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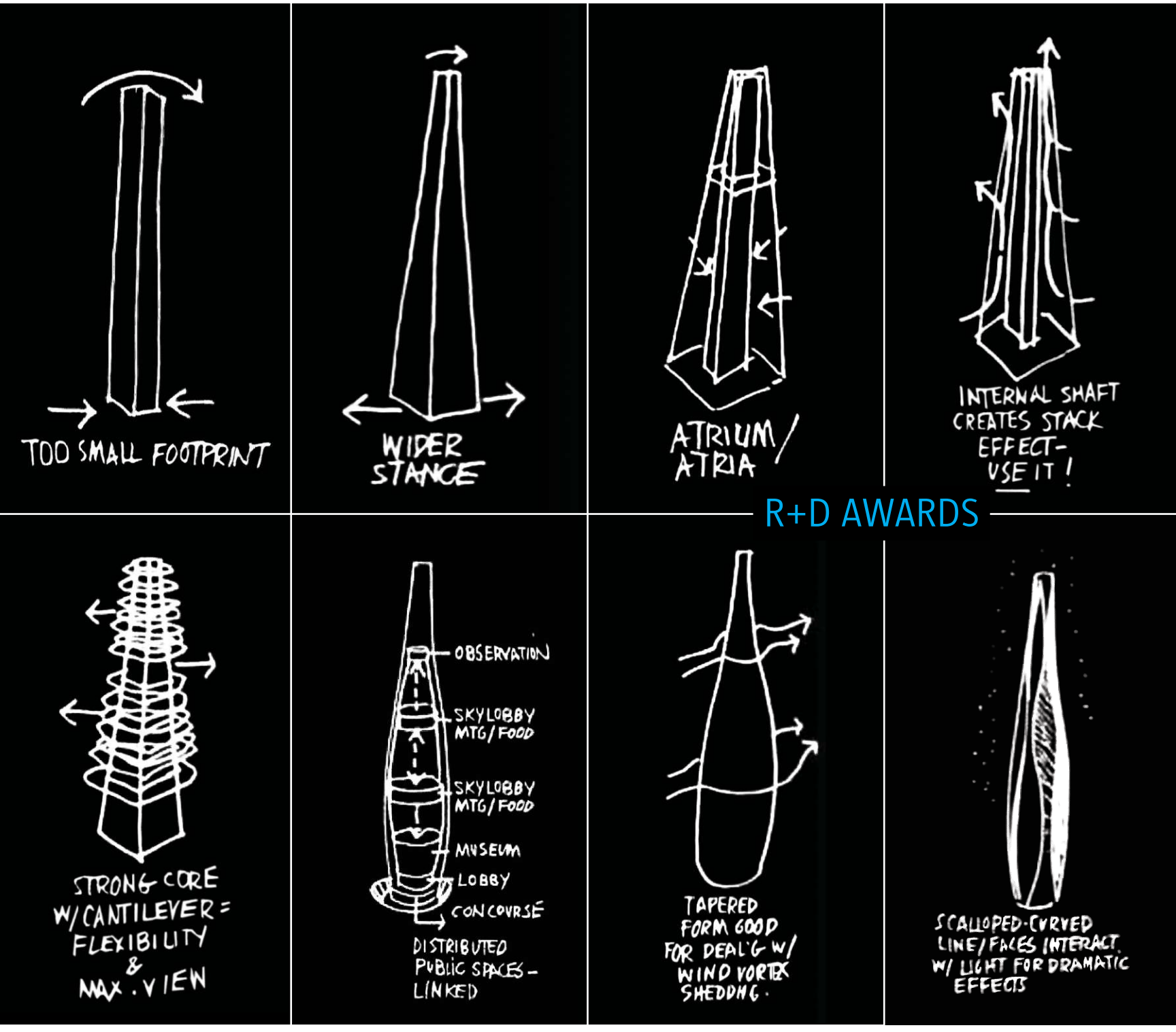

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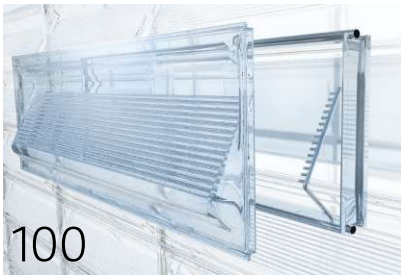

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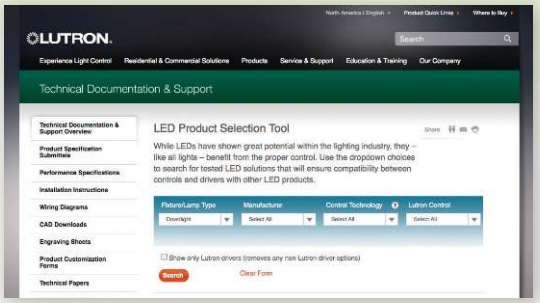

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GOOSE BUMPS AND BALLYHOO

WHEN THE NEWS SEEMS HOPELESS, I FOCUS MY MIND LIKE A YOGI AND FIND SOLACE IN THE RECOLLECTION OF SKIN-PRICKLING MOMENTS.

IN THE LATE '90S, rumor had it that a certain famous architect would leap out of bed each morning, pump his fists in the air like Rocky Balboa, and shout, "Architecture!" You've got to respect that kind of passion. Right now, the profession needs all the passion it can get.

According to the latest projections, the U.S. GDP grew a dismal 1.3 percent in the second quarter of the year, the Architecture Billings Index has fallen three months in a row, home prices are lower than they were at the depths of the housing crisis, and consumer confidence, jobs, and credit remain scarce, to put it mildly. Pundits are wondering aloud whether the dreaded double-dip recession is upon us—assuming that the previous one ever really ended.

It's okay to cry.

As for the debt-ceiling debate, let's just say that the process hasn't helped. Kermit Baker, the AIA's typically restrained chief economist, didn't hold back in a statement about the latest Billings Index numbers:

> *This seems to be a case of not thinking it can get any worse—and then it does. While a modest turn around appeared to be on the way earlier in the year, the overall concern about both domestic and global economies is seeping into [the] design and construction industry and adding yet another element that is preventing recovery. Furthermore, the threat of the federal government failing to resolve the debt ceiling issue is leading to higher borrowing rates for real estate projects and should there actually be a default, we are likely looking at a catastrophic situation for a sector that accounts for more than ten percent of overall GDP.*

Who knows how the economy might react to the government spending cuts of at least $2.1 trillion that, as this issue went to press, were being heralded as the final solution to the debt crisis. Rep. Emanuel Cleaver, D-Mo., the chairman of the Congressional Black Caucus, called the deal a "sugar-coated Satan sandwich," which presumably means he's opposed. I'm just keeping my fingers crossed. At this point, that's all any of us can do.

Maybe I worry too much about current affairs. While architecture is my lifelong vocation, journalism is my trade. I consider it my responsibility to promote dialogue about the effects that politics, policy, and economics can have on the profession. An informed architect, I'd like to think, is an empowered architect.

But truth be told, I'm not just a committed journalist, I'm a news junkie. Occasionally I overdose, and my blood pressure rises to unacceptable levels. Architecture, by contrast, gives me goose bumps, a physical condition that both Martha Stewart and Dr. Phil would describe as a good thing.

Architecture calms the mind and lifts the spirits. So when the news seems hopeless, I focus my mind like a yogi and find solace in the recollection of skin-prickling moments. Here goes:

I got goose bumps the first time I saw the Pantheon in Rome. It was the summer of 1993, and the building had just closed for the day. So I pressed one eye against the slit between the massive bronze doors and gazed through the dusk at the still-bright oculus and its spotlight on the *opus sectile* floor. I can remember the cool ozone smell, the gritty feel of the metal on my skin, and my complete awe at the antiquity and pure, cosmic geometry of the place.

I got goose bumps leafing through a first edition of Johann Bernhard Fischer von Erlach's 1721 *Entwurf Einer Historischen Architektur*, seeing Philip Johnson at the Four Seasons Restaurant in New York, reading Mike Davis's 1992 *City of Quartz*, climbing the Temple of the Inscriptions at Palenque, Mexico, and using the bathroom in the Farnsworth House.

I got goose bumps touring Tadao Ando's Pulitzer Foundation for the Arts in St. Louis, Sir John Soane's Museum in London, and the Church of the Society of Jesus in Quito, Ecuador. I got goose bumps looking at Robert Mangurian and Mary-Ann Ray's archaeological renderings of Hadrian's Villa, Piranesi's etched section of the entrance hall at Robert Adam's Syon House, and Eero Saarinen's scale model of Dulles Airport.

I get goose bumps a lot.

According to my mother, my stock childhood answer to the age-old question, "What do you want to be when you grow up?" was a confident, "The first married Pope-architect." The Vatican wasn't in the cards, as it turns out, but my vocation to architecture has never wavered, and I'm guessing that yours hasn't either, despite all the uncertainty in the air.

So give yourself a break. It's August, and whether you're working on your tan, your resumé, or a set of drawings, why not take a moment to share one of your architectural goose-bump moments? Write an online comment or send me an email at ncramer@hanleywood.com. We'll include the most passionate responses in an upcoming issue, as a kind of psychological antidote to the recession.

All together now: "Architecture!"

MIKE MORGAN

In the end, your legacy may be built out of paper.

The Kingspan Legacy Papercaft Competition is open to professional architects and students of architecture. The challenge: create the most visually arresting and legacy-worthy structure you can. It matters not who you are; judging is based on the imagination and talent applied. The winner will receive an Apple MacBook Pro, and a scholarship of $5,000 donated in their name; if the winner is a student, they'll receive the scholarship. Both runners up get an iPad 2, and all three finalists will be featured in the November issue of Architect Magazine. Enter the contest and explore future legacies in The Unknown Architect Exhibit at LegaciesAreBuilt.com/architect

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LETTERS

A NEW MORALITY, June 2011
"Nearly the entire scientific community agrees about climate change," Ned Cramer writes, yet 31,487 of that community disagree and have openly signed a petition stating so. You assert that climate change is a "fact," yet you have missed the basic fact that 30,000 scientists, including 9,000 Ph.D.s, aren't buying it. They haven't claimed infallibility either. Doesn't that make their opinion reliable too? *Michael S. Nowak, AIA, Indiana, Pa.*

WHEN IT LEAKS IT POURS, June 2011
What should be regarded as an important aspect of an architect's roof-design responsibilities has been completely disregarded by the author—the role of the architect during construction. Call it "review," "observation," "periodic observation," "supervision," or any phrase crafted by an attorney to reduce liability, the responsibility to ascertain that the architect's drawings and specifications are being followed by the contractor is assumed by law, in most jurisdictions, to be the architect's responsibility. Diligent review of the work performed throughout the construction phase is the best way to prevent errors, misinterpretations of the architect's intent, or costly omissions. The responsibility is not only a legal issue, but also an ethical one. We have a "supra client responsibility." When we perform construction-phase services inadequately, we fall short of meeting our professional responsibility. *Gerald Gamliel Weisbach, FAIA, San Francisco*

EMERGING TALENT, July 2011
Please forgive me if I wouldn't want to share the studio with, nor retain, the emerging talent profiled in your feature article. My own joy and passion for design would be constrained by their soulless, joyless expressions, mortuary attire, and lifestyle backdrops of urban wasteland and grunge. Please offer me hope that the future of design is brighter than the outlook they portray. Someone needs to stop telling them that they are validated by black, gray, and painfully sober expresssions. *Douglas M. DeChant, AIA, Avon, Colo.*

It is clear to me that architecture, like medicine, has abandoned professionalism for profits. And it has been abetted by your publication and by the AIA. If I had any doubts, the latest issue settled them. Of what use to me as a practicing professional is an article on emerging talent featuring full-page photos of the subjects? Is this

People magazine? Is your next step to get into the supermarket checkout-line shelves? Especially when I search ARCHITECT for columns by critics—Robert Campbell and Martin Filler being the most important to me—and find nothing. What architects have lost is "cultural capital." ARCHITECT and *Architectural Record* are busily promoting those with real capital, but seem to have no time for developing the cultural underpinnings of the profession, the building blocks of cultural capital. No wonder the public thinks we are a joke. We don't take ourselves very seriously. *James W. Hadley, AIA, Orleans, Mass.*

Correction

In the July 2011 Typology story, "Uneasy Rider," the funding sources for the the $2.8 billion Atlanta BeltLine project were misreported; $1.7 billion will come from a local tax-allocation district, and the city anticipates $1.1 billion from outside sources, including federal dollars. We regret the error.

→ Want to join the conversation? Go to architectmagazine.com. All letters and comments may be edited for length, content, grammar, and style.

Contributors

Lisa Findley

"Haunting in Halifax" • page 40

Lisa Findley has written about architecture as a visual and cultural practice for numerous publications, including ARCHITECT, *Architecture*, *Architectural Record*, *Harvard Design Magazine*, and other publications. As a journalist and academic, she has traveled extensively to document the ways that architects and architecture directly participate in social, cultural, and political change. She is the author of *Building Change: Architecture, Politics, and Cultural Agency* (2005) and co-edited the spring 2010 "Changing Asia" issue of the *Journal of Architectural Education*. A registered architect educated at UCLA, Findley is a professor of architecture at the California College of the Arts in San Francisco and chairs the bachelor of architecture program.

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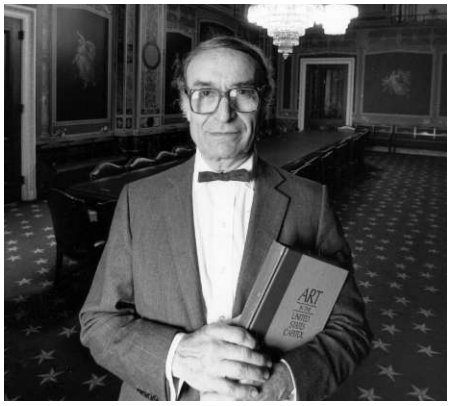
NEWSWIRE

EDITED BY KRISTON CAPPS

LOS ANGELES TIMES

Crystal Cathedral to go Catholic?

The Roman Catholic Diocese of Orange, Calif., has bid $50 million on the Philip Johnson–designed Crystal Cathedral, whose ministry declared bankruptcy in October 2010.



THE NEW YORK TIMES

Architect of the Capitol dies at 90

George M. White, who was appointed by President Nixon and served until 1995, oversaw the refurbishment of the Capitol after a bomb attack by the Weather Underground in 1971.

THE WALL STREET JOURNAL

New UN tower approved for Manhattan

Lawmakers in New York approved the construction of a new office tower for the United Nations on the site of a playground adjacent to the UN Secretariat Building.

The Spirit of St. Louis

ST. LOUIS takes flying saucers seriously. That and its midcentury architecture.

The fate of the Del Taco building, a saucer-shaped fixture of downtown St. Louis, is in question. Despite its landmark status with the National Register of Historic Places, the Googie-architecture icon could be slated for the wrecking ball.

The developers who are renovating the Schwarz and Van Hoefen–designed Council Plaza (where the saucer originally served as a gas station), have proposed to demolish the now-vacant drive-through—drawing a public outcry from the building's fans, AIA St. Louis, and the mayor.

"A lot of St. Louisans have grown up going through there," AIA St. Louis executive director Michelle Swatek says. "It has that California, *Mad Men* design. Young people are falling in love with that mid-century modernism."

Bruce Development Co. and Rick Yackey, the developers looking to demolish Del Taco, appeared to admire it, too: They nominated the Council Plaza for historic designation, and it was listed in 2007. Critics say that the developers earned federal tax credits—and stand to earn city tax credits by declaring it blighted. (The developers did not return calls for this story.)

The St. Louis Land Clearance for Redevelopment Authority approved the demolition; Ward 19 Alderwoman Marlene Davis supports it, too. But the developers' progress has not escaped the attention of St. Louis residents. A "Save St. Louis Del Taco" Facebook page—mounted under a "Save Our Saucer!" banner—has garnered more than 12,000 supporters since June.

Among them may be St. Louis Mayor Francis Slay, who opposes the demolition. A final up-or-down vote will come from the mayorally appointed Cultural Resources Board in the coming months. In the meantime, a coffee roaster and a pizzeria have expressed interest in the space.

Yackey may be taking notice. In a note to the *St. Louis Post-Dispatch* about alternatives, he said, "I am a developer, not a demolition man." That remains to be seen. KRISTON CAPPS

Minnesota Master Dies

Leonard S. Parker, FAIA, founding partner of the former Leonard Parker Associates and professor emeritus of architecture at the University of Minnesota, died on July 25. He was 88.

Parker was well-known in Minnesota for his landmark designs, including those at the University of Minnesota campus. But it was his ability to balance Modernist principles with community tradition that positioned him as a leader in the architectural world.

