions opens the room to long views on three sides.
because it keeps things simpler. Then we can focus on the big moves and still do smaller refined things along the way.”

Tedd puts it another way: “The challenge for architects is to let go of trying to control everything. Here we are totally invested in making really good building performance envelopes and iterating and perfecting. The question is, ‘can we get architects to leave it alone?’ In Sweden, you don’t find architects worrying about the envelopes and assemblies—they can rely on companies to deliver those. They’re designing spaces and buildings.”

Perhaps architects could let go of some control, if there were more forward-thinking factories like Bensonwood in the United States.
Details, Details
No matter how interested Lake|Flato is in the Porch House process, the firm is careful not to lose sight of the quality of house it delivers. At first glance, Clinton Corners feels very familiar, almost iconic. The steeply gabled, two-story bedroom volume evokes a timeless farmhouse structure. Its form, and that of the low-slung guest building, closely follows the Porch House pattern book, which has the uncanny ability to fit in almost anywhere in the country.

The great room building, connected by a glass vestibule to the bedroom wing, departs in size from Porch House dimensions but maintains its flavor—an open plan stripped of redundant functions and needless flourishes. “Elemental is a word we used a lot,” says Evan. “The clients put a lot of faith and trust in the design team, which included interior designer Neal Thomas. They were hands off in many ways. When they did interject themselves, it was to let us know they wanted something functional and unprecious. They didn’t want anything that felt overly decorative, worked, or designed—just something that felt essential.”

“They wanted a well-built tool box, not a well-built jewel box,” adds Bill. “They knew the kids were going to throw balls against the side of the house.” Hardy materials stand up to juvenile hijinks. All three buildings are clad in cedar—the main volumes have a weathered finish and the guest house has a dark stain. Standing seam metal roofing fits in with the rural setting, and polished concrete floors handle the wear and tear of lakeside country life with aplomb. Elsewhere, the material palette quiet craftsmanship permeates the family spaces. The owners wanted elements to look unfussy and “essential.”
is pared to the requested essentials, including white oak trim and woodwork, glulam timber framing, and board-formed concrete for the fireplace chimney.

At the core of the great room is the “gray machine,” supplied by Henrybuilt of Seattle. The cabinet system forms the kitchen and powder room, and provides closed storage for closet, pantry, utilities, and additional open shelving. The cabinet material is unfussy laminate, edged with plywood. “It’s beautifully built but not precious, and it takes all of the useful wear of the house in a very nice way,” says Evan.

Every material, however pragmatic, contributes a subtle layer of texture and pattern that conveys an overall impression of quality. Most striking are the exterior cedar screens that wrap the great room volume at each gabled end. At the front of the house, they inject an element of privacy and protection for a porch. On the lake side, which faces west, they shade the triple-glazed window wall from heat gain and glare. In the late afternoon, they filter that golden Hudson Valley light, gilding the living room in its warm glow.

On the exterior of the house, the screens allow an edited but inviting view from the front of the great room through to the lake, where a bustling community of neighbors shares active summers and quiet winters.

The bedroom volume shelters private family life. It contains a first-floor sitting room and master suite and two kids’ bedrooms on the second floor. It’s divided from the great room by a glass vestibule that also connects the front entry

Clockwise from the top: A short walk from the main house, the guest quarters contain two bedrooms and a carport. The powder room in the great room’s “gray machine.” A simple, functional bedroom space.

Clinton Corners Residence
Clinton Corners, N.Y.

ARCHITECT: Bill Aylor, AIA, project manager; Evan Morris, project architect; Joshua Leger, intern, Lake|Flato Architects, San Antonio and Austin, Texas
BUILDER: Jason Jones, Ingrained Woodworking, Rhinebeck, N.Y.
INTERIOR DESIGNER: Neal Thomas, Emily Summers Design Associates, Dallas, Texas
LANDSCAPE ARCHITECT: Susan Wisniewski Landscape, LLC, Beacon, N.Y.
STRUCTURAL ENGINEER/PREFABRICATION CONTRACTOR: Bensonwood, Walpole, N.H.

MECHANICAL/ELECTRICAL/PLUMBING CONTRACTOR: Apex Engineering, Calvert City, Ky.
SITE SIZE: 2 acres
PROJECT SIZE: 4,400 square feet
CONSTRUCTION COST: Withheld

PHOTOGRAPHER: Chris Cooper

KEY PRODUCTS:
CLADDING: Western red cedar
ROOFING: Standing seam metal
WINDOWS: Marvin, Intus
INSULATION/HOUSEWRAP/SHEATHING: Bensonwood SIP panel construction with Zip System

CABINETRY: Henrybuilt
HVAC: Mitsubishi
ENERGY RECOVERY VENTILATOR: Zhender
FIREPLACE: Isokern Magnum
COOKING APPLIANCES: Wolf
REFRIGERATOR/FREEZER: Sub-Zero
FAUCETS: Watermark
MASTER TUB: Victoria + Albert
DECKING: Thermory
STAINS: Valhalla LifeTime Wood Treatment
to a rear, lake-view deck. Flanking the vestibule is a set of slatted built-ins. On the great room side, they function as mudroom storage for coats and shoes. On the bedroom side, they form bookshelves for the private sitting area. Door openings within the shelving align with exterior windows, allowing light and views to flow through—preserving that porch-like permeability between indoors and outdoors.

Although most of the plan contains only critical functions, there is one flex space to absorb games and other rainy-day activities. It occupies the space between the front porch and the “gray machine.”

The guest quarters are a short stroll away from the main house, past the swimming pool, and hold two bedrooms with private bathrooms, an ample carport, and a small gym. Taken as a whole, it’s a high-function program that could serve many families very well, while still delivering the delights of a well-built, smartly tailored custom home.

**Faster, Better**

Best of all, the Clinton Corners build came together quickly—in about eight months—which was a chief goal for the clients. “One of the promises of prefab is that it’s faster,” says Bill. “Everyone thinks it’s cheaper, faster, and better—but you’re lucky if you get two of those. Still, this project was definitely faster, better, and cost effective.”

Working with Bensonwood has sold the firm on the component approach to factory fabrication. “It lends itself to mass customization rather than mass production,” says Bill. “And there’s much more appeal to that because it doesn’t sacrifice the hands-on, site-specific quality of the houses. We can’t leave that behind.

“As long as you have an understanding of the rules—the limits and the potential—I think components and panels are the most obvious future,” Bill concludes. “We’re going to see some major advances in how buildings are delivered.”
Turn any view into a vision.
The art of creating a spectacular view is all in the framing. Weather Shield windows and doors give you a complete system of products flexible enough to bring your grandest visions to life. Experience the innovation at weathershield.com/resdesign.

©2018 Weather Shield Windows & Doors. All rights reserved.
Architectural Promenades

A trio of houses choreograph structure and site in a dazzling dance of discovery.

BY S. CLAIRE CONROY AND CHERYL WEBER
Sugar Shack Residence

AUSTIN, TEXAS
ALTERSTUDIO ARCHITECTURE
What is the value of an architect?
Houses like Sugar Shack by Alterstudio make the answer crystal clear. Imagine this half-acre undulating lot in the hands of a speculative builder with a stock plan. What gyrations of foundation and stair design would have ensued to reconcile the contours of the topography? Both the lot and the house would have suffered deep compromises in livability and aesthetics—and, yes, in value, too—had a generic solution been imposed. But Kevin Alter’s clients knew they needed skilled design help to make the most of their property and their program, and the resulting house turned every deficit into an asset.

Located in the West Lake Hills area of Austin, this post-war neighborhood of limestone ranch houses is close to the Colorado River and the leading edge of Texas Hill Country. Its proximity to downtown and green space makes it a desirable place to live, notwithstanding the tricky topography. “The site was so interesting with its contours and the mature live oaks,” says Kevin. “But it also has close neighbors, so we had to reconcile the contradictory desires for privacy and openness to nature. That’s what architecture is so good at—resolving contradictions.”

Some architects might have solved these problems with a complicated composition of structure and volume. The clients, however, were adamant in their desire for a smaller house—with main living space on just one level. “They didn’t want big rooms, and they didn’t want a lot of redundant space. They wanted their young children close,” Kevin recalls. “In a way, it was kind of a Midcentury program.”
The family room is open to a protected courtyard on one side and woods on the other. Thick walls hold storage, and floors terminate above the window frame, adding layers of interest to the house.
Openness and Privacy
So the team took a few cues from those neighboring Midcentury dwellings and designed a seemingly simple box. Not so simply, they elevated the box on steel columns above the carport and torqued it along the site’s natural grade. Orienting the shorter end toward the street and pointing the broad side deep into the lot allows the house to capture the high, flat side of the property for a private courtyard and pool area and provides a wooded vista as the ground drops off toward the river.

“The Modernism I love...simplicity of line, animated by reflections and shadows, vistas and materials.”—Kevin Alter

With the main level elevated, the clients gained some lower-level space at minimal extra cost, including a “rumpus room,” as Kevin calls it, and some storage and utility space. There are no interior stairs between the main and lower level, and arrivals at the carport must proceed up a flight of covered exterior stairs to the family entry. Even with the small exertion required, it’s a lovely arrival experience. The stairs are flanked by a screen of white powder-coated steel rods along the exterior of the house and by a glass wall along the interior. The rods block views at certain angles and allow them at others, serving as a “series of veils” into the house. And when the interior lights shine through at night, the whole house appears to float above its terrain, answering the play of light and shadow from the sinewy live oak trees nearby.

“It’s beautiful to see shadows come in and reflect off the glass in streaks of light,” says Kevin. “I can’t do anything
as beautiful as those incredible live oaks, but I can engage them.” And the box that appears simple but holds numerous surprises? It too has inspirations and associations: “If you asked a layperson to describe a Modern building, they would probably mention a white box. But I think of modern painting, like a portrait by Braque. One where you see the front of a woman’s face and the side at the same time. That’s the version of Modernism I love—the simplicity of line, but animated by reflections and shadows, vistas and materials.”