"He was an architect who the city and university went to frequently," says Thomas Fisher, dean and professor of the College of Design at Minnesota.

Fisher says Parker took a "humanistic" approach to meet those requests, challenging traditional Modernism with brick and ample daylit space. His green roofs still remain at the university. "He was pretty determined to make Modernism acceptable and comfortable and friendly to people," Fisher says.

But his work wasn't limited to the Twin Cities. He built several embassies and worked with the renowned Modernist Eero Saarinen on projects including the Gateway Arch in St. Louis. Leonard Parker Associates received more than 100 regional, national, and international design-excellence awards.

"All kinds of people in the construction industry can put up buildings," Parker told alumni at the University of Minnesota, where he both studied and taught design, in 2005. "But we architects don't just build buildings, we create works of art." HALLIE BUSTA

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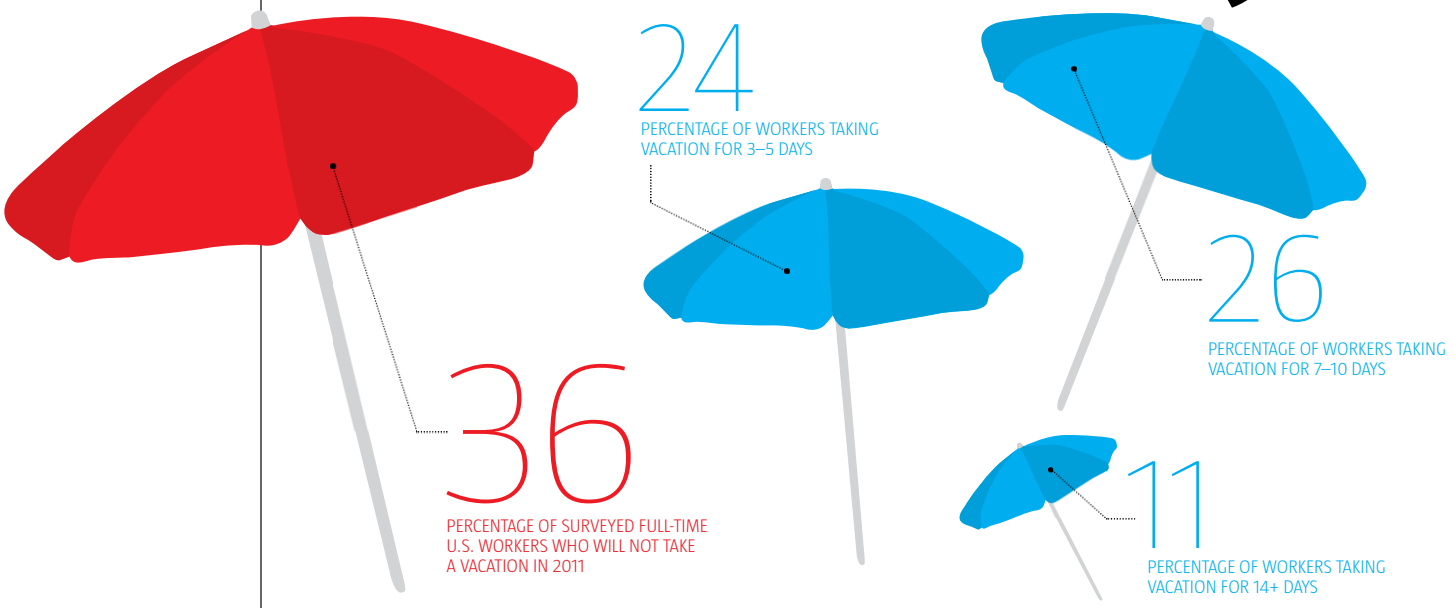

TEXT BY KRISTON CAPPS

WITH THE RESOLUTION to the debt-ceiling crisis looking like it could potentially inspire a double-dip recession, the urge to get far, far away is profound. Only some of us will be so lucky.

As everyone knows, workers in the U.S. accrue less vacation time than their counterparts in, say, fun-loving France: about one-third fewer days (13 to 38 days). And according to a 2009 survey by Expedia, Americans forego an average of three of their vacation days per year. The situation is still worse for our workaday Janes: Not only do women workers leave more of that time on the table than men, but the same survey finds that they earn 11.7 vacation days per year (compared with 14.3 days for men) and are more likely to feel guilty about taking time off.

In some ways, the economic recovery has nurtured the prospects for summer fun in 2011. A survey of more than 5,600 full-time U.S. workers conducted by CareerBuilder between February and March of this year found that more than one-third of them (36 percent) feel better about taking a vacation this year than last year. Most Americans are taking some kind of vacation, even if most of them will be packing their BlackBerries with their sunscreen.

Yet 24 percent of workers report that they won't take a vacation because they can't afford it—up from 21 percent last year. And more than one-tenth (12 percent) say that even though they can afford to take the time off, they won't be. For those hard workers fortunate enough to take some well-earned time away, be sure to send a postcard.

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PERCENTAGE OF WORKERS WHO REPORT FEELING MORE COMFORTABLE TAKING A VACATION IN 2011 THAN THEY DID IN 2010

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PERCENTAGE OF WORKERS WHO WILL WORK WHILE ON VACATION

SOURCE: CAREERBUILDER AND EXPEDIA

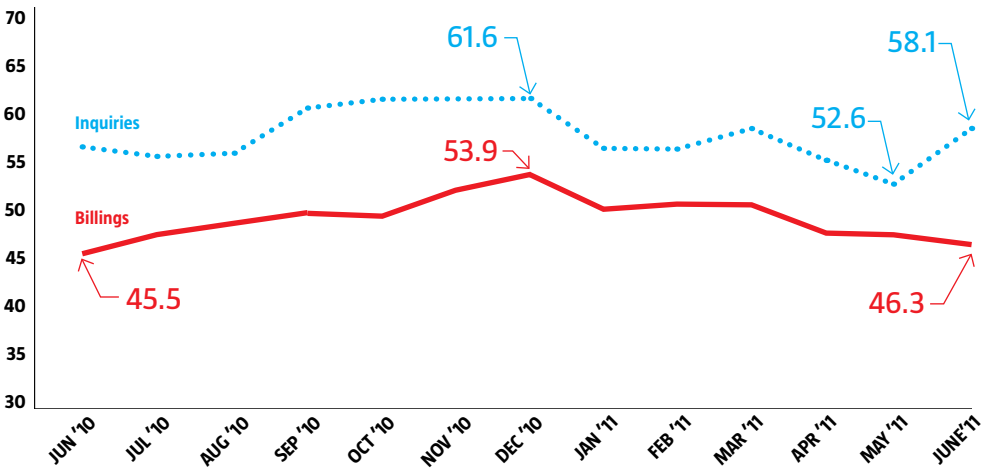
JUNE 2011 ARCHITECTURE BILLINGS INDEX

46.3

- ↑ 50.0 commercial
- ↑ 45.9 institutional
- ↑ 51.5 mixed practice
- ↓ 49.6 multifamily residential

SOURCE: AIA

BILLINGS AND INQUIRIES INDEXES



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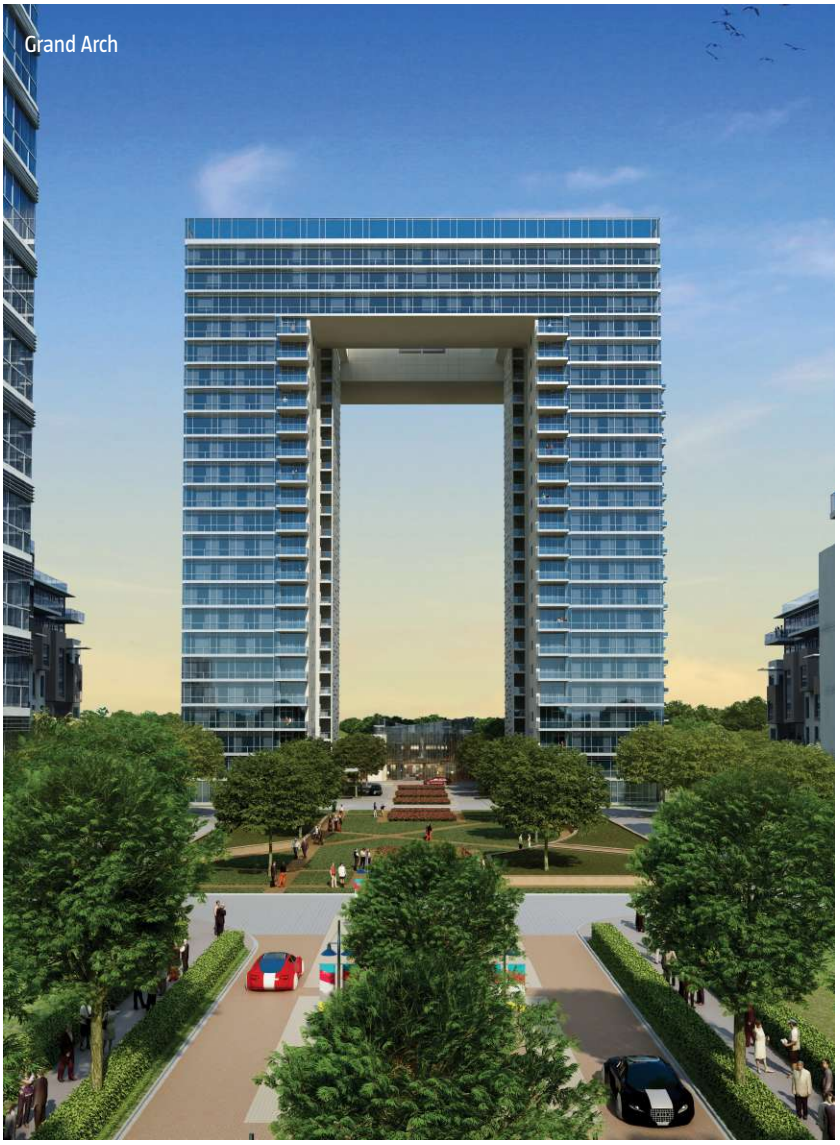
TEXT BY KATIE GERFEN



The Grand Arch, Sector 62, and Skyon

SORG ARCHITECTS

One of the fastest-growing areas in India is Gurgaon, a new business district on old farmland 20 miles south of New Delhi. It is home to a new spate of high-rise multifamily housing, a relatively new typology in India, to accommodate a growing middle-class workforce. Washington, D.C.–based Sorg Architects, led by New Delhi–born Suman Sorg, FAIA, has three projects in the area: Sector 62, a 250,000-square-foot commercial tower; the Grand Arch, a 12-building mid- and high-rise residential complex; and Skyon, a 22-acre site anchored by a 44-story pinwheel-shaped housing tower. But in contrast to the U.S., "the expectation of the buyer is not tight space in a packed, smaller apartment, but rather stacked houses," Sorg says. In the Grand Arch, slated for a 2013 completion, the average unit size is 2,500 square feet—including maid's quarters—with nary a double-loaded corridor (requirements for daylight in every room mean "you have to create a lot more skin," Sorg says). But the demand is there: the first 250 units in the complex sold in 48 hours.

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PHOTO: FAWZAN HUSAIN

AIAVOICES

AS THE LINES BETWEEN LOCAL AND GLOBAL PRACTICES CONTINUE TO BLUR, ONE ARCHITECT REPORTS ON INDIA'S VIABILITY AS A PRODUCTIVE ARENA IN THE 21ST CENTURY.

When he returned to his native India after having trained and practiced architecture in the United States, Somshankar Bose, AIA, established his own practice, Bose Laboratory and Industrial Planning Solutions (BLIPS). As the AIA, through President Clark Manus's trip to Mumbai and through high-level conversations with the Department of Commerce, strives to increase the viability of architects working abroad, Bose is now looking for opportunities to develop a component in India, which will draw together AIA members interested in opportunities there.

When I moved back to India, in October 2010, it was for personal reasons, but I found that many U.S.-trained architects had relocated here because of the downturn in the American economy. The market here is very strong and there are many architects with American degrees and licenses, so I thought it would be important to help organize these professionals.

The practice here hasn't evolved too much since the 1950s. The knowledge base comes from the British system, but it hasn't been updated to current RIBA or global standards. The material palette was very limited and so were methods of construction. In the past few years, though, this has all started to change.

When I first returned, before I launched my own practice, I did a short stint in an architecture firm, and after five months I realized what knowledge base was available to practitioners here and what was unavailable. I was very involved in the Wisconsin chapter of AIA, so I know that for a lot of the missing pieces here, in India the AIA can really contribute.

To help fill this gap, over the past few months we've laid the groundwork for an AIA chapter here. I've been reaching out to a network of friends and fellow architects to develop the India chapter. Things take time to develop here, but at this point we have over 50 members. We are putting together seminars about design, practice delivery, and education, and we will bring in world-class speakers and develop programs to connect architects with industry, clients, and manufacturers. We are not the primary professional body in India, though, so we will work in alliance with the Indian Institute of Architects as closely as possible.

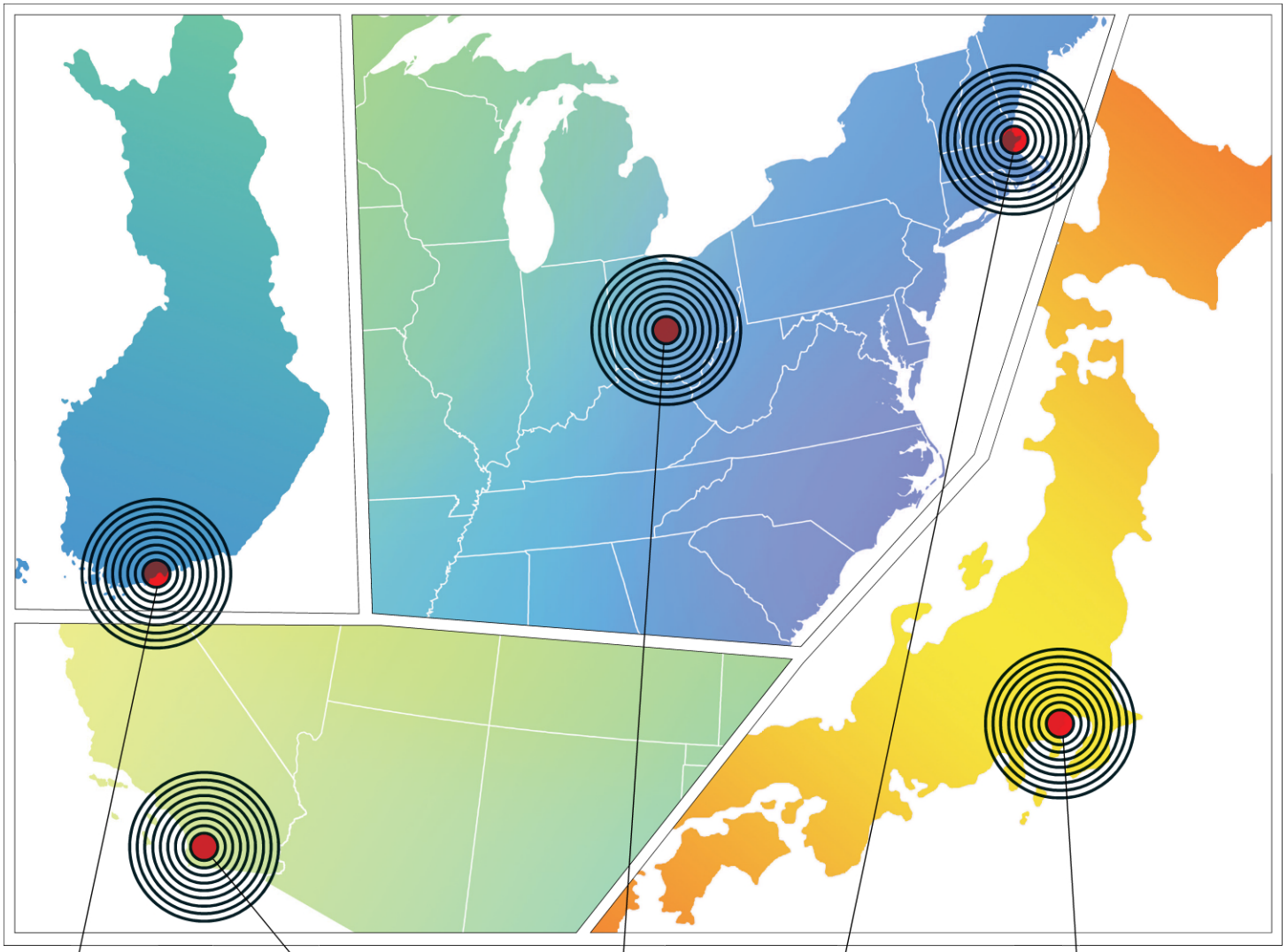
Clients here are always interested in developing projects with an international scope, and Indian design firms are always more than willing to partner with American firms, so there is a lot of potential for architects from the U.S. to practice or to collaborate here in India. But with the way the profession is organized here, architects should have a specialization, an expertise in a niche area. This is typically what clients expect.

It feels like the moment is right now. The economy is very robust, and in the next 20 years there will be a lot of construction. We just need to keep organizing our profession and expanding our knowledge base.—*As told to John Gendall* AIA

To hear more Voices, visit architectmagazine.com/AIA.

AIANOW

ACROSS THE INSTITUTE



FINLAND

Finnish Lines

This summer, the Museum of Finnish Architecture (MFA) in Helsinki explores the relationship between the architecture of Finnish schools today and the country's high educational marks from the Organisation for Economic Co-operation and Development's (OECD) Programme for International Student Assessment (PISA). "The Best School in the World" runs through Sept. 25 and joins the permanent exhibition "Decades of Finnish Architecture 1900–1970."

↗ Learn more at mfa.fi.

LOS ANGELES

Candid Camera

The Southern California Institute of Architecture (SCI-Arc) received $270,000 in grants in 2011 from the Getty Foundation and the National Endowment for the Arts to support digitization of more than 1,000 hours of architecture lecture videos by Frank O. Gehry (1975), Rem Koolhaas (1985), and Thom Mayne (1994). The lectures will be available in 2012 through SCI-Arc's Digital Lecture Archive, which already offers 200-plus lecture videos online. Also included are lectures by Beatriz Colomina, Manuel Delanda, and Reyner Banham.

↗ Learn more at sciarc.edu/lectures.php.

DAYTON, OHIO

Unconventional Methods

On Sept. 16 and 17, AIA Ohio Valley Region is hosting Discover.Design.Dayton, billed as an "UNConvention for Emerging Professionals." With programs titled "Ask a Fellow Roundtable" and "How to Champion Your Project as a Young Designer," the UNConvention will cover mentoring, portfolio review, regulations and issues related to operating an architecture firm, and alternative careers in architecture.

↗ Learn more at aiaohio.org.

BOSTON

Hybrid Plants

Technology in Architectural Practice (TAP), part of the AIA's Center for Integrated Practice, hosts its second multivenue Hybrid Conference—New Technologies, Alliances, Practices—on Nov. 12 in conjunction with Build Boston. Although Boston will be the "hub," 10 components will host remote satellite sessions, including New York City, Dallas, and Chicago.

↗ Learn more at aia.org/tap.

TOKYO

Tokyo to You

Next month, an AIA delegation will attend the International Union of Architect's (UIA) 24th World Congress in Tokyo (Sept. 25–Oct. 1). AIA leadership and members will strengthen existing and new strategic relationships to help members expand their practice internationally. They will also report on best practices and resources while advancing the American architecture profession and its interests abroad.

↗ Learn more about UIA Tokyo at uia2011tokyo.com; read daily reports at aia.org.

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October 27 | Dallas

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November 2-4 | Los Angeles

PRACTICE MANAGEMENT FALL CONFERENCE

In conjunction with Architecture Exchange East 2011

November 2-4 | Richmond, Va.

COMMITTEE ON ARCHITECTURE FOR EDUCATION FALL CONFERENCE:

Building Better Schools—Investing in Education

November 9-11 | London

HEALTHCARE DESIGN.11

November 13-16 | Nashville

CRAFTING THE FUTURE JAPAN

Committee on Design and AIA Northwest & Pacific Region with AIA Japan

November 13-19 | Tokyo to Kanazawa

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AIAPRACTICE

IS TODAY'S BIG TOMORROW'S SMALL?

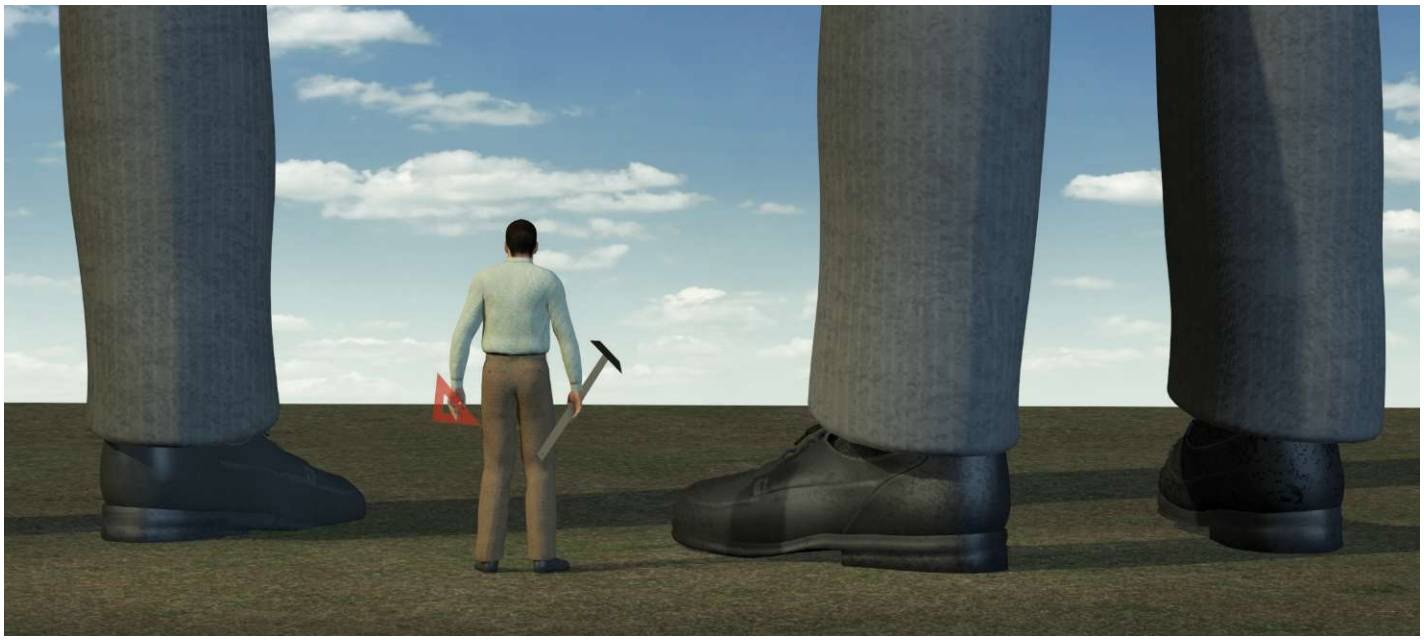

ILLUSTRATION: RANDY LYHUS

The difference between small and big in the federal market has very large consequences.

BY MIKE SINGER

THIS SUMMER, THE U.S. SMALL BUSINESS ADMINISTRATION (SBA) proposed raising its current definitional size standard for architectural services for its federal jobs set-aside program from $4.5 million to $19 million. The new higher size-standard definition means a larger pool of architecture firms could soon be eligible to compete for federal contracts as small businesses. According to AIA estimates, over 91 percent of architectural firms already fall under the current $4.5 million net receipts standard. If raised to $19 million, over 97 percent of firms will qualify as small businesses.

"The set-aside program objective is to have 35 to 40 percent of the category's participants benefiting, but even under the current threshold we have 91.7 percent of architect firms qualifying, so there is something wrong there," says Paul Mendelsohn, AIA vice president of government and community relations.

The official comment period on the proposed new size definition ended June 15, and AIA continues to work with SBA officials on the proper methods to define who can compete as a small architectural business in the $700 billion federal contract marketplace. Extensive AIA member feedback suggests problems with both the current and proposed new small-business size standards. SBA has long struggled to find a numerical definition of small businesses on an industry-by-industry basis. Between 1980 and 2008, the agency proposed comprehensive revisions of its size standards five different times, yet none were ever fully implemented due to industry concerns.

SBA currently has 42 different size standards covering 1,114 different industries, with 31 of the current industry size standards based on average annual total receipts, eight on number of employees, and three on other metrics. With federal budget cutbacks soon delivering far fewer dollars to all programs, along with high governmental interest in streamlining processes, there is a renewed push to simplify metrics and ease administrative oversight by reducing both the number of industry categories and the number of size ranges.

SBA is now proposing eight receipt-based size standards (down from the current 31), placing architectural services into the new $19 million range—a 322 percent increase from its current $4.5 million range. Further complicating matters, the current category of architectural services would be combined into A/E services, placing both architectural and engineering firms in the same category definition. When proposing size standards, SBA looks at distribution of firms by size, average firm size, industry competition, and success in the government contracting marketplace. Architects and engineers do not share common metrics in each of these areas, which may make for an illogical grouping.

Walter J. Hainsfurther, FAIA, in his May 5 testimony before the U.S. House of Representatives Subcommittee on Economic Growth, Capital Access and Tax, noted that the average size of architectural firms is in fact getting smaller, not bigger.

"Billings at my company are down 80 percent from two years ago ... and I've gone from a firm of 25 architects five years ago to five architects today," testified Hainsfurther, president of Kurtz Associates Architects in Des Plaines, Ill. "The vast majority of architects practice in one- or two-person firms [and] in the recession, more small firms are created instead of consolidating; as more people lose jobs, they hang out their own shingles."

While the higher size standard may allow federal agencies to more easily achieve their small-business contracting goals, businesses now defined as small under the current standard may obtain far fewer, if any, federal contracts, as this will put them in the same definitional category as much larger firms. With no date set for its decision, one thing is sure: If the SBA goal in a budget-limited environment is to truly help small businesses, raising the current $4.5 million size limit may have unintended consequences. AIA

↗ To learn more about the AIA's advocacy efforts, visit aia.org/advocacy.

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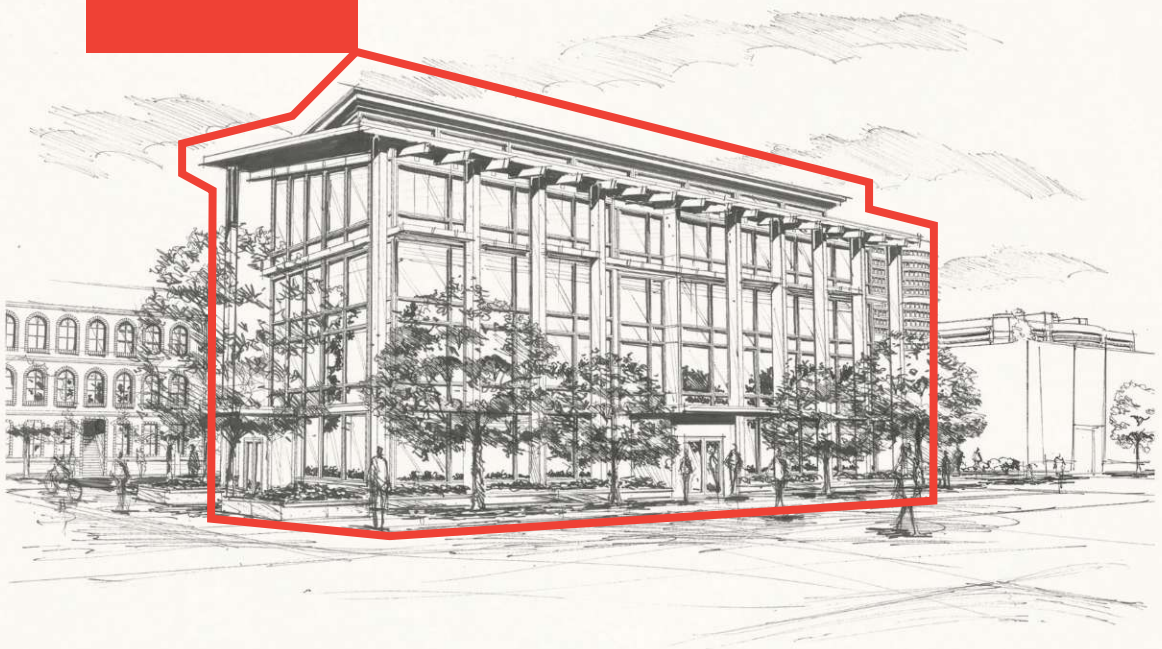

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The New Normal

ILLUSTRATION: MARK MCGUINNIS

Ownership and equity are about more than square footage in today's home—they're about design's value and process, too.

BY CAMILLE LEFEVRE

The first in a three-part series on residential architecture in today's economic climate.

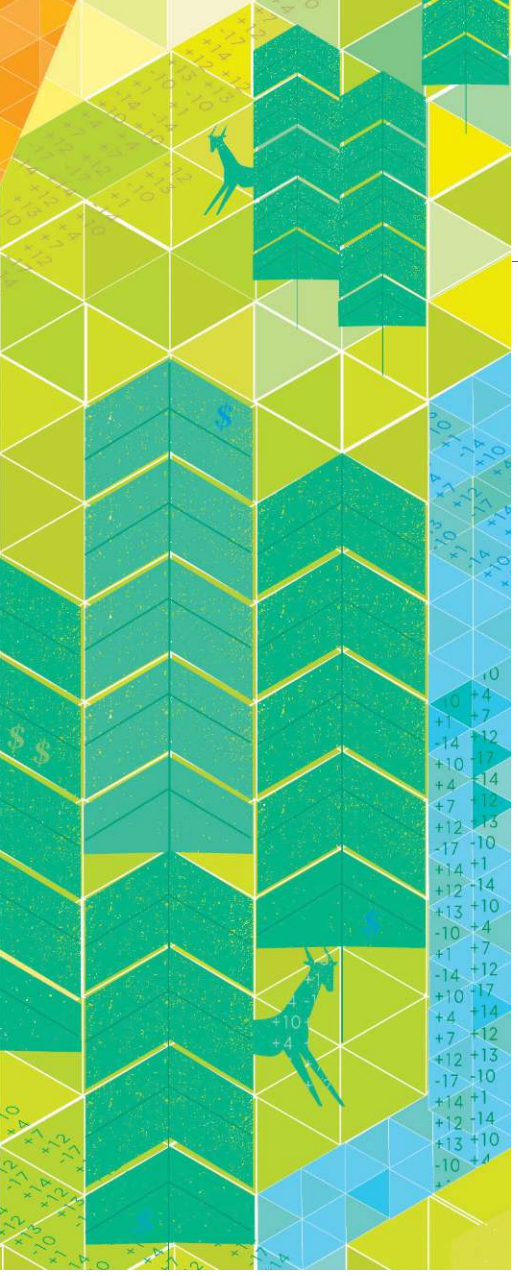
ANY ARCHITECT WHO HAS BEEN PRACTICING FOR A WHILE IS well aware that the United States has sustained several economic recessions over the past 30 years. But aside from a few regional blips during the dot-com bust, the housing sector largely sailed through these downturns with homeowners' equity intact. Then a perfect storm of factors—including low interest rates and unprecedented access to mortgage credit, booming home sales financed by mortgages bundled for sale to insatiable investors, and escalating home prices—created a bubble doomed to burst.

"The hype of equity was a classic bubble that assumed an upward value unrelated to the actual worth of the commodity," explains Duo Dickinson, AIA, NCARB, CORA, principal of Duo Dickinson Architect, Madison, Conn. "For the first time in the history of world economics the cause of the recession was a building type: the American house."

In the wake of the housing crash, followed by record unemployment and foreclosures, homeowners who kept their houses still lost tens of thousands of dollars in equity. According to the S&P/Case-Shiller Home Price Indices, home prices are down more than 30 percent since their peak in 2006, and the housing data firm CoreLogic found that 11 million homeowners still owe more than their houses are worth. Finger-pointing continues as political pundits and economists sort out the causes.

Dickinson doesn't hesitate to point to his own profession for a mea culpa. "To me, [the housing crash] was merely an ironic, extreme interpretation of how far architects have drifted away from any sensibility in the American consciousness that we have value," says Dickinson, author of *House on a Budget: Making Smart Choices to Build the Home You Want* (American Institute of Architects, 2007) and *Staying Put: Remodel Your House To Get the Home You Want* (Taunton, 2011).

"Rather than talking to an architect about whether their house was really worth $257,000, home buyers talked to a real estate agent



or mortgage broker," he adds. "The truth is, that's our fault, not the consumer's fault. They have no concept that an architect will give them straight information about where their greatest liabilities are—the mortgage—and what their assets are. Until a few years ago, that net asset was a positive dollar amount between the mortgage and the house value. We have distanced ourselves as a profession from doing the dirty work of making our buildings account for cost."

Today, clients for single-family residences do exist. They are savvy businesspeople who refrained during the boom and now have the money to build new or renovate while receiving more value on the dollar in a more competitive market. They are also homeowners who can't sell or move up, but still have some equity or savings to renovate their homes.