Like a Braque painting, Sugar Shack’s complexity reveals itself as you step closer in. Window openings hug the parapet, Shou Sugi Ban cedar siding pops out from the building plane in battens, a perimeter French drain is an elegant lattice of cedar grille, and a privacy wall is board-formed concrete. All of these carefully executed details add their own layers of shadow, depth, and texture. “The building has a certain reading at a distance,” says Kevin. “But it animates when you get closer. And even closer, you start to see

The open kitchen is clean and sleek, with fumed oak cabinetry inset with steel panels for lights and switches. The kitchen island rises above the floor on legs, and the floor drops away at the window wall to showcase the view.
the complexity of the Shou Sugi Ban. And the French drains, they’re a part of the composition, too. I did a lot of studio art when I was in college, and what I like about architecture is that it’s professional. We conspire with things like French drains.”

Inside and Outside
The interiors continue the dance of openness and privacy, light and shadow. Because of the home’s compact size and artful torque between kitchen and living room, main family areas extend the full width of the plan and usher in multiple exposures of daylight.

Large window systems align with protected exterior views, connecting occupants with carefully curated slices of the suburban lot. “We went to some effort to have the windows extend beyond the ceiling and below the floor,” Kevin explains. “The effect is a little unnerving, because the way we judge distance is by the window frame. But the space carries out more dramatically this way. And practically, it lets us hide shade pockets. It also undermines the boxiness of the building and makes it more dynamic. On the ravine side of the property, the clients can sit at the window and see into a bird’s nest. Overall, the space isn’t huge, but it opens up in ways that are key.”

The exterior’s white steel becomes touches of mill-finished black steel inside—in the fireplace surround, the ceiling lights in the kitchen, the light switch strip in the kitchen cabinets, and an accent wall here and there. Unlike true Midcentury houses with their thin walls and light structure, walls here are thickened with storage, adding depth and solidity to the interiors. Floors and built-in cabinets are fumed white oak in a straight, rich grain, segueing artfully into the level-five surfaces throughout.
The master suite raises the standard even further, indulging in a bit of private luxury. Here, the palette is one of luscious, ethereal whites and smooth, unified planes. “We try to get rid of corridors and doors as much as possible, so for the master suite there are sliding wall panels rather than a hole in the wall. As you turn the corner and proceed to the master bath, it gets quite luxurious—materials and finishes that are not necessary but are pleasurable, like small tiles that can make a curve or a beautiful tub,” says Kevin. “The master bath is more of an insular room, an intimate internal space. It’s the figured space while the other ones are more modern.”

Included and Excluded
The value of good residential design derives not just from what’s included in the final building, but what is excluded. The team chose not to follow neighborhood tradition and place the house crosswise on the site, they did not bring cars right up to the main living level, and they did not maximize the amount of house on the lot. The result of excluding these very standard approaches to single-family residential design is
The flat spot of the site is an urban oasis of outdoor living, shielded from neighbors by carefully placed screening and board-formed concrete walls.
a house that enhances its site and the lives of its occupants and that engages the delights of its surroundings—both manmade and natural.

“I like buildings that continue to intrigue and offer discoveries,” Kevin says. “À la Corbu, they should offer an architectural promenade where you’re not just walking through space, but always making new discoveries.”

Alterstudio thrives on everyday architecture, where beauty, function, and budget infuse and inform the final experience. “This isn’t sculpture. We work within a normative architectural system and change it where necessary,” he concludes. “It’s one thing to do a glass house on a large piece of property, and another to do a house on a suburban lot. This isn’t a big house and it’s not an extremely expensive one, but its greatest luxury is in being just one room wide.” —S. Claire Conroy

Sugar Shack Residence
Austin, Texas

ARCHITECT: Principals Kevin Alter, Ernesto Cragnolino, Tim Whitehill; project architect Daniel Shumaker, Alterstudio Architecture, Austin, Texas
BUILDERS: John Caldwell, Austin; Redbud Custom Homes, Austin
STRUCTURAL ENGINEER: Duffy Engineering, Austin
PROJECT SIZE: 3,572 square feet (conditioned)
SITE SIZE: .47 acres
CONSTRUCTION COST: $290 per square foot
PHOTOGRAPHER: Casey Dunn

MOISTURE BARRIERS: Tyvek Fluid Applied WRB
HVAC: Mitsubishi City Multi S-Series
HUMIDITY CONTROL: Ultra Aire Dehumidifier
COUNTERTOP SURFACES: Silestone
FIREPLACE: EcoSmart Fire
DOOR HARDWARE: Emtek
TILE: Artistic Tile, Ann Sacks, Eleganza Tiles, Interceramic, Daltile
COOKING APPLIANCES: Miele
VENT HOOD: Zephyr
REFRIGERATOR/FREEZER: Liebherr
LIGHTING CONTROL: Lutron
LIGHTING: Halo, WAC, Texas Fluorescents
WINDOW SHADES: ShadeWorks
DECORATIVE LIGHTING: Lambert & Fils Atomium pendant
PAINT: Benjamin Moore Super White

KEY PRODUCTS
WINDOWS: Fleetwood
ROOFING: TPO
ROOF WINDOWS: VELUX
ROOF DRAINS: Zurn
You have a vision for your project. How it looks, how it feels and most importantly, how it reflects your style.