In short, they survived the crash with funds intact. "To an extent, all architects who do custom residential work are more or less dealing with people who are financially above the mean," says Andrew Porth, AIA, LEED AP, principal of Porth Architects in Red Lodge, Mont.

But even potential clients of means are, since the recession, stingier than ever with the dollars they spend.

"Our clients have become more sensitive to the value of our services, what we bring to the design process, and what they're going to build," says Jean Rehkamp Larson, AIA, CORA, principal of Rehkamp Larson Architects, Minneapolis. "When dollars tighten, architects need to provide a good value and the leadership to take clients from here to there in an efficient way."

Carney Logan Burke Architects in Jackson Hole, Wyo., weathered the recession by creating a marketing plan to make the firm appealing to a broader array of clients, says Eric Logan, AIA, principal. The plan included self-publishing a hardcover survey of the firm's work. Now that the firm's busy again, he continues, "We're hearing more from people that they have a very strict budget, and our contracts are scrutinized in a way they weren't before.

"We also can no longer ask for the fees we used to get," he adds. "We go with this, as a business decision, to keep our clients happy, which means our work has to be done more efficiently if we're going to remain solvent." For Rehkamp Larson, the recession "tightened everything. It made leadership, clarity, and the design process more important."

> The recession "tightened everything. It made leadership, clarity, and the design process more important."

For the first time, she's also been asked to give away her time: A potential client suggested she complete a schematic design and compete against two other architects. She declined. "As residential architects, we sell our time and expertise," Rehkamp Larson says. "Giving away our best skills and fundamental talents isn't a sustainable way to run a practice."

Residential clients are expressing their new fiscal conservatism in other ways. One is the smaller footprint. "There's been a scale shift," Logan says. "More clients are saying, 'I don't need a 10,000-square-foot house. We can manage in a thoughtfully designed 4,500-square-foot house.'" The trend toward less square footage is borne out by NAHB's recent "The New Home in 2015" survey. Responses indicate that space in the average new single-family home will decrease by almost 10 percent from the average size of single-family homes started in the first three quarters of 2010—to about 2,152 square feet—by the middle of the decade. Greener features ranked at the top of the trend list as well.

Homeowners are also choosing to stay put. "The percentage of clients looking at options to stay within an existing home has increased," says Rehkamp Larson. According to Harvard University's Joint Center for Housing Studies, the remodeling market will recover from its 12 percent drop between 2007 and 2009, and expenditures will increase at an inflation-adjusted average annual rate of 3.5 percent between 2010 and 2015.

Many potential clients still face roadblocks to financing a new or remodeled home. "Buyers are now being asked to come up with a 20 percent down payment," explains Porth. "A whole of raft of potential buyers has been blindsided by this renewed requirement." For architects, an ongoing challenge is to convince "appraisers and lenders that there's value in architectural design," Porth says. "Managing to get even the cost of our services incorporated into an appraisal or a loan is tough."

Nonetheless, residential architects and their clients remain steadfast in their belief that "good design adds value," says Rehkamp Larson. "That was true before the recession and is true after the recession." As clients shift toward smaller square footages and remodeling existing homes, "That idea of value, of making sure you're spending your money on the things you care about, is as important as ever." AIA

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AIAPERSPECTIVE

SECURITY BY DESIGN

PHOTO: WILLIAM STEWART

AS THIS PERSPECTIVE IS BEING WRITTEN, WE'RE RAPIDLY CLOSING in on the 10th anniversary of one of the most terrible days in our nation's history. The attacks on New York's World Trade Center and the Pentagon erased what turned out to be a false sense of security. We woke up on the morning of Sept. 11, 2001, believing that the vast oceans that separated us from much of the rest of the world would keep us safe. When we went to bed that night, even those who were able to sleep felt a new chilling sense of vulnerability.

Ten years later, a reflexive hunkered-down mentality persists. Consider the drawn-out controversy over the design of the lead tower of the new World Trade Center complex in Lower Manhattan. The tallest building in the United States, standing at a symbolic height of 1,776 feet, will rise from a bombproof base that critics have compared to a concrete bunker.

In Washington, D.C., the National Park Service is considering ways to secure the Washington Monument from attack. In one proposal, visitors would gain access through an underground door and atrium. Across Constitution Avenue and opposite the White House, President's Park South was the subject of a National Capital Planning Commission (NCPC) design competition earlier this summer. Over the past decade, this area has been littered with Jersey barriers and makeshift fencing. To put it generously, the place looks like an abandoned construction site.

The impulse to spruce up the park is commendable. Yet why was design thinking an afterthought? The message is clear: Security and design operate at cross purposes. The architect's role has been relegated to masking the more unpleasant aspects of contemporary life.

Of course, protecting those who use the buildings and the spaces we design has to be a priority. But what's new about that? Security became a design issue for architecture and architects when the first humans moved out of caves. It's no less a concern in an age of international terrorism.

Yes, the stakes are higher and the damage that can be inflicted by a single determined terrorist is frightening. Yet a free society that values access and openness must not be frightened into a defensive posture that subverts the most precious values of our democracy. It's incumbent upon us as a nation—and those of us specifically entrusted with the public health, safety, and welfare—to factor in the most advanced thinking about security before disaster, in whatever form, occurs. Design is more than skin-deep; it's about preventing harm, not coming in afterwards to tidy up the debris.

This past April, the U.S. Department of State Bureau of Overseas Buildings Operations (OBO) rolled out new Design Excellence Guiding Principles. With assistance and input from the American Institute of Architects, OBO is adopting Design Excellence as both a tool and a solution for advancing a new generation of secure, high-performance, and sustainable facilities that support the conduct of American diplomacy—and, not so incidentally, convey American values.

The action taken by OBO underscores the fact that security and design excellence are not separate matters to be reconciled. Security is the nexus of a broad spectrum of design decisions, ranging from how a structure performs under stress to the way it uses energy. It's what we do.

To be alive is to be at risk; to live freely carries the greatest risk of all. Our role as architects is to secure the open space in which a democratic people can continue to risk without fear the bold adventure that is democracy, and to live the values of openness and freedom of movement that have made our nation great. AIA

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Clark D. Manus, FAIA, 2011 President

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Lance Armstrong — international cycling star and well-known cancer survivor — has built an unparalleled legacy of achievement. His LIVESTRONG™ movement, along with the Lance Armstrong Foundation, is dedicated to improving the lives of the 28 million people around the world living with cancer.

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The foundation discovered a 30,000-square-foot former warehouse near Austin. The loft-like space offered the openness, youthfulness and sense of energy that Armstrong sought.

At the same time, he wanted the new headquarters to highlight the foundation's concern for the environment. He turned to San Antonio-based Lake/Flato Architects to fulfill his vision of this becoming one of Austin's first LEED® Gold-certified facilities.

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In the end, Mitsubishi Electric was able to provide precise cooling and heating without interrupting or compromising the design aesthetics of the space. And that was vitally important to the designers.

Additionally, Mitsubishi Electric was the leading factor in the foundation earning LEED® Gold certification. According to Greg Lee, chief financial officer for the Lance Armstrong Foundation, "In less than two years, we already know that our new building uses 30 percent less energy than a conventional office building, and much of the savings can be attributed to (Mitsubishi Electric's) intelligent HVAC system."

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BUSINESS

→BEST PRACTICES

Grow Up

RAY KOGAN EXPLAINS THAT BUILDING UP A FIRM IN A TIME OF ECONOMIC CRISIS MAY BE THE SMARTEST STRATEGY FOR RECOVERING FROM THE RECESSION—SO LONG AS IT'S DONE THE RIGHT WAY.

INTERVIEW BY ERNEST BECK
PHOTO BY ELI MEIR KAPLAN

→

THE ECONOMY is still sluggish and competition is cutthroat—making it a seemingly odd moment for architecture firms to think about growth. But Ray Kogan, AIA, president of Washington, D.C.–area consulting firm Kogan & Company, believes that it's exactly the right time to craft strategies to anticipate the sweeping transformation of the industry. "The past few years have taught firms the danger of complacency," he says. "Ongoing change and challenge will likely be the only constants." With more than 30 years experience advising architecture and engineering firms through good times and bad, Kogan talks to ARCHITECT about building a path to sustained growth amid uncertainty.

SOME FIRMS, BURNED BY THE RECESSION, DECIDED THEY WOULD GO AFTER EVERY PROJECT THEY COULD. BUT BY DOING THAT THEY LOST WHATEVER POWER THEY HAD TO BE EXPERTS IN SPECIFIC AREAS.

Face reality.
"Everything has changed—in the world, in the industry, and in your firm," Kogan says. The clients are different and so is the technology. Markets that once were robust and thriving are in the doldrums with little hope of recovery. New markets are emerging. You have gotten older. Accept these realities and consider where you want the firm to go from here. "Avoid just picking up where you left off."

Ask questions ...
Speak to clients directly about trends and markets, whether publicly or privately. Don't ask what's coming down the pike in terms of projects, but ask deeper, probing questions about their business and where it's going—or not. This will help you structure your firm for the future around clients' needs and new markets. "Architecture firms need to be positioned to meet the needs of their clients in a proactive, not reactive, way."

... and then follow the money.
Some firms, burned by the recession, decided they would go after every project they could. But by doing that they lost whatever power they had to be experts in specific areas. Because it's a leaner, more competitive environment, stay focused on some select target markets to develop expertise and build a leadership position, Kogan says. Say no to what's not in your desired market. "Diversification is good for a stock portfolio but not a design firm."

Give up guilt.
If you need new staff, don't submit to the impulse to consider only former staff, Kogan cautions. That's a natural and, of course, humane inclination, borne out of a sense of obligation. Yet it might not be in the best interest of the firm. "The real question is what type of people are required to drive revenue and profit growth and new business," he says. Some former employees might fit the bill, but others might not. New strategic hires can take the firm into new markets.

Make time for a tough talk.
Don't leave principals and owners out of the hiring discussions. For many of them, their nest eggs and retirement plans were battered by the recession, and they might want to stay on and work longer. That might be welcome in some cases. If not, have that difficult conversation. For the good of the firm, it might be time for a longtime partner to leave. This can be a bitter pill to swallow, but ask yourself what it would mean for the firm for a partner or owner to stay on, with others waiting to come up through the ranks.

Seek new blood.
Leadership transition issues are approaching as baby boomers move on. Besides pruning at the top, "look at the younger generation in the firm and see who has the raw material to be a leader and cultivate that talent," Kogan says. Be aware of the leadership gap that the younger generation represents. "Who is going to run these firms if nobody is trained to lead?"

Spend some money.
To survive the recession, stinginess made good sense. To get out ahead after the recession, loosen the purse strings a bit. Nothing indulgent—"don't buy Aeron chairs for everybody"—but invest in marketing and business development, the latest technology, and training younger architects for leadership positions.

Articulate your vision.
Many firms lost their way in the recession. Now winners and losers alike must realize that what worked before doesn't necessarily work today. Leaders should craft a vision of where they want the firm to be 10 years out. That will tell you what people you need, how to organize the firm, and what direction you must go, Kogan says. "Plotting a new course is more important now than it has been for many years." □

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→TYPOLOGY

Recovery Rooms

DESIGNERS ARE BUILDING SUBSTANCE-ABUSE TREATMENT FACILITIES WITH AN EYE TOWARD EVIDENCE-BASED TRENDS AND LIVABILITY.

TEXT BY JENNIFER CATERINO

IN LATE JULY, Tribeca Twelve, a new five-floor residential building in New York City, began leasing to young adults ages 18 to 29. The project's tenants, who are required to be enrolled or plan to enroll in an area college, are expected to shell out a minimum of $5,000 per month for rent. They also need to be qualified candidates for Hazelden and Columbia University's Department of Psychiatry's new alcohol- and drug-free housing for students in recovery.

The project, which borrows heavily from conventional luxury residential projects, sets a new standard for collegiate recovery residences. The 2,200-square-foot, furnished, semiprivate or shared units feature a full kitchen, dining room, living room with fireplace, flat-screen television, study, and two full bathrooms, with Wi-Fi and in-unit laundry facilities. Decorative items were sourced from Etsy and local antique shops, and no two units are identical. These amenities don't come cheap, though Hazelden does label itself "insurance friendly."

Though experts say that the basic tenets of treatment design—group spaces, private spaces, family spaces, and so on—are a constant, designers are employing evidence-based design strategies and adapting facilities to specific populations.

Tenants at Tribeca Twelve, for example, will get more than high design for their money; the facility will serve as a supportive, independent-living environment for young adults in school and for those who have had to leave school to obtain substance-abuse treatment while reintegrating back into campus life. Ann Bray, general counsel and vice president of strategic initiatives for Hazelden, a national nonprofit organization based in Center City, Minn., explains that the project was intentionally designed to feel much more residential than a typical hospital environment. "When you walk in [to a Tribeca Twelve unit], it doesn't jump out as a treatment area; it looks like a living room," she says.

Hazelden tailors facilities to its patients' level of acuity, Bray says. While centers serving more acute patients, such as Hazelden's main campus in Center City or its Springbrook facility in Newberg, Ore., are designed to support a range of clinical services, patient-residents

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PREVIOUS PAGE: COURTESY DEPARTMENT OF VETERANS AFFAIRS; TOP TO BOTTOM: COURTESY DEPARTMENT OF VETERANS AFFAIRS; ECKERT AND ECKERT PHOTOGRAPHY; ECKERT AND ECKERT PHOTOGRAPHY; COURTESY GAMUT ONE STUDIOS

Project Legacy • *New Orleans* • Studio Nova
Pictured at left and on the preceding page, the replacement hospital for the U.S. Department of Veterans Affairs was designed by Studio Nova (NBBJ with Eskew+Dumez+Ripple and Rozas Ward Architects) and developed based on both veteran and employee input.

Springbrook • *Newberg, Ore.* • *TSP Architects and Engineers*
Communal rooms at Hazelden's Springbrook facility, pictured center, serve adults over age 18 who live at the 23-acre Springbrook campus. TSP more than doubled the facility's capacity, with a 24,000-square-foot expansion begun in 2009.

Adolescent Treatment Center of Winnebago • *Winnebago, Minn.* • *HGA*
The only treatment center to receive LEED certification, the Adolescent Treatment Center of Winnebago provides patients age 12 to 18 with education from state-licensed instructors.

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at Tribeca Twelve enjoy kitchens in what are essentially condominiums.

"The trend in design is to deliver healthcare. We like to turn that upside down and think about the patient experience," Bray says.

Many healthcare facilities are now adopting a design-for-home philosophy, HGA senior interior designer Christine Guzzo Vickery says. This trend is particularly relevant when patients will be residing in a facility for an extended period of time. "Creating a home-like environment [at an inpatient substance abuse facility] really matters," Vickery says. "People are living there; they need to feel comfortable."

To reduce stress and anxiety in a recovery setting, designers are tasked with providing abundant natural light, optimizing views of nature, addressing safety with discreet design solutions, and selecting therapeutic artwork, among other requirements. "It's about treating a person as a whole, not just dealing with the substance abuse," she says.

These design elements not only create a calm environment for patients; they can mitigate what Rick G. Wessling, AIA, managing principal of TSP Architects and Engineers in Minnetonka, Minn., calls the "rearview-mirror factor"—how families of patients view the facility. "Often, people dropping loved ones off are torn up and want to know it's OK," he says. Design can help ease some of these concerns.

Though recovery is the goal at many facilities, other centers exist to ensure that people who are coping with substance abuse are safe. Lehrer Architects principal Michael B. Lehrer, FAIA, has completed two wellness centers for Homeless Health Care Los Angeles (HHCLA), an organization for which he now serves as board president. The facilities vary from traditional substance-abuse treatment settings by offering "harm-reduction" services, such as a needle exchange, in addition to conventional services and referrals.

In his work with HHCLA, as well as two other projects serving low-income and indigent people in Los Angeles, Lehrer has found that providing a welcoming atmosphere can help clients overcome any initial pathologies they might have regarding integration and rehabilitation.

"Design matters a lot in all of these projects. They are calibrated very much in terms openness and protection," Lehrer says. "This is not fear-based design."

Bray says the same considerations go into designing Hazelden admissions areas, which she describes as intimately scaled, not voluminous or intimidating. These spaces "feel private and confidential. The flow is very important, warm and intimate, not commercial," she says.

According to Vickery, even subtle design enhancements can turn a potentially off-putting but ultimately necessary building feature into a welcoming design asset. With security glass, for example, she says, "You can etch a pattern on it."

In contrast to other behavioral health environments, Francis Murdock Pitts, FAIA, a principal at Troy, N.Y.–based Architecture+, says inpatient treatment facilities typically feature shared bedrooms and areas designated for group therapy.

In treatment, "success depends on an environment that supports groups and [a patient's] ability to take a role within that group," Pitts says. "It's a question of the individual and society and what architecture does as a mediator."

Joseph Lomonaco, AIA, principal of Architecture+, likens the group dynamic to a "bootcamp arrangement." "Once they [patients] have been through detox, people live in a world built around a little community. They eat there, live there, sleep there, receive group treatment there," he says.

According to Wessling, the subdivision of these little communities drives the need for "swing rooms" that can be used for different levels of care depending on current demand. As patients progress through their treatment, they transition from primary care to extended care and are introduced to a new peer group. Swing rooms intersect the different care units and can be used for either level. "The room itself might not differ. It's about understanding community. A primary patient is part of the primary community—it's where the fellowship happens. If someone [a patient] moves to extended, fellowship will happen there," Wessling says.

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"THE TREND IN DESIGN IS TO DELIVER HEALTHCARE. WE LIKE TO TURN THAT UPSIDE DOWN AND THINK ABOUT THE PATIENT EXPERIENCE."

—ANN BRAY, HAZELDEN

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At the outset of Project Legacy, a new replacement medical center for the Department of Veterans Affairs now under way in New Orleans, the design team of Studio Nova—a joint venture between NBBJ and local partners Eskew+Dumez+Ripple and Rozas Ward Architects—sought feedback from veterans and their families. Some 630 hours of conversation led to a whole host of insights and design priorities for the comprehensive healthcare facility that includes substance-abuse services, NBBJ principal Susan Bower says.

Some of those priorities, such as designing wide, open stairwells, directly relate to co-occurring disorders, such as post-traumatic stress disorder. "We focused on reducing anxiety and putting patients at ease with simple navigation choices and easy wayfinding," Bower says.

Patients also played a key role in color selection. Bower explains that the original palette, composed of bright, cheerful colors, was nixed once it was discovered that veterans preferred muted tones. Even that seemingly simple change led to new concerns: Because many veterans have vision problems, designers are looking at ways to improve contrast on reception graphics, she says.

The industry is moving toward evidence-based design, Vickery says. HGA "always does a pre-occupancy study to ask people where they are now, what are their issues and what we can improve upon," she says.

A 2009 study from the Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that 22.5 million Americans, or 8.9 percent of the population, were classified with substance dependence or abuse in the past year. Not everyone seeks treatment, however. The National Survey of Substance Abuse Treatment Services (N-SSATS), conducted in 2008 by SAMHSA, concluded that financial burden, including lack of health insurance, was a barrier to individuals with substance-abuse problems that did not seek treatment.

The fee varies based on the provider and level of treatment, but Hazelden estimates that inpatient alcohol and drug treatment costs about $28,300 at one of its facilities. New legislation, such as the Mental Health Parity and Addiction Equity Act of 2008, aims to reduce restrictions and limitations placed on mental-health or substance-use disorder benefits. And the Patient Protection and Affordable Care Act (ACA), signed into law March of last year, will fundamentally change what services will be available to individuals with mental health and addiction disorders. But Bray says that the implications of these new laws have yet to be fully felt, and Bray and Vickery agree that it's too soon to plan new facilities based on these impending changes.

The future of facilities may also be shaped by "retail" healthcare services. Vickery speculates that this could mean more outpatient clinics, perhaps set up in retail environments. For Hazelden's part, Bray says that the organization is especially sensitive to changes in healthcare and is purposefully planning facilities to serve different needs depending on what the future holds.

"Our design philosophy is staying flexible, [to] grow outpatient care if that's where there's future demand. We need to be able to reconfigure readily," she says. □

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→LETTER FROM GHOST 13

Haunting in Halifax

ON A FOGGY FARM IN NOVA SCOTIA, NEARLY 200 PEOPLE, UNDETERRED BY A HIGH STICKER PRICE, GATHERED TO HEAR ARCHITECTURAL LUMINARIES AND FIND A SENSE OF PLACE AT THE GHOST 13 CONFERENCE.

TEXT BY LISA FINDLEY
PHOTOS BY ALEX FRADKIN

THE FIRST FULL DAY of Ghost 13—held this June on a farm an hour and a half south of Halifax, Nova Scotia—began with a cold, driving rain, deepening mud, and unexpected electrical failure. Overall, an inauspicious beginning to a symposium that, based on its registration fee of $2,500, appeared at first blush to be an elitist event open only to those with piles of extra cash lying around. But by the time the shuttle buses bearing attendees from their nearby lodgings arrived, generators had been procured, coffee had been perked, and at 9:30 a.m.—only an hour late—the first in a star-studded list of presenting architects and critics was ready to take the podium.

"I know it is a strange time to do a conference like this," says Brian MacKay-Lyons, the Halifax-based architect who organized the conference with his partner Talbot Sweetapple. "But these tough economic times are exactly when we need our peer communities. We all need to remain optimistic and ambitious, to keep the lamp lit, and to remind one another of why we are doing it."

The 150 attendees agreed with MacKay-Lyons's thinking: Overwhelmingly midcareer architects, the group included solo practitioners, principals of small

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firms, and midlevel associates from middle-sized firms. They were worn out from the past three years of struggling to get projects, keeping firms afloat, and getting work built. Some felt isolated in their practices or cities and sought the very inspiration and community that MacKay-Lyons hoped to offer.

And he's had experience with creating it: Every summer since 1999, MacKay-Lyons has organized and hosted a two-week design/build workshop, open to about 20 architecture students from anywhere in the world, on this remote piece of land called Shobac Farm. The workshop specifically addressed architecture based in the physical and cultural history of the site, the experiences of the landscape, and the materials and details of construction. Named Ghost for the building that MacKay-Lyons imagined once occupied an ancient stone foundation on the site, the workshop built temporary buildings, sheds, observation platforms, and a boathouse.

INSTEAD OF GATHERING AN EXCLUSIVE GROUP TO HUDDLE IN A ROOM AND CRAFT A SINGLE STANCE, MACKAY-LYONS INVITED A DIVERSE GROUP OF ARCHITECTS WITH OVERLAPPING CONCERNS AND AN UNABASHED APPRECIATION FOR EACH OTHERS' WORK.

The 2010 Ghost 12 was the last of the workshops, and Ghost 13 was seen as a capstone for the Ghost effort, bringing the scale of the event from small and student-driven, to a broader, more practitioner-focused discussion. "I would love for us to be able to develop a strong position—even to be a movement or a school," MacKay-Lyons says. "Like Team 10, but the postfeminist version—inclusive, ever-expanding, dedicated to making architecture that reinforces … [the idea of] place in the face of globalization."

Many of the conference presenters—mostly architects whose work struggles with issues of climate, place, landscape, and technique—had taught at a Ghost workshop, while others had visited as guest critics. In this sense, and in their own work and shared concerns, most of the presenters make up a kind of family tree, with the keynote speakers—Kenneth Frampton, Juhani Pallasmaa, Hon. FAIA, and Glenn Murcutt, Hon. FAIA—serving as what MacKay-Lyons calls "tribal elders." The opening keynote set both the framework for this year's gathering and the bar for the level of discourse: Frampton revisited his 1983 seminal essay "Towards a Critical Regionalism," expanding it to embrace the subtleties, contingencies, and global perspectives of the past 30 years.

The program for the three days was packed. Daytime presentations, held in a historic hexagonal barn, began at 8:30 each morning, and ran back-to-back, culminating in an afternoon discussion led by critics and historians. Each day's sessions focused on a different theme: place, craft, and community. Most of the presenting architects—including people such as Wendell Burnette, AIA, Marlon Blackwell, FAIA, and Patricia Patkau—might be considered regional modernists. Of course, the buildings shown were inspiring, and almost all were extremely expensive private residences in unbuilt settings. The third day's theme, Community, added complexity to the conversation—and a challenge to the overall sense of privilege in the work—with presentations about design/build programs with architecture students set in marginalized communities.

MacKay-Lyons admits that the list of invited speakers—which is missing some excellent women, talented younger-generation architects, and overseas practitioners—was not inclusive, but rather reflects his own interests and connections. He had relied on his friendships to convince people to come help with past Ghost workshops, and to come for this week to a remote corner of North America. "There are many close friendships among people in this group, some of us invite others to collaborate on projects, we help each other with practice advice, we are often in friendly competition with one another for projects, we call each other up for information on details, materials, finishes," he says.

But this very atmosphere of generosity and community is why Ghost 13 resulted in no call to arms issued and no Team 10–like movement launched. Instead of gathering an exclusive group to huddle in a room and craft a single stance, MacKay-Lyons invited a diverse group of architects with overlapping concerns and an unabashed appreciation of each others' work. He then opened the conference to anyone who was interested in becoming part of this loose network. Indeed, rather than defining an exclusive territory, the presentations embellished, updated, and pushed the boundaries of the strain of Modernism that has been around since Alvar Aalto and some of his contemporaries pushed back against the orthodoxy of the Congrès Internationaux d'Architecture Moderne. It's the strain that Frampton dubbed "critical regionalism," and that Colin St. John Wilson called "the other tradition of modernism": In short, contemporary work that is embedded in the specifics of its place, its program, and its tactile and technical context, and achieves these aims without being sentimental.

Even in the absence of a unified rallying cry, however, attendees were not disappointed. On their few breaks, the Ghost 13 participants scattered across the farm to explore the various constructions. Architects eating lunch at a handmade picnic table—some sent by their firms, others paying their own way—all concur that it was worth the cost. What they forged here was community: They were now "Ghosters," alums of this place, part of the network built by MacKay-Lyons and his associates, and of its ongoing conversations around architecture. This particular event didn't, and perhaps couldn't, take place in Chicago or New York, so tied is Ghost to its own intellectual and physical place: this farm 13 miles from the nearest town—with its views of inlets and islands, sweeping green pastures, and thick stands of spruce—serviced only by a one-lane dirt road. □

→ For a full list of speakers and sessions, visit architectmagazine.com

Clockwise from top left: Robert Benz, AIA, Juhani Pallasmaa, Hon. FAIA, and Peter Buchanan enjoy coffee in between sessions; a sheep shelters from the rain on Shobac Farm; the historic Anglican Church in the nearby World Heritage–designated fishing village of Lunenburg, where the keynote speeches were held each evening for about 500 to 600 people, including the public; attendees listen to presentations made in the hexagonal barn on Shobac Farm; conversations continued over meal breaks; views out to the fog-covered bucolic landscape.












Karaoke with **FXFowle**, volleyball with **HDR**, and tailgating with **Populous**.

→**FIRM CULTURE**

Office Space

COMMUNICATION? SPACE? ORGANIZATION? KEY TO ANY SUCCESSFUL PROJECT—AND ALSO CRUCIAL FOR A HEALTHY OFFICE CULTURE.

TEXT BY KRISTON CAPPS

THERE ARE ANY number of ways to do office culture. There's top-down office culture, spelled out in employee manualese by HR. There's bottom-up office culture, where no one's late when everyone's hungover. Small firm and large firm, West Coast and East Coast, trendy and rigid: Every office has one.

But how do firms go about recognizing their culture—or better yet, changing it? In an ongoing recession, when employee morale can decline right along with receipts, it's a question that firms need to consider. The examples set by three firms show that the same skills that go into understanding what a client wants from a project can help to determine what a staff needs from an office.

At FXFowle, culture starts with the space itself—specifically, an in-house art gallery.

The gallery is a modest example of FXFowle's commitment to social betterment, says managing partner Guy Geier, FAIA. "We use architecture to get there. Commitment to the greater good is also about making life for the staff, principals, and everyone else about more than just coming to work."

The gallery was envisioned as a counterpoint to the practice of simply hanging the firm's own work on the walls, Geier says. Instead, the gallery shows work by artists unrelated to the firm, and is currently showing wall sculptures by artist—and director of architectural photography agency Esto—Erica Stoller. While FXFowle staff get a discount on the work on display, the firm takes no commission on any artist's sales.

"'Do I like this, do I not like this,'" Geier says. "It generates a lot of discussion."

In July, the space prompted more than talk: FXFowle

TOP TO BOTTOM: JOHN LOOMIS; DON CUDNEY; ALISTAIR TUTTON

used the gallery for a staff karaoke party. Though the firm's annual outings usually take staff further afield—the Bronx Zoo, Central Park, and so on—Geier says that the gallery is crucial to the firm's culture.

"There was a time six or seven years ago that we had expanded our staff to the point where we had to put workstations with architects in that space, because we had no place to put them," he says. "When it wasn't available as a gallery, I remember hearing people say, 'We have to get that gallery space back.'"

AT POPULOUS, the work itself sets the tone for the firm. "One of the unique things about working in a practice that has for most of its history focused on sports and entertainment is that architects that gravitate to this work are fans," says Populous senior designer and principal Brad Clark, AIA. "I think not every architecture practice is filled with people who have that love of sports. A big percentage of our staff have allegiance to the local teams."

In June, project team members at Populous enjoyed tickets to the inaugural game at Livestrong Sporting Park, the Major League Soccer stadium that the firm designed. And in July, the staff at Populous held a tailgate for a Kansas City Royals game at Kauffman Stadium, for which the firm completed renovations in 2009. Populous also spearheaded the 2010 renovations at Arrowhead Stadium, home of the Kansas City Chiefs—another stadium in Kansas City with Populous's fingerprints on it.

Yet Populous people are more than just Kansas City sports fans. Last year, the firm made a shift in its accounting practice that promises an even stronger relationship with the city. Prior to the change, a Populous designer between projects might bill his or her time to a "General" or "Nonassigned" category in the company's accounting system. Now—under the ominous-sounding designation "Initiative 066"—underworked staffers are encouraged to channel their energy into the community.

"Rather than not having true accounting for that time," Clark says, "we're making that more meaningful and eliminating the stigma of charging to that number." Time assigned to Initiative 066 is "time that the staff can spend exploring 'cool stuff' that has a correlation to our business and strengthening our brand."

Working with local marketing agency VML and local audiovisual company Harvest Productions, for example, Populous has helped to stage TEDxKC events—an independently organized offshoot of the popular TED talks series—at the Nelson-Atkins Museum of Art. One former Populous designer performed a statistical analysis of how new sporting venues contribute to a team's win–loss record. In another Initiative 066 effort, several Populous designers joined the U.S. Army School of Advanced Military Studies, based at nearby Fort Leavenworth, for military- and design-planning discussions.

"Participation expands our work locally," Clark says. "We want to emphasize that we're here in Kansas City, and that we're part of the local design community as well."

SOME FIRMS are large enough to represent entire design communities in themselves. For large firms, organization is not just a human-resources dilemma, but crucial to employee morale. At HDR Architecture, young professionals groups—YPGs, by the firm's own parlance—exist to guide and organize young talent joining the nation's fourth-largest firm. YPGs mean different things to different divisions within the company. At HDR's Denver office, it means intramural volleyball.

The Denver office team—Hit Dig Roll (get it?)—describes this year as its "breakout season" in the city's intramural Design Volleyball League. One of 84 teams organized into four divisions, Hit Dig Roll meets in Washington Park in central Denver to compete for bragging rights over other architects, engineers, and contractors. With a 3-9 record, Hit Dig Roll might appear to be a pushover, but the team placed fourth in its division during the first of the season's two tournaments.

Back at the office, the Denver YPG hosted an event for young professionals from the state's other HDR offices as part of the firm's "One Colorado" push. Young professionals from more than a dozen HDR business groups assembled in July and August for "speed networking" sessions, in which they delivered short presentations on their projects, software, and other areas of expertise—from marketing to preservation.

HOW DOES THE STUDIO COMMUNICATE? HOW DOES THE FIRM INTERACT WITH THE CITY? OFFICE CULTURE IS DEFINED BY MORE THAN JUST SOCIAL GET-TOGETHERS.

"This is a great opportunity for them to develop their public speaking skills," says HDR project coordinator Valerie Martin, Assoc. AIA, "as young professionals oftentimes don't get many chances to do that."

For a firm with thousands of employees, the YPGs represent a crucial vehicle for intracompany knowledge sharing. But HDR associate vice president Chad Narburgh, AIA, assures that it's not as soulless as all that. Those young professionals are at the forefront of the firm's use of social media in internal and external communications—one example of how the firm would like to take its lead from its younger staffers.

"All these things that people are doing across an 8,000-person firm in terms of communication have really hit the street in a big way in the last three years," Narburgh says. The YPGs network enables HDR to "pull them across multiple sources," he says.

Size notwithstanding, any firm has to grapple with some fundamental questions. How does the studio communicate? How does the firm interact with the city? Office culture is defined by more than just social get-togethers—it's the sum of the answers to these questions. Though the occasional happy hour doesn't hurt. □

→LOCAL MARKET

Wichita, Kansas


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TEXT BY MARGOT CARMICHAEL LESTER AND CLAIRE PARKER

DEVELOPMENT IN WICHITA, KAN., known as the "Air Capital of the World" for its aircraft manufacturing, has taken flight even as the larger economy has stalled. Wichita's new developments are due in large part to government spending on education (a $370 million local school-bond issue) and the 2001 formation of the Wichita Downtown Development Corporation to revitalize downtown—initiatives that have kept cranes in the air.