At Windsor Windows & Doors, we’re passionate about your vision and it’s our mission to produce high-quality windows and doors that exceed your expectations. Countless style options, expert craftsmanship and high-performance technology – if you can dream it, we can build it. From new construction to renovation and replacement, Windsor can bring your vision to life. *Now imagine what you can do...*

Visit **ImagineWithWindsor.com** to see performance information, hardware and glass options, and download our product guide.
Linkhorn Bay Residence

VIRGINIA BEACH, VA
HAYS+EWING DESIGN STUDIO
If the most memorable houses are subtly tuned to their environment, this one on Linkhorn Bay in Virginia Beach sends up its antennae in multiple directions. Surrounded on three sides by a waterway that feeds into the Chesapeake Bay, it responds not just generally to the idyllic site but with very specific moves that build up to something more than the sum of its parts.

Asked to design a spacious home for a couple with three children, architect Allison Ewing, AIA, let the land inspire its three-dimensional form. “The river strikes a horizontal line and then the shore across has a band of trees, and then sky,” she says, while little inlets suggested the opportunity for more intimate views next to the house. For Allison, who spent time in Japan, that strong horizontal line brought to mind the Japanese concept of shakkei, or borrowed scenery. The T-shaped house engages this flat line with cantilevered rooflines and with terrace edges and stairs detailed to cast a horizontal shadow line.

The substantial home was designed as two perpendicular volumes defined by dark Spanish cedar cladding, composite metal panels, glass walls, and cumaru-and-steel pergolas. The main section contains a large kitchen, family room, and great room/dining area that spill out to the pool terrace; upstairs are an art studio and three bedrooms and baths for the children. The perpendicular wing, separated by an axial entry gallery on the first floor and a glass bridge on the second floor, houses a library, office, and master wing downstairs and a media room and open porch upstairs.

It’s not just the horizon line, but water seeps into the scheme, too. A fountain and water channel along the entry path seem to slide beneath the house, only to reappear as a swimming pool at the far end of the foyer gallery. A dark wooden pergola reinforces that through-view overhead. It starts at the front door, continuing through the entry gallery and out the back, where it shades the great room and pool from the western sun.

Opposite and this page: Two distinct volumes are bisected by a water channel at the front of the house that continues into the main hall and terminates at the back of the house in a swimming pool. Just beyond the pool is the Chesapeake Bay.
A large, double-height great room absorbs family life and grand-scale entertaining, all while taking in long views of the water.
These ideas, too, were innovated from the other side of the globe. “One thing I carried with me from my time in Japan was that when you're arriving at a Japanese house, they tend to be closed in; the experience of entering is always a surprise,” Allison says. “There is that about this house as well, a muteness, always looking for that sense of arrival and surprise.” She adds, “The water has a symbolic connection—the Japanese concept of foreshadowing the experience to come. Not until you arrive at the top step do you begin to understand the connection between the front view and the view of the water.”

To Scale
The other part of the puzzle was making the home’s 6,537 square feet feel livable. The clients, who sometimes use caterers to entertain, felt that their previous house was too small. “I might have said it was just awkward and chopped up,” Allison says. She was able to reduce the square footage that the owners thought they needed by creating overlapping spaces and eliminating wasteful hallways. “One thing we try to do is have a sense of moving from space to space in a way that your sense of calm and centeredness is reinforced and you appreciate the light and nature, rather than just have a series of disruptions to your mental calm.”

It’s a quality she became keenly aware of early on. “My mother made a comment that stuck with me all these years,” Allison says. “She said she didn’t like to walk into rooms where the paint color was different and sort of jarring; she thought houses should have a few good colors so that as you move from one room to the other you don’t have an abrupt transition of mood. The idea is that flow and materiality can affect your mood, and how can we create spaces that help people feel centered and calm and happy?”

Allison minimized the number of color changes in paint and materials to maintain a sense of calm moving through the space.
With 16-foot ceilings and glass walls, the atmospheric great room became the place for entertaining, but it also feels intimate day to day. Dark paneling on the ceiling brings it down visually while reinforcing the notion of horizontal planes, as do the exterior louvers on the upper part of the glass walls and the lower trellises that wrap the great room. Other human-scale moves included dropping the ceiling down over the family room and breakfast area, and the great room’s linear fireplace is moderately sized. Those elements, while striking a lower scale, also allow the room to feel light, airy, and impressive.