"A major asset is that we've completed a downtown master plan"—known as Project Downtown—"to keep everyone on the same page for the next 10 to 15 years," Schaefer Johnson Cox Frey Architecture vice president Joe Johnson says. A 2010 collaboration between the city and the Downtown Development Corp., the Project Downtown plan includes multifamily housing, entertainment venues, and other amenities.

One Project Downtown development is the subject of some controversy: WaterWalk, a mixed-use, $100 million development along the banks of the Arkansas River that includes the new Convention and Visitors Bureau and a $12 million Fairfield Inn and Suites that opened last year. After years of stops and starts, the WaterWalk project has led some locals to voice skepticism about its ability to revitalize the city center—particularly since it competes with Old Town. This cluster of brick and limestone buildings dating from 1870 to 1930 was rehabilitated in the 1980s; some locals wonder whether Wichita can support two entertainment districts.

Nevertheless, the galleries, theaters, and other amenities of Old Town got a boost from the Intrust Bank Arena, for which the construction was funded by a voter-approved, countywide one percent sales-and-use tax financing plan. Located in a 5-acre entertainment complex, the arena is accented with design elements and materials that recall Wichita's agrarian history.

Aviation is still big business in Wichita. Hawker Beechcraft and Cessna call the city home, and other aircraft manufacturers operate here. "The consensus among industry analysts is that general aviation manufacturing recovery should strengthen in 2012," says Greater Wichita Economic Development Coalition research director Duane Smith. There's some evidence of a nascent recovery in the recently completed National Center for Aviation Training as well as in Airbus's expanded Engineering Design Center.

In the Air Capital, buildings need protection from tornadoes, regardless of use. "The building codes do not really address tornadoes, but virtually every house in our area is built with a basement," says Spangenberg Phillips Tice Architecture partner Greg Tice, AIA. The 2008 school bond requires FEMA shelters—rooms reinforced with 10 to 12 inches of concrete to withstand an EF-5 tornado—in the new buildings. "A FEMA shelter will add about $55 per square foot to the cost of building," Tice says.

Locals remain bullish on Wichita. "Added strength and activity in downtown will in turn build strength throughout the city and help attract new businesses to the area," says WDM Architects associate principal and director of business development Jason Van Hecke, AIA. "Another strength is the large number of people in public and private leadership positions dedicated to the success of Wichita. These are people that have grown up in Wichita or lived here for a long time who are truly looking to make sure Wichita succeeds." □

NEW PROJECTS

1. NATIONAL CENTER FOR AVIATION TRAINING
Architect: Schaefer Johnson Cox Frey Architecture, Wichita, Kan.
Total Cost: $42 million
Completion: 2010

2. INTRUST BANK ARENA
Architect: Arena Design Consortium, Wichita
Total Cost: $210 million
Completion: 2010

3. WATERWALK
Architect: LawKingdon Architecture, Wichita; and GLMV Architecture, Wichita
Total Cost: $100 million
Completion: Phased project to be completed by 2013

MARKET STATS

2.02
EXPANSION INDEX VALUE, WICHITA METRO AREA
The Expansion Index from Reed Construction Data is a 12- to 18-month look ahead at the construction marketplace. A value of 1.0 or higher signifies growth.
SOURCE: REED CONSTRUCTION DATA

382,368
POPULATION, 2010
SOURCE: 2010 U.S. CENSUS

429,380
PROJECTED POPULATION, 2035
SOURCE: WITCHITA-SEDGWICK SOUNTY METROPOLITAN AREA PLANNING DEPARTMENT

8.3%
UNEMPLOYMENT, MAY 2011
SOURCE: KANSAS DEPARTMENT OF LABOR

2,778,147 S.F.
CLASS A OFFICE INVENTORY
SOURCE: GRUBB & ELLIS, MARTENS COMMERCIAL GROUP

9.3%
VACANCY RATE FOR CLASS A OFFICE SPACE, JUNE 2011
SOURCE: GRUBB & ELLIS, MARTENS COMMERCIAL GROUP

5.2%
INCREASE IN CLASS A RENTS SINCE 2002
SOURCE: GRUBB & ELLIS, MARTENS COMMERCIAL GROUP

CLOCKWISE FROM LEFT: SJCF ARCHITECTURE; MICHAEL SPILLERS; WATERWALK DEVELOPMENT

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*Flotkoetter, Brent. "ZIP System® Wall sheathing and energy performance" November 2008.
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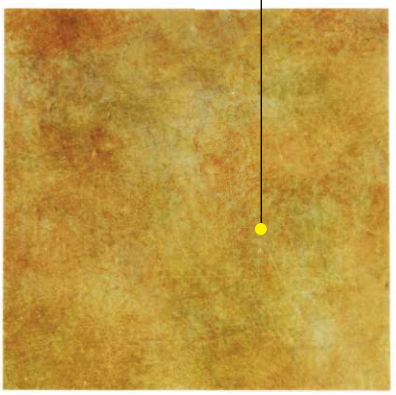
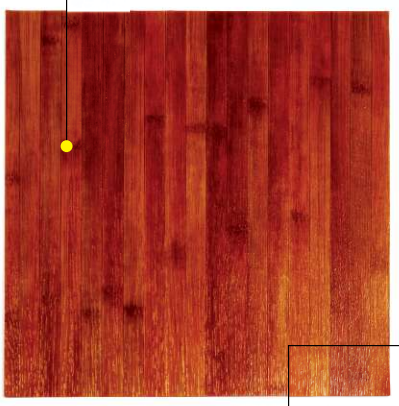
TEXT BY HALLIE BUSTA
PHOTOS BY NOAH KALINA

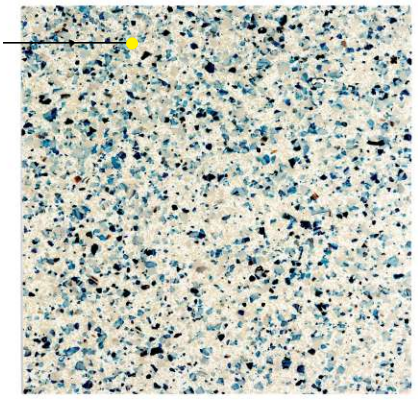
The **Perspectives** line of sheet and tile resilient flooring from **Armstrong** features 12 concrete (shown) and metallic finishes. The flooring is 0.08" thick and has a protective urethane coating and a medium gloss finish with a light reflectivity of between 30% and 34%. Solid vinyl weld rods are available. Perspectives features a low-VOC rating and may contribute to LEED credits. • *armstrong.com* • Circle 101



Timberline bamboo resilient flooring from **Armstrong** is protected from heavy wear with a high-performance urethane coating. It features a low-VOC rating and between 15% and 19% reflectivity. The flooring is 0.08" thick and is available in sheets sizes 6.5' wide with a maximum of 72' in length. Timberline may contribute to LEED credits. • *armstrong.com* • Circle 102

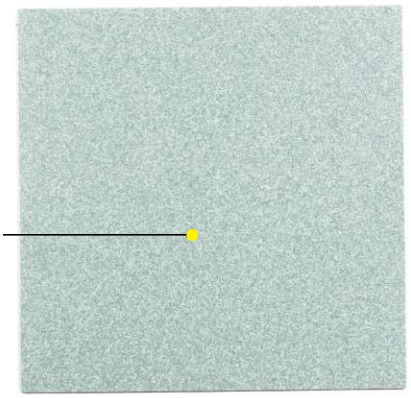


Azterra is a vinyl-enhanced tile from **Johnsonite** that mimics terrazzo and can be used in a variety of applications, including hospital lobbies, patient rooms, and corridors. It contains at least 23% pre-consumer and 6% post-consumer recycled content. Azterra's 1/8"-thick, 12"-square tiles are available in 14 colorways (shown here in Assuro). Tiles are installed with the company's adhesive and padding. • *johnsonite.com* • Circle 103

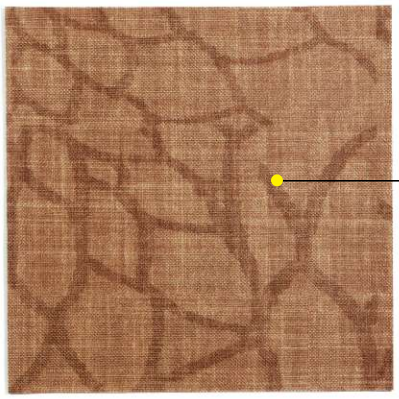


Mipolam Symbioz is a new homogenous resilient sheet flooring from **Gerflor**. A polyurethane coating offers protection in heavy-traffic areas and eliminates the need for self-shining. The flooring contains 75% sustainable and renewable raw materials and is 100% recyclable. Its 2m-wide sheets are available in 26 colors and are installed with a solvent-free adhesive and 100% plant-based plasticizer seam. • *gerflor.com* • Circle 104

Color Essence from **Johnsonite** is a vinyl-enhanced tile intended for a range of commercial uses, including healthcare applications. The 12"-square tiles are available in 51 colors and six coordinating slip-resistant options; tiles feature a wear layer and are designed for use in areas that do not receive routine maintenance. Color Essence contains a minimum of 23% pre-consumer recycled and 6% post-consumer content. • *johnsonite.com* • Circle 105



HOK Product Design collaborated with **Mannington Commercial** on the new **Vivendi Collection** of heterogeneous resilient flooring for healthcare applications. Available in three patterns and in 6', 9', and 12' widths, Vivendi features a proprietary aluminum oxide, UV-resistant layer. A collection of coordinating fabrics is available from Pallas Textiles. • *mannington commercial.com* • Circle 106



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→REGULATIONS

Eco-Logical

THREE DESIGNERS DISCUSS THE ENVIRONMENTAL CODES THAT MOST AFFECT THEIR WORK.

TEXT BY BRIAN LIBBY
ILLUSTRATIONS BY PETER ARKLE

SINCE ITS INTRODUCTION IN 2000, the U.S. Green Building Council's LEED rating system has not only grown to include more than 107,511 projects in the U.S. and 129 other countries, but the system has transformed local and state environmental laws. Whereas achieving top-level Platinum or Gold LEED ratings once meant energy efficiencies some 10 percent or even 25 percent beyond code stipulations, state and local jurisdictions are now setting standards that match these stringent requirements—for better and for worse.

Allen Eskew, Eskew+Dumez+Ripple

In New Orleans, Eskew+Dumez+Ripple director Allen Eskew, FAIA—who has been involved with Hurricane Katrina recovery planning efforts such as Bring New Orleans Back as well as the Unified New Orleans Plan—is frustrated by the base flood-level elevations issued by the Army Corps of Engineers.

"The flood elevation is based on the belief that the levees will hold and you're dealing with rain from thunderstorms or torrential but temporary downpours," Eskew says. "But all bets are off when there [are] breaches in the levee. Because of the actions of the corps pre-Katrina, there was a real loss of confidence in the corps modeling. And because Katrina was in fact a midsized hurricane, it's a worst-case natural-disaster scenario. Do you build for the 100-, the 500-, or the 1,000-year flood? In a city and region that is right in hurricane alley, there are still mixed signals as to what is prudent."

Not only does this make safety guidelines confusing, but it's contributing to a disconnect between building heights and setbacks across the city's neighborhoods. "We've got an extraordinary inventory of historic architecture. But when you change the paradigm, the whole way in which you related from your front porches to the sidewalk, it alters the socializing pattern and becomes disruptive," Eskew says.

Lisa Petterson, SERA Architects

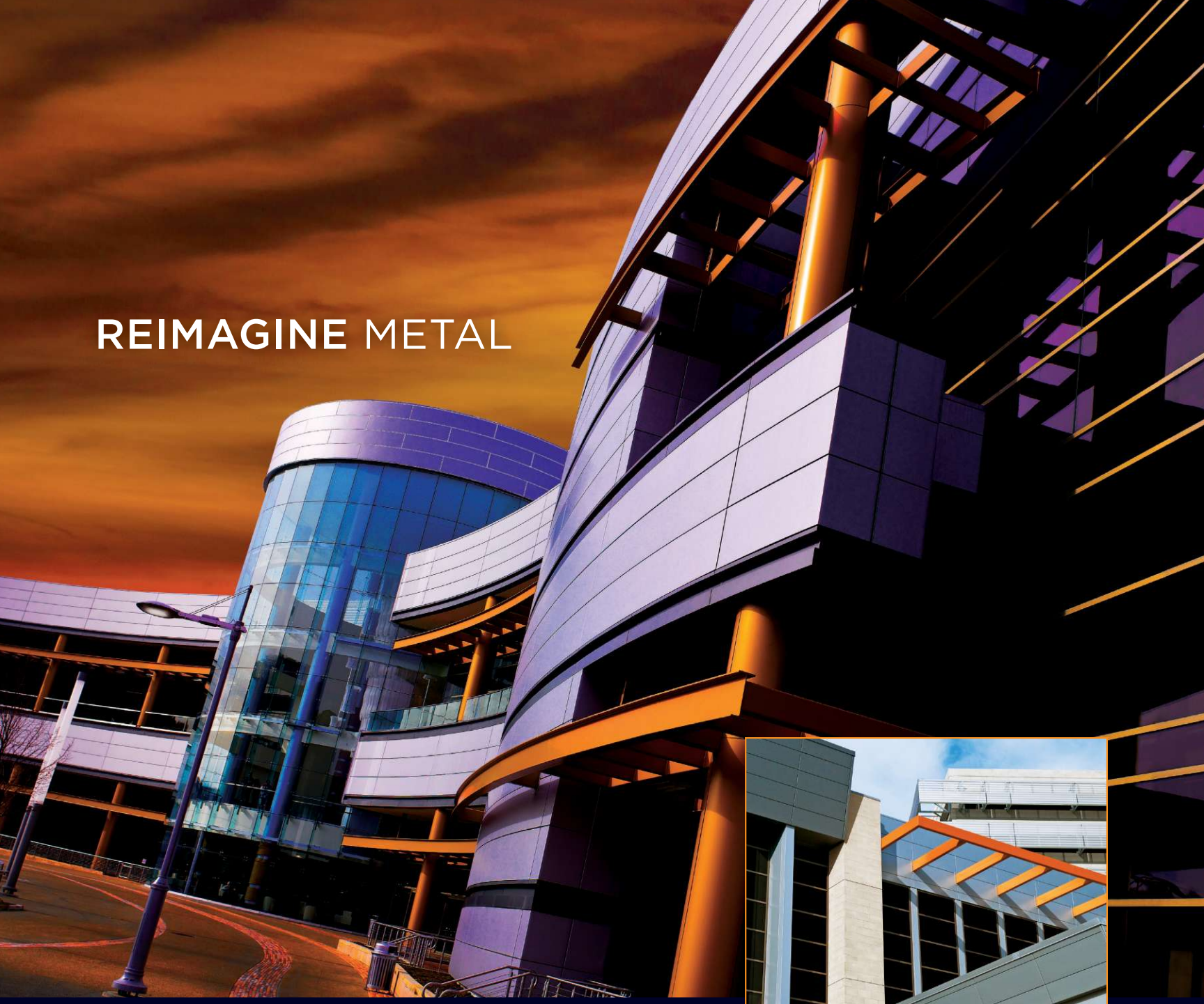
For Lisa Petterson of Portland, Ore., firm SERA Architects, codes for government buildings such as the Energy Independence and Security Act of 2007 (EISA) guide her work. In order to get federal stimulus funding from the American Recovery and Reinvestment Act (ARRA) for Portland's Edith Green-Wendell Wyatt Federal Building renovation, SERA was challenged by the General Services Administration to meet design standards set by EISA's requirement to meet the 2030 Challenge.

"You have a specific goal to meet versus a moving target. They're requiring 55 percent less fossil-fuel usage, 30 percent reductions from solar-thermal hot water, 20 percent potable water reductions, and 50 percent non-potable water reductions," Petterson says. "The EISA legislation says the government should lead in this area."

Petterson believes that both LEED and more-stringent rating systems that have followed—such as the Living Building Challenge—have served to heighten EISA and ARRA strictures. "I would expect there would be a ratcheting up of other codes," she says. "Why are we not doing this more?"

→

REIMAGINE METAL



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—NELLIE REID, GENSLER

Nellie Reid, Gensler

According to Nellie Reid, who directs sustainable-design initiatives for Gensler from the mega-firm's Los Angeles office, the 2008 Green Building Standards code, known as CalGreen, "changes the game for us."

CalGreen went into effect as a voluntary basis on Aug. 1, 2009; compliance was made mandatory as of Jan. 1 of this year. The CalGreen code is the first statewide green-building code in the nation.