Everything revolves around the kitchen, of course, and it too figures into the careful calibration of compression and expansion, light and dark that affects the main living space’s scale and mood. White Poggenpohl cabinetry, found on sale in New York City, is mixed with darker custom cabinetry made of stained ash to match the wood in the rest of the house. And sliding panels on the counter between the kitchen and great room can screen out some of the cooking activity. Silk paintings by a Chinese artist were laminated onto the glass panels to add visual interest.

Sitting atop the perpendicular wing, the media room and porch are another living space whose proportions and scale play with the sense of prospect and shelter. Allison calls it “a compressed space between floor and roof.” Roof decks can feel uncomfortable if they are too open, she says. Under the flat, cantilevered roof, accordion doors open the media room to the roof deck, where a double-sided concrete fireplace divides the seating and dining areas.

That porch fireplace has a steel moment frame that picks up the load of the wing’s robust steel beams and transfers them down into a closet two stories below. “Because there are no walls to provide lateral stability against wind flow, the steel beams had to be rigid so the structure wouldn’t twist,” Allison says. “The wing’s two levels are articulated to bring down the scale of the depth of that structure.”

“When you’re arriving at a Japanese house, the experience of entering is always a surprise. There is that about this house as well.”

—Allison Ewing, AIA

In the master bedroom wing, a library and home office are divided by an open fireplace that preserves the water views.
Core Logic
It’s always impressive when a building’s structural logic is exposed, revealing a sculptural rhythm in the way its weight is carried. In this case, concrete site walls, formed from smooth plywood with the joints and form ties expressed, were used both for support and to “strike a line toward the view” in the public volume. For example, the two-story concrete wall in front continues through the entry gallery and deforms into spaced columns that support the pool pergola.

“The columns had to be formed and cast in place and all other components built around it and to it,” says Dan Neveu, project supervisor at Sykes Construction. “As you walk through the house, you can see how she designed the concrete columns to be not just a feature but part of the structure. The wall on the north side of the hallway entry is 40 feet long. It was impressive to see that structure stand alone as we were moving forward.”

The plan was set up on an 8-foot grid system, with windows, roof components, and metal panels aligned with cuts and control joints in the concrete. “You couldn’t be a half inch off here and there,” says Sykes Construction owner Jim Sykes. “The combination of concrete, metal panels, wood framing, and glass was challenging. Some of the
glazing, which was shipped from Germany, was set with a crane.”

Another structural feat involved the great room’s floor plate, which overhangs the pool. Because hurricanes come through the region, the slab had to be robust enough to tie in the trellises. “The trellises are supported on the concrete columns but also on the base of the glass wall so they don’t rotate around the columns” in high winds, Allison says.

In Situ
Passive and active strategies helped to neutralize the house’s size. The great room’s cantilevered slab was wrapped in two inches of insulation so that the concrete doesn’t carry heat and cold into the house. “This house is too big and has too many windows to be Passivhaus certified,” Allison says, “but we looked closely at the details they use.”

The windows are triple-pane with a U value of 11, which helped the home achieve a nearly 40 percent reduction in energy use over code. A Zip system creates a watertight and airtight barrier, and two inches of rigid “outsulation” isolates the building envelope from the unglazed exterior, even wrapping over the window frames where possible. In addition, storm water is collected and slowly released in bioswales planted with native species.

The house, so relevant to its setting, seems to satisfy the owners’ need for balance, harmony, and contentment. “They used to travel a lot, and one of the clients said she doesn’t want to travel anymore; she loves just being in the house,” Allison says. “It’s a validation of what we were trying to do.”

—Cheryl Weber

On the second level of the master suite wing, a media room opens to a vast roof deck. Allison kept the ceiling low on the deck for a more intimate, human scale.
Linkhorn Bay House
Virginia Beach, Va.


INTERIOR DESIGNER: Antonio da Motta, da Motta Design, Los Angeles

LANDSCAPE ARCHITECT: Kennon Williams Landscape Studio, Charlottesville (design/execution); O’Shea + Wilson Siteworks (design concept), Charlottesville

STRUCTURAL ENGINEER: Curry & Associates, Charlottesville

ENERGY CONSULTING: Staengl Engineering, Crozet, Va.

LIGHTING DESIGNER: Jacob Wimmer, Charlevoix Design Services, Charlevoix, Mich. (lighting design execution), Gilmore Lighting Design (lighting), Bethesda, Md.

PROJECT SIZE: 6,537 square feet

SITE SIZE: 2 acres

PHOTOGRAPHER: Prakash Patel Photography

KEY PRODUCTS

COOKTOP/VENT HOOD/WALL, WARMING, AND SPEED OVENS/DISHWASHER: Miele

FAUCETS: Dornbracht, Grohe, Hansgrohe

GARAGE DOORS: Amarr

KITCHEN CABINETS: Poggenpohl and custom

KITCHEN COUNTERTOPS: Silestone

PAINTS/STAINS/COATINGS:
Sherwin-Williams (exterior), Benjamin Moore (interior)

REFRIGERATOR/FREEZER: Sub-Zero

ROOFING: Firestone

SINKS: Duravit, Blanco, Kohler

TOILETS: Toto

TOWEL HEATERS: Virtu USA

WASHER/DRYER: Samsung

WINDOWS: Optiwin Alu2 and Raico timber curtain wall system
ProVia offers four lines of fiberglass and steel professional-class entry doors that meet the highest standards for beauty, durability, security and energy efficiency. All our doors are available in a wide variety of custom sizes and finishes, and you can design your entry door just the way you want it using our iPad app. At ProVia, we continue to build our products and our company to last a lifetime — The Professional Way.