"By the state mandating this, instead of architects having to convince clients in investing in energy-efficient equipment and design, we can focus on meeting the solution," Reid says. "We can say, 'It's required by law.' We have to just figure out the best way to do that by budget."

The architect believes that CalGreen will inspire more clients to pursue LEED compliance because they're already meeting the energy requirements. But at the same time, Reid acknowledges that CalGreen is a work in progress. Many cities have no means of enforcement.

"With CalGreen, each city has to come up with a way to check that the design meets the code. The city of L.A. created their own customized, easy-to-use checklist, so the reviewers on the city's side can understand the form." But many other cities, she says, haven't created any sort of checklist for the requirements. "What's the mechanism for how to report and review it?"

Action at the national level may bring standardization. Reid cites the International Green Construction Code—a combined effort of organizations including the American Institute of Architects and the American Society of Heating, Refrigerating and Air-Conditioning Engineers—that was unveiled in 2010. "I think we'll see that adopted by a lot of states," Reid says, citing its amenability to local customization. "We are seeing a ratcheting up of codes around the country, and that it's all connected." □

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TEXT BY FRED A. BERNSTEIN
ILLUSTRATIONS BY JAMESON SIMPSON

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Learning Objectives

1. Describe the argument presented in favor of architects holding local government positions to promote the practice of architecture.

2. Describe the argument presented against architects holding local government positions to promote the practice of architecture.

3. Describe at least four areas of the design and plan approval process addressed in this article where an architect's knowledge and experience with local codes is beneficial.

4. Describe why the practice of architecture in San Mateo County, Calif., is different from most jurisdictions in the U.S.

↑ GREENPOINT AUDITING OFTEN REQUIRES ARCHITECT INVOLVEMENT TO ENSURE COMPLIANCE

→CONTINUING EDUCATION

Managing Up

MORE ARCHITECTS THAN EVER BEFORE ARE GETTING INVOLVED IN LOCAL POLITICS AS A WAY OF ENACTING CHANGE IN THE BUILT ENVIRONMENT. BY MAKING DESIGN OF VALUE IN CODES, THEY ARE MAKING FELLOW ARCHITECTS INVALUABLE IN THE BUILDING PROCESS.

JOHN STEWART, AIA, remembers the time that a relative in Blue Bell, Pa., asked him to design a small addition to her house. Stewart produced a sketch, which the local buildings department approved in a matter of minutes. The architect was incredulous.

Back in San Mateo County, Calif., where Stewart has practiced for 30 years, the same addition "would have taken a stack of at least 20 sheets," he says. An architect would have almost certainly been required, not only to design the addition, but to shepherd it through a complex review process, which could include appeals. "This isn't a place where you can pull a plan out of a book and get it stamped," Stewart says.

Getting Involved

In fact, Stewart lives in what is—by some criteria—a kind of paradise for architects: Though statistics are hard to come by, it appears that at least 80 percent of new houses in San Mateo County (which includes such Silicon Valley communities as Burlingame, Hillsborough, and Menlo Park) are architect-designed. This is a stunning reversal of the usual pattern: In the U.S., some 80 percent or more of houses are built without an architect's involvement. As for commercial and institutional buildings, architects who work in the

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area say that tight controls on what gets built ensure that their services are valued.

But what really makes San Mateo County different even from some other affluent parts of California is that many of its architects have roles in local government. Their input, as city council members, planning commissioners, and even mayors, leads to the creation and enforcement of rules that give architects an edge over unlicensed designers in winning and retaining commissions. To Stewart, the lesson is clear: "If architects want to have more work," he says, "they should help pass laws that promote better building and make it hard for unlicensed people to design."

The AIA San Mateo County website boasts a page called "citizen architects," which lists members who have served in local government. There are shout-outs to nearly half of the chapter's 70 architect-members, including Jack Matthews, AIA, who—besides being the founding principal of John Matthews Architects—serves as mayor of the city of San Mateo (population 92,000). Matthews makes clear that he didn't go into government to make more work for architects; his goal was to serve all of the city's residents. But by raising the profile of architects in the community, he can't help but make life better for his colleagues. "Simply being in government helps bring the profession forward," he says, noting that, compared to the number of lawyers in government, the number of architects is infinitesimal. (And no one doubts that lawyers in government make more work for lawyers.)

With half of its local AIA component architect-members having served in local government, others can look to San Mateo County for examples of how this type of engagement can not only benefit the community writ large, but also make its architects invaluable to the design process. Here are some of the ways that involvement in local government translates to more and better work for architects:

Zoning

Many towns have complicated rules for how much space a house can occupy. There are separate regulations of setbacks, lot coverage, and floor area ratio, each requiring complex calculations. Basements and attics pose particular problems. For example, in some communities, attics more than 5 feet high are included in floor-to-area ratio (FAR), which means that there are certain architectural styles that will be difficult to build, Stewart says. The rules also consider "daylight planes," which affect the angles at which roofs have to be built, though there are carefully worded exceptions for gables and dormers. And in Burlingame, to encourage separation between buildings, detached garages are encouraged with FAR bonuses. The upshot: To understand the interplay

↑ USE SOIL TESTING AND OTHER REQUIREMENTS TO VALIDATE ARCHITECT INVOLVEMENT IN PROJECTS

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Lorcan O'Herlihy, FAIA
Principal
Lorcan O'Herlihy Architects (LOHA)
Los Angeles, CA

→ [SOME ARE] ... CONCERNED THAT BY WORKING ARCHITECTS COULD "PERPETUATE THE MYTH THAT

between these various designs, it helps to have architectural training.

Design Review

In some parts of the county, design guidelines are unusually picayune. Hillsborough, for instance, advises anyone considering a tile roof that "the use of factory-made tile should be carefully considered and tile products with a high gloss or shiny appearance should be avoided." And good luck to a homeowner who wants to use asphalt. "When specifying composition or asphalt shingles, the product selected should be thick enough and of an appropriate color to create shadow lines when installed to avoid the appearance of a flat field on top of the house," the handbook says. By contrast, in one mixed-use section of Burlingame, architects are advised to "draw inspiration from the style of utilitarian buildings such as sheds and Quonset huts." Either way, the involvement of architects is assumed.

GreenPoints and Energy Audits

California requires that every new house and commercial building be audited by a GreenPoint Rater, who follows a state-mandated checklist. But each town decides how many points a project needs to receive in order to be approved. Most municipalities require houses to achieve 50 or 60 points, but in San Mateo County, 70 is common. The GreenPoint Rater must pay close attention to whether the builder put flyash in the concrete, used Forest Stewardship Council–certified wood, and recycled construction debris. Meanwhile, California's Title 24 requires that every proposed house and every new commercial building have an energy audit—calculations, based on factors such as the amount of glazing, have to be submitted with the building permit application. Some architects perform the audits themselves. Stewart says that he brings in an energy-calculation consultant, but says that "it takes an architect to coordinate all these other professionals. The average contractor who draws up plans can't do that."

Soil Tests

Generally, before a new building or significant addition is approved, a soil engineer has to take samples from the ground and send them to a lab for analysis. The engineer uses the results to develop a foundation system, which the architect employs in his design. The engineer then has to approve the architect's plans, providing a so-called "clean letter" to the buildings department. Then, after foundation pier holes are drilled, the engineer has to write a letter saying that the work conformed to the requirements of the soil report. Requirements for this

ON THE PROFESSION'S BEHALF THROUGH LOCAL GOVERNMENT, ARCHITECTS CARE ONLY ABOUT THEMSELVES."

—MARK BARTOS, AIA, FOUNDER OF BARTOS ARCHITECTURE

level of analysis can make it crucial for an architect to be available to address issues of compliance.

Building Codes

California has, like most U.S. jurisdictions, adopted the International Building Code. But any municipality can add to the code—so long as it makes findings that the added requirements address local conditions—and architects can be critical to making those determinations. In Hillsborough, one addition to the code involves runoff. 'This is a hilly community—and we have drainage issues. If you live at the bottom of a hill, you might get inundated," says John Mullins, Hillsborough's chief building official. So Hillsborough has imposed rules about runoff—essentially, "water that comes off your roof should go into the ground before it goes into the street," Mullins says. Not every town has hills as steep as Hillsborough, but most towns have something that makes them different from surrounding communities, and that may justify building code additions.

There are also topographic, meteorologic, and geologic reasons for a high level of scrutiny. "In San Mateo County, we have everything—snow loads, wind loads, coastal ranges, and seismic activity to consider," Mullins says.

Given the proximity of the San Andreas Fault, Mullins asks to see structural designs for all but the smallest buildings. "The architect does the drawing, then gives it to the structural engineer—they work hand in hand," Mullins says. He adds that, while there's no legal requirement that a residential project be submitted by an architect, "It's certainly a lot less painful to go through the process where there's a design professional involved."

Convincing the Rest

Yet, not everyone in the profession is sold on the idea that engaging local government is the right way to ensure full employment for architects. Mark Bartos, AIA, founder of Bartos Architecture in San Mateo and a member of the San Mateo County Design Review Committee, is concerned that by working on the profession's behalf through local government, architects could "perpetuate the myth that architects care only about themselves," he says. "To advocate for making things difficult for homeowners so they have to hire us isn't what we should do. People should be allowed to build their own dwelling without an architect." Still, Bartos, who specializes in educational buildings, acknowledges that "one reason I love doing school facilities is that the State of California explicitly respects the need for architects on school facilities."

"I CAN ONLY IMAGINE THE WELL-DESIGNED, LIVABLE, AND SUSTAINABLE COMMUNITIES THAT WE COULD HELP CREATE BY GETTING MORE ARCHITECTS INVOLVED IN COMMUNITIES NATIONWIDE." —BROOKS RAINWATER, AIA DIRECTOR OF LOCAL RELATIONS

Noemi K. Avram, AIA, another chapter member, also isn't happy about the perception that architects might use government posts to make things difficult for their competitors. After all, she says, "The more we regulate, the more we stifle design."

And she may be right. In Hillsborough, the Architecture and Design Review Board appears to discourage Modernism. According to its design guidelines, "because of the dangers posed by poor modernist design ... homeowners and architects proposing to develop buildings in one of the subtypes of Modernism will be subject to a higher level of scrutiny during the Design Review process." But the good news is that to build a house in any style requires an attention to detail that all but requires an architect's involvement.

Does It Work?

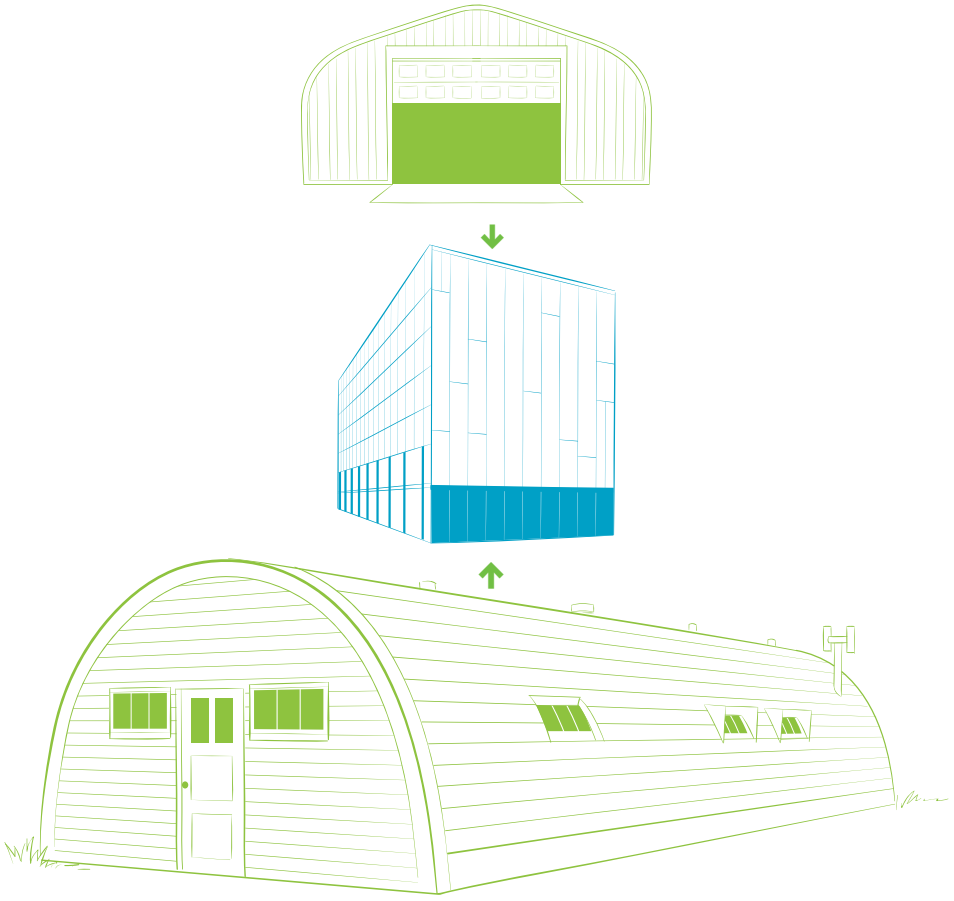
San Mateo County, infused with Silicon Valley wealth, isn't like other places. "People here are highly educated and appreciate good design, and they know architects are the ones who can provide it," Matthews says. His firm's projects include the Stillheart Institute, a retreat center located in a coastal redwood forest, and the SMART Center, a 16,000-square-foot education building on the San Mateo High School campus.

And in an area where most houses cost more than $2 million—sometimes much more—and the median income is as much as 44 percent higher than the rest of the state, homeowners are willing to pay for professional advice. Eric Nyhus, AIA, principal of Burlingame, Calif.–based Nyhus Design Group and a member of Hillsborough's Architecture and Design Review Board, says, "There's no law requiring an architect on a residential project, but there have been incidents, with unlicensed designers, where the buildings department sent the drawings back, over and over, with requests for more detail."

Stewart, who says he has designed more than 100 houses in Hillsborough, says, "These regulations aren't silly. They make for better buildings." And "whatever rules make for better buildings," he says, "will automatically make it more difficult for untrained professionals to take work away from you."

That's OK with Matthews, who says having an architect involved may increase the value of a house by 30 percent or more—far more than the architect's fee. Besides, he says, "rules that improve the quality of buildings—by increasing the chances that an architect will be involved—benefit everyone."

Though there are few places with the same statistical



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alchemy as San Mateo County, there are lessons that architects in other areas can learn from its example.

Going National

Not surprisingly, national AIA is both tracking—and encouraging—its members' participation in local government. Paul T. Mendelsohn, vice president, government and community relations for the AIA, said his office had identified approximately 1,250 members who hold positions in local government—up from around 850 members four years ago.

What those architects do is very different from the lobbying that happens at the state and federal levels. There, the goal tends to be standardization, such as the adoption of uniform building codes, to make it easier for architects to practice in multiple jurisdictions. But the lesson of San Mateo County may be that architects have more to gain by participating in local government. After all, architects practice in communities (very few have national, or even statewide, practices), and it is in those communities where they can make real changes in what gets built.