Visit ProVia.com

Entry Doors by ProVia: Built for Better Design Possibilities

ProVia offers four lines of fiberglass and steel professional-class entry doors that meet the highest standards for beauty, durability, security and energy efficiency. All our doors are available in a wide variety of custom sizes and finishes, and you can design your entry door just the way you want it using our iPad app. At ProVia, we continue to build our products and our company to last a lifetime — The Professional Way.

Visit ProVia.com
Hither Hills in the Hamptons is known for its small, half-acre lots and hilly landscape of Russian olive, oak, shad-bush, and pine trees. Once a getaway destination for middle-class families, the area’s modestly built cottages often responded to the views and gullies in offbeat ways. “It’s my favorite area in the Hamptons; growing up I spent a lot of time there,” says Paul Masi, AIA. “There are a lot of kit houses. My parents built one in the 1960s, and it’s still there.”

This house’s owners, Manhattanites, also felt the pull of the Zen-like landscape and asked Bates Masi + Architects to design a house on a steep lot they had found with views of the ocean. The budget was relatively small, as was the wish list, which included a pool and a desire to be outdoors as much as possible.

But with a grade rise of 20 feet from the road to the back of the lot, it lacked a level ground plane on which to build an easy indoor-outdoor relationship. “For us, the real challenge was navigating this piece of property,” Paul says. “It’s a pretty steep hill, and how do you spend time outside when you’re 10 feet in the air as soon as you open the door?”

Paul’s solution was to artfully insert five concrete retaining walls that step down the hill, organizing the views and
Opposite and this page: To capture distant ocean views on its steep site, the Hither Hills house climbs six levels and creates multiple, smaller indoor and outdoor destinations—instead of one big open space.
allowing the house’s volumes to be nested into the hillside. Its six levels, including terraces, resulted in a series of destination points rather than one big open space. The interior rooms connect almost seamlessly to the outdoor decks, allowing the owners to “experience the hillside,” Paul says.

He drew an upside-down floor plan with the master suite and public areas at the top of the house. From the crushed bluestone parking court at the bottom of the lot, visitors are presented with a poetic pair of parallel staircases—one exterior and one interior, with a glass wall between them—sheltered by cantilevers and roof projections. Inside or out, both stairs lead up to the main entry at the kitchen, and the exterior stair continues to the pool deck at the back of the house. The ground floor contains three bedrooms, two baths, an office, lounge, mudroom, laundry, and storage. Beneath are a basement rec room, mechanical room, and storage.

Nesting Instincts
The bulk of the project’s budget was devoted to earthwork and site infrastructure to support this nested configuration. Site and foundation walls follow the land’s contours, which influenced the house’s geometries. “I always enjoy doing Paul’s houses because there are new elements, things we haven’t done before, and it’s thought-provoking to get them from paper to fruition,” says builder Keith
Wood louvers shade the skylight over the kitchen and, like the curtains at the window wall, move gently with the breeze.
Romeo. “It’s like a chess match, thinking a couple of steps ahead so you don’t get tripped up.” The biggest challenge, he says, was to get all the foundation and retaining walls in first and then frame the house around them. For example, the foundation wall on the north side, at the back of the house, is 20 feet deep to accommodate the basement under the ground-level guest rooms. “Because of the depth of that foundation, it was a nerve-wracking pour,” Paul says. All of the retaining walls are connected to decks and tied back to the house. They are clad and capped with bluestone from a local stone yard, and the joints run vertically, expressing their insertion deep into the earth.

Once the house was in place, Romeo pulled the dimensions to build the pool, which sits at the property’s highest point with views of the ocean. Whereas the concrete for the foundation work was pumped in from a truck near the road, the pool construction involved laying a temporary driveway for cement trucks on the south side.

Not that this almost inevitable-seeming scheme was initially evident to the untrained eye. Keith’s first impression of the lot was that he could not see the trees for the forest. The overgrown land contained an existing house that was beyond repair and buried in the woods. “One of Paul’s greatest assets is that he was able to see this property in the wood,” he says. “Once we cleared the lot, it revealed that this house was site-specific, but it was difficult to see at first.”
site-specific, but it was difficult to see at first. Those angles, and the way it sits on the contours of the existing property—we didn’t have to regrade.”

However, some of the resources saved by not having to move mountains of dirt went into digging down 80 feet to find sand on which to place the septic system. The municipality requires excavating all the clay, and “we had to bring a clamshell in so we could go straight down,” Keith says. “Normally on Long Island we can get sand six or eight feet down. When you’re digging an 80-foot hole, you don’t want to stand near the edge because you can’t see the bottom!”

The upside-down plan locates central living spaces and the master suite on the top level, where views of the ocean are available.
Weather Vane

The sense of being on the ocean is palpable. Paul chose an earthy yet refined palette of materials that records the effects of nature and blends with the landscape. Weathered horizontal mahogany decking spans between the bluestone walls—a counterpoint to the vertically run bluestone—and covers the underside of roof overhangs, the stairs, and the exterior walls, while oak warms the interior floors and ceilings. Like the bluestone, all of the wood was sourced locally.

The pale, calm interiors bear some of the quietly ingenious design moves that Paul is known for. Lightweight white curtains register the movement of sunlight and air, rendering the intangible tangible. “We talked about how windy it is there,” he says. “We used a lot of hidden roll-down shades, but we wanted to put curtains that flutter in the wind on the large sliding doors” off the kitchen and dining room. The wind “is something that’s unseen but part of the experience.”

In another nod to the elements, wooden louvers hang on canvas hinges under an oversized skylight that stretches across the kitchen ceiling. The louvers sway in the ocean breezes, casting dynamic patterns of light and providing shade much like a tree’s canopy. An elongated variation of those louvers forms a beach-appropriate chandelier under lighting at the dining room table. And large, flat skylights sit flush with the deck outside the dining area, brightening the office and lounge below.

Structural gymnastics notwithstanding, the building is simple but leaves nothing to be desired. “In a lot of architecture, the experience is made by the materials, details, form, and geometry,” Paul says. “I feel like this experience is more about
Hither Hills House
Montauk, N.Y.

ARCHITECT: Paul Masi, AIA, Bates Masi + Architects, East Hampton, N.Y.
BUILDER: Keith Romeo, K. Romeo Inc., East Hampton
LANDSCAPE ARCHITECT: Groundworks Landscaping, East Hampton
PROJECT SIZE: 3,300 square feet
SITE SIZE: .35 acres
PHOTOGRAPHER: Bates Masi + Architects

KEY PRODUCTS
CABINETRY HARDWARE: Linnea, Blum
ENTRY DOORS: Arcadia
KITCHEN COUNTERTOP: Corian
DISHWASHER: Bosch
FIREPLACE: Heatilator
KITCHEN APPLIANCES: Thermador
TILE: American Olean
BATH FIXTURES: Toto, American Standard
TUB: Signature Hardware (master bath)
LIGHTING CONTROL SYSTEMS: Lutron
PAINTS/STAINS/COATINGS: Benjamin Moore
VANITIES: Kohler
WINE REFRIGERATOR: Edge Star
WINDOWS: Arcadia (master bath); Kawneer (guest bath, shower, stair, master bedroom)

the space planning and capturing the views, and these terraced outdoor spaces. What I like about it is the subtle way the architecture reads, but that the experience is more about being there. Some of our projects are more expressive than others, but this one wasn’t. We used American Olean tile and American Standard fixtures—not trying to be exotic for exotic’s sake.” After all, a house with an emotional relationship to the beach is its own luxury, and this one is about more than meets the eye.

—Cheryl Weber
ASSA ABLOY, the global leader in door opening solutions

Modern Barn Door Hardware in Stainless Steel | emtek.com
A New Wave

1. COLOR SCHOOL
Nest Studio expands its Geo pulls and handles with an array of powder-coated metals. Custom colors are available as special orders.
neststudiocollection.com
Circle 101 on inquiry card.

2. METALLIC DUO
Kohler blends two metallics in one for its new Ombré finish, currently an option on its Components and Sensate lines.
kohler.com
Circle 102 on inquiry card.

3. HOLD MY BEER
Now in the development phase at Delta’s First Wave Innovation Lab is a prototype for a glass rinser. This is an idea we’d like to see brought to market.
firstwavelab.com
Circle 103 on inquiry card.

4. GOOD VIBES
For more compact luxury, BainUltra offers the new Vibe tub line. The freestanding tub measures 58x28x21 inches; alcove and undermount versions are a couple of inches larger.
bainultra.com
Circle 104 on inquiry card.
WALK RIGHT IN.
OPEN TO THE PUBLIC
M-F 9–5  SAT 10–3

Shop the world’s largest collection of premier boutiques for home building and renovation.

45 BOUTIQUES. 1 LOCATION.
theMART, CHICAGO | LUXEHOME.COM
312.527.7939

KITCHEN   BATH   TILE   CABIENTRY   APPLIANCES   HARDWARE   FLOORING   WINDOWS   PAINT

LUXHOME BOUTIQUES INCLUDE:

Ann Sacks
Artistic Tile
Belwith-Keeler
Bentwood of Chicago
Brizo and Delta Chicago
Carlisle Wide Plank Floors
The Chopping Block
Christopher Peacock
de Giulio kitchen design
Devon&Devon
Divine Flooring
DOM Interiors
Ernestomeda Chicago
Experience & Design Center
Exquisite Surfaces
FANTINI | THE GALLEY
GRAFF – art of bath design center
House of Rohl Studio
Italcer
Katonah Architectural Hardware
Lefroy Brooks | Cooper & Graham
Middleby Residential/Viking Range/La Cornue
Miele Experience Center
Moen Design Center
Monogram Design Center
NEFF of Chicago
New Style Cabinets
Paris Ceramics
Pella Crafted Luxury
Poggenpohl
Porcelanosa Tile/Kitchen/Bath/Hardwood
Scavolini Store Chicago
The Shade Store
Sherwin-Williams Color Studio
SMEG USA
Studio Snaidero Chicago
Sub-Zero, Wolf, and Cove Showroom
True Residential
Vicostone
Waterworks
Wood-Mode Lifestyle Design Center

FOR MORE INFO CIRCLE 15
<table>
<thead>
<tr>
<th>ADVERTISER</th>
<th>CIRCLE NO.</th>
<th>PAGE NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIA Contract Documents</td>
<td>10</td>
<td>24-25</td>
</tr>
<tr>
<td>Brizo</td>
<td>22</td>
<td>76</td>
</tr>
<tr>
<td>ClearMirror</td>
<td>16</td>
<td>73</td>
</tr>
<tr>
<td>Dacor</td>
<td>2</td>
<td>4-5</td>
</tr>
<tr>
<td>Emtek</td>
<td>14</td>
<td>69</td>
</tr>
<tr>
<td>Humbolt Redwood Company</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>In-O-Vate Technologies, Inc.</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Kolbe Windows &amp; Doors</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>LaCantina Doors</td>
<td>19, 21</td>
<td>73, 75</td>
</tr>
<tr>
<td>Marvin Windows and Doors</td>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Merchandise Mart Properties, Inc.</td>
<td>15, 18</td>
<td>71, 73</td>
</tr>
<tr>
<td>NanaWall Systems, Inc.</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Petersen Aluminum</td>
<td>3, 20</td>
<td>6, 73</td>
</tr>
<tr>
<td>ProVia LLC</td>
<td>13</td>
<td>59</td>
</tr>
<tr>
<td>Sherwin-Williams</td>
<td>8</td>
<td>17</td>
</tr>
<tr>
<td>SoftPlan Systems Inc.</td>
<td>17</td>
<td>73</td>
</tr>
<tr>
<td>Weather Shield Windows &amp; Doors</td>
<td>11</td>
<td>37</td>
</tr>
<tr>
<td>Western Window Systems</td>
<td>1</td>
<td>2-3</td>
</tr>
<tr>
<td>Windsor Windows &amp; Doors</td>
<td>12</td>
<td>49</td>
</tr>
</tbody>
</table>
If you would like to advertise in this special section, please contact MIKE SERINO at (630) 699-2004 or Mike@SOLAbrands.com.
Legends in the Snow

E. COBB ARCHITECTS
PROJECT LOCATION: BIG SKY, MONT.

When architect Eric Cobb’s longtime Seattle clients approached him with a site for a mountain house in Montana, he was intrigued. They had found a small, relatively nondescript parcel with one standout feature: It was surrounded on three sides by ski slopes. Eric’s task was to design a commodious, architecturally compelling house that took full advantage of the benefits of ski-in, ski-out mountain living.

“There’s a magical part of the day, between 3:30 and 5 p.m. in the winter, when you can soak in the last sun after skiing. That moment is why my clients are there, and it encapsulates the meaningful and powerful experience they wanted to have in their house.” So the house begins at the après-ski deck, with its hot tub, bar, fire pit, and lounge area. Everything else radiates from there, including six bedrooms, a two-story spa room, additional terraces and gathering spaces, and an elevator with its own alder wood bar.

Although the site has wonderful Big Sky mountain views, it was otherwise devoid of natural interest. Carved out by the developers, the lot was largely fill dirt abutting a curved road. Eric’s team set about anchoring the house to the landscape with rough and rugged materials, evoking in a modern language the sturdy solidity of a mountain-lodge ideal.

Cor-Ten steel, charred wood siding, and horizontal board-formed concrete walls stand up to the elements and are, in their own way, elemental. “Design review calls for stone, but we convinced them that the concrete would accomplish the same effect,” Eric explains. “We went for a very rough texture, where removal of the form caused intentional chipping and jaggedness, so horizontal legends catch the snow.”

The team also brought in more than 20 boulders “as big as mid-sized vehicles,” he says, “to help bed the structure as it comes out of the ground.”

—S. Claire Conroy

Extravagance finds new expression in the Levoir™ Bath Collection by Brizo. Its sleek curvatures and slender proportions offer a refined take on opulence. Elegant details combine with luxurious flow patterns—creating an indulgent escape from the ordinary.

Available exclusively in showrooms. brizo.com