Brooks Rainwater, national director of local relations for the AIA, and director of its Citizen Architect/Civic Engagement programming, says, "I can only imagine the well-designed, livable, and sustainable communities that we could help create by getting more architects actively involved in communities nationwide." He adds: "There is a lot of momentum out there for this effort and the more we can get architects actively engaged in their communities the more we can get them back to work." □

→PRODUCTS

Editor's Choice

Jean is a new seating element designed by Antonio Cittero for **B&B Italia**. Its base comes in polished aluminum or painted in white, taupe, plum, or steel-gray lacquer finishes. The chair features blanket stitching and an optional back cushion, and is available in the company's array of upholstery options. • *bebitalia.com* • Circle 120

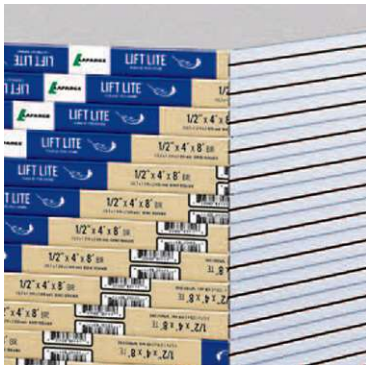
Illumra has introduced **CMR**, a lighting-control system designed to work with dawn-and-dusk sensors to measure the length of the night cycle; internal timers turn the lights off during the second half of the night, cutting energy consumption by 50%. Suitable for parking lots, garages, landscape lighting, and streetlights, it synchronizes to existing sensors and adapts to changing seasons. One device is needed per pole or fixture.• *illumra.com* • Circle 121

Hansgrohe's new **RainBrain** touchscreen shower system can store up to four presets and offers five functions, any three of which can be used simultaneously. The system's warm-up function preheats the water to preset temperatures. It also offers water cascade, antiscald, and hot and cold shower options. The system can pause the water flow, control external lighting, and interface with a Bluetooth-compatible device to play music. • *hansgrohe-usa.com* • Circle 122

TEXT BY HALLIE BUSTA

A collaboration between **Philips Lighting** and **Kvadrat**, **Luminous Textile** panels incorporate color-changing LEDs spaced 6cm apart on acoustic foam. Both driver box and power supply are integrated into each panel; the fixtures can be remotely programmed and managed. Kvadrat textiles with soft-cell technology are used to soften noise, and are held in tension within an aluminum frame. Panels are available in sizes ranging from 72cm by 120cm to 648cm by 120cm. • *lighting.philips.com* • Circle 123

Kawneer has introduced the **1600UT Curtain Wall System**. Available as an outside-glazed, captured system or as a structural silicone-glazed curtainwall, the system can be used with either double- or triple-paned insulating glass, with the option for an additional fiberglass pressure plate. The system also includes an optional preengineered rainscreen back pan with spandrel adapters. • *kawneer.com* • Circle 124



LiftLite wallboards from **Lafarge North America** are made from 99% recycled content and are Greenguard-certified as a low-VOC product. Designed at three-quarters the weight of regular gypsum board, the wallboards are intended to cut transportation and installation costs. Highly resistant to sagging, the boards can be used on both walls and ceilings. Four-foot wide boards are available in 8', 10', and 12' lengths, and 54" wide boards in 12' and 14' lengths. • *lafarge.com* • Circle 125

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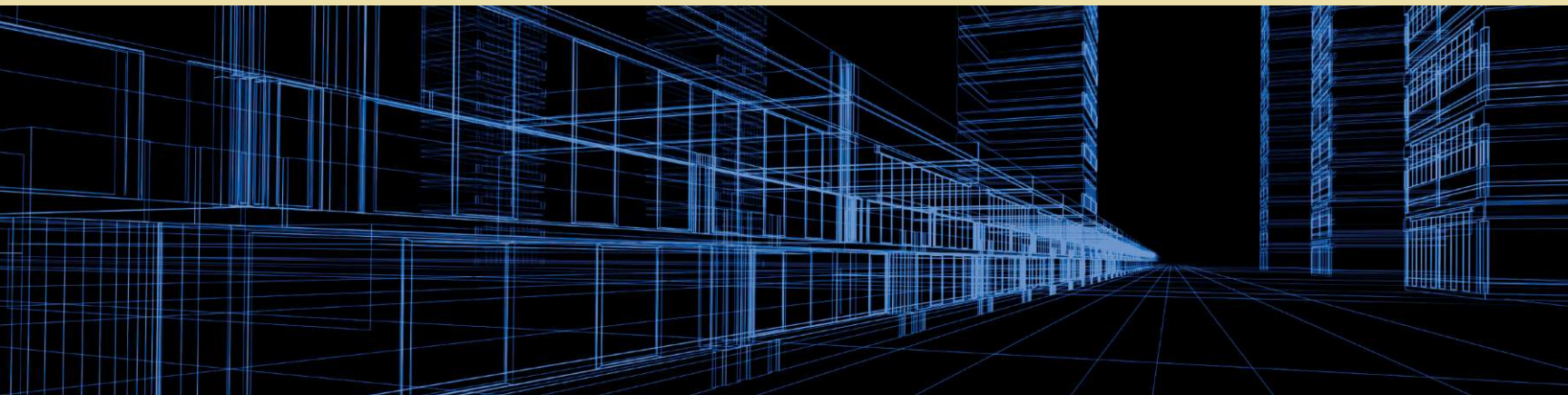

15,000

The approximate number of species of lichen worldwide. The slow-growing plantlike organism is a mix of algae, which yields food, and fungus, which absorbs water. When not being nibbled by caribou or reindeer in the far north, lichens have historically been eaten by humans and used in medicine and dye.

SOURCE: ENCYCLOPÆDIA BRITANNICA

Moss Tile from **Benetti Stone Philosophy** uses natural lichen which has undergone a stabilization process and is installed on 29.6cm-square tiles using a nontoxic water-based resin. The moss is intended for interior applications with at least 50% humidity. The lichen does not require access to daylight or water, and can be installed directly onto any surface using an epoxy. • *benettistone.com* • Circle 126

The **Hexagon** system designed for Horm by architect **Steven Holl**, AIA, is a series of two modules that can be arranged as seats and tables together or used independently. The truncated pyramid with a hexagonal base comes in amber-toned Lecce stone, white or black painted metal, or the company's Okumé African wood, all of which are suitable for outdoor use. The modules are available in sizes of 43cm by 40cm by 42cm and 51cm by 44cm by 42cm. • *horm.it* • Circle 127

3M Architectural Markets has released its **Sunlight Delivery System**, a hybrid daylighting solution that uses GPS to track and collect sunlight, potentially reducing peak energy demands. The collected light is carried through horizontal and vertical ducts—lined with 98% reflective film—to a building's interior and delivered via multiple apertures. The system incorporates artificial lighting sources to maintain lighting levels in dark or overcast conditions and can transmit light five stories into a building. • *3marchitecturalmarkets.com* • Circle 128

Viracon's **VUE-40** is a high-performance coating for insulated architectural glass that reflects both heat and light in order to lower peak electric and cooling costs. The coating comes in a blue-gray hue and is applied after heat-treating the glass. It can be applied to glass with thicknesses between 3mm and 10mm to reduce visual distortion, or with tinted substrates or silkscreen to improve solar performance and reduce glare. • *viracon.com* • Circle 129

The **R-Mer Guard** horizontal wall-panel collection from the **Garland Co.** features a concealed clip system. The architectural metal panels are custom-formed and available in several ribbing profiles. The system comes in 20-, 22-, and 24-gauge Galvalume and 0.032"-, 0.040"-, and 0.050"-thick aluminum. Panels are 12" and 16" in width and a maximum of 20' in length. The panels are available in a range of colors, gauges, and metals including aluminum, zinc, copper, and stainless steel. • *garlandco.com* • Circle 130

Green Sense Concrete from **BASF** is formulated based on the application's performance targets. The company analyzes regionally available raw materials to match the desired target strength. Cementitious and non-cementitious fillers are then combined together or separately with the appropriate high-range water-reducing admixtures. The concrete contributes to LEED credits. • *basf-admixtures.com* • Circle 131

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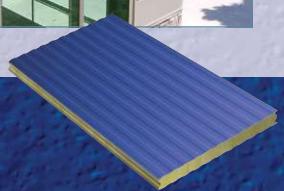

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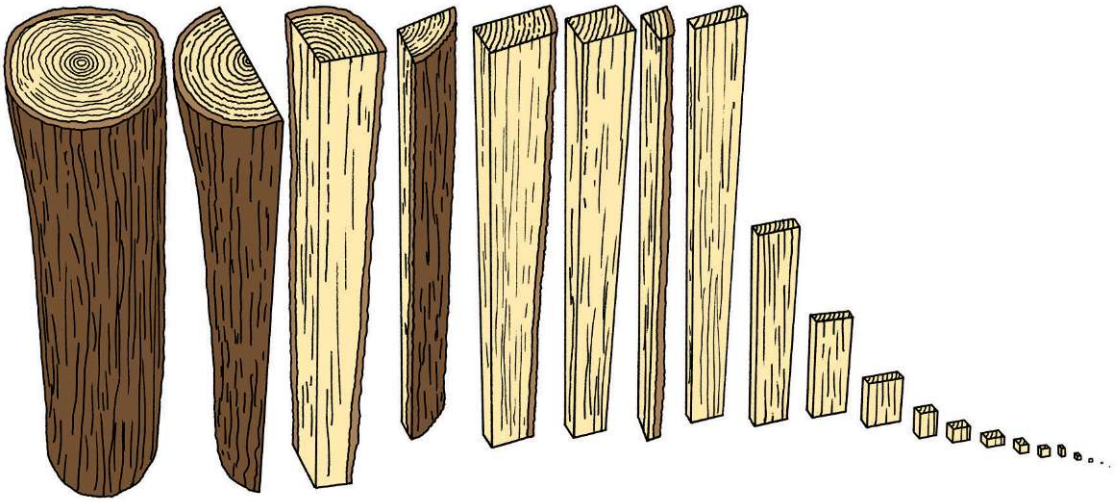
NEW DATA-VISUALIZATION TOOLS CLARIFY THE LIFE CYCLE OF MATERIALS WHILE STRENGTHENING THE CASE FOR BETTER REUSE.



IN ORDER to surmise the extent of a problem, a little homework is typically required. In the case of material resources, for example, it is common knowledge that material consumption and disposal can have far-reaching environmental, social, and economic consequences. But it is difficult to comprehend the full repercussions of material use, given the complexity and vast spatiotemporal scales of global material flows.

At an individual scale, real-time sensory feedback loops related to resource consumption have met with some success. The Prius dashboard fuel monitor, for instance, is a well-known example of a tool that teaches drivers to become more energy efficient. When it comes to building materials, however, the average consumer knows little about where materials are acquired or processed. It is therefore welcome news that architects, engineers, and scientists are delving into the complex and mysterious world of material life in order to provide a clearer picture of resource utilization.

One example is Tools for Conviviality, a recent design studio led by University of Virginia architecture professor Lucia Phinney and visiting professor Lionel Devlieger. This studio examined the Virginia wood industry, seeking to clarify the life cycles of various wood species and uses in order to propose more environmentally friendly methods of material reuse.

One of the studio's most intriguing outcomes is a set of diagrams depicting wood flows. The diagrams indicate the different types of wood processing employed, the relative volume of material for each process, the various markets served, and the amount of wood reused or disposed. The diagrams demonstrate the extent to which successful graphic depictions of well-researched data can demystify complex systems and help material industries make informed choices about resource utilization.

Realizing that consumers are more likely to make good decisions when supplied with the right information, researchers at MIT's Senseable City Laboratory have developed techniques for tracking and visualizing the disposal and recycling process of electronics—an especially problematic category due to the heavy metals contained within these products as well as the large distances that discarded electronics must be transported for proper handling. This project, entitled Backtalk, enables researchers to trace discarded laptops and other electronic devices along their journey to recycling centers around the world. Some of the devices were refurbished and reused in developing markets, and their second lives are now being monitored by the Backtalk project.

Tools for Conviviality, Backtalk, and other materials life cycle–modeling tools offer tangible benefits: They deliver potent visual stories about the distant journeys of materials in visceral ways. These sophisticated tools are more likely than reports issued by the relevant regulatory authorities to influence improvements in product manufacturing and recovery cycles—and to reveal patterns among consumers, manufacturers, architects, and builders along the way. □

3.2

MILLIONS OF TONS OF CONSTRUCTION AND DEMOLITION WASTE DISPOSED OF IN VIRGINIA LANDFILLS IN 2010.

SOURCE: VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

TEXT BY BLAINE BROWNELL, AIA
ILLUSTRATIONS BY PETER ARKLE

→ Read more of Blaine's reports on cutting-edge tech at ARCHITECT's Mind & Matter blog: go.hw.net/brownell.

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CULTURE

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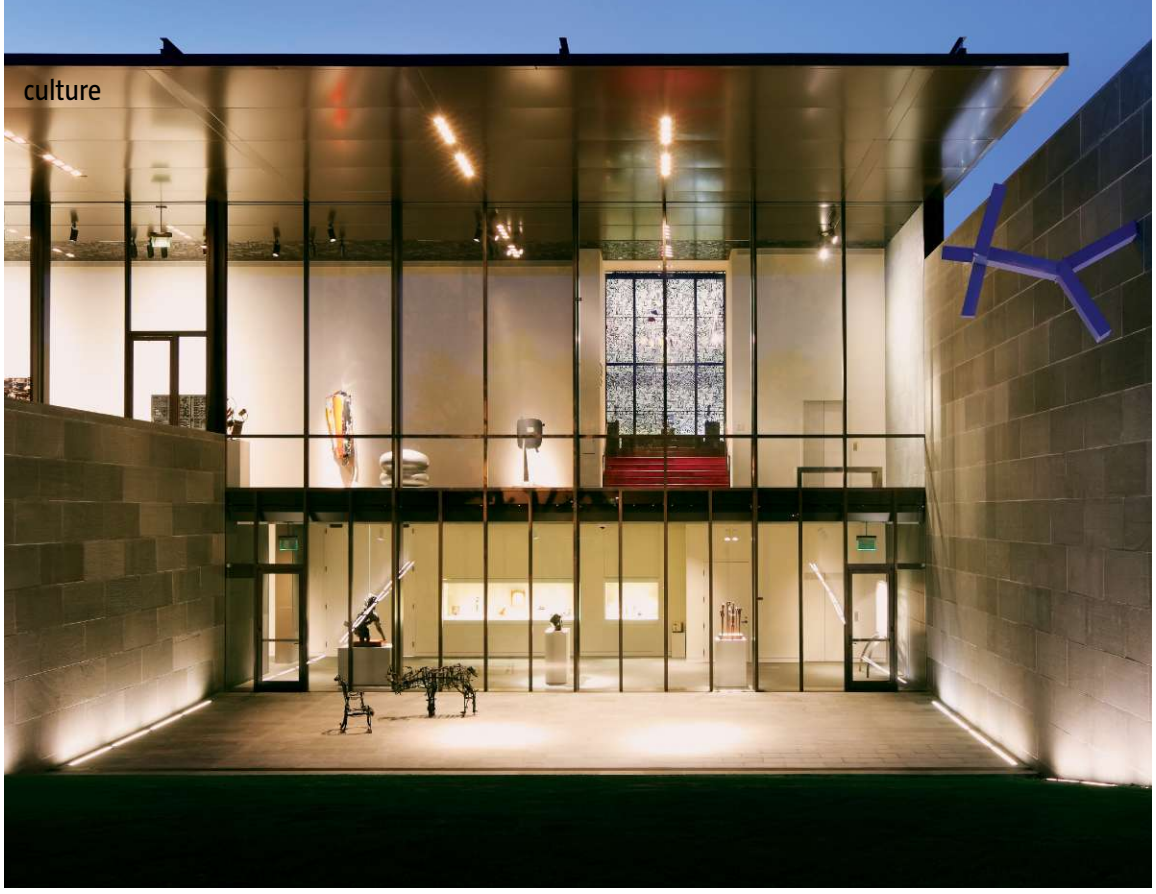
LOUIS BA-KAHN
Snickerdoodle cookies with brown-butter and candied-bacon ice cream

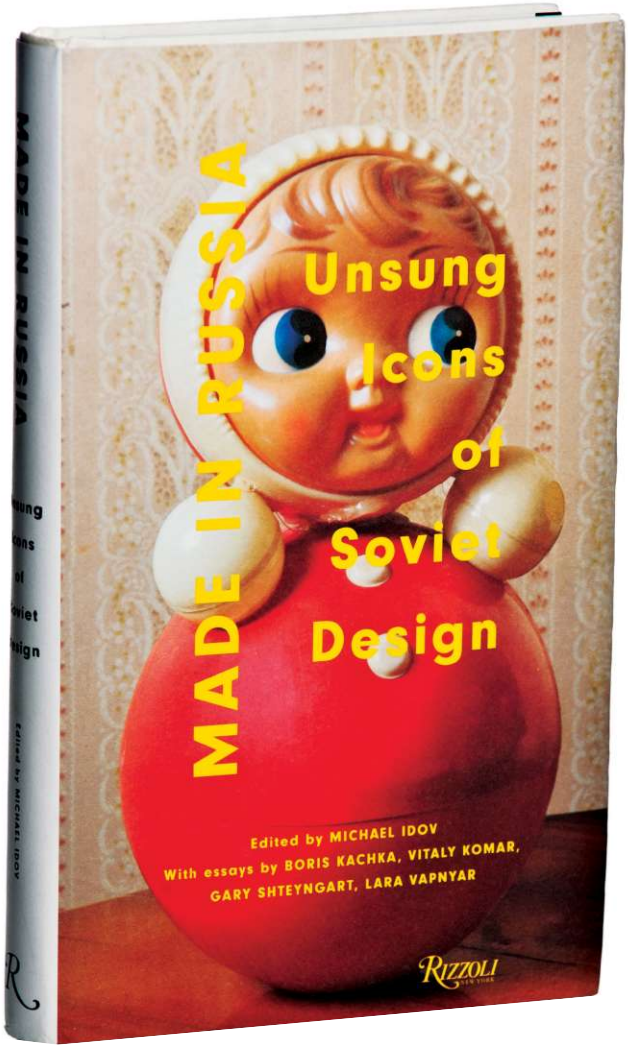
MINTIMALISM
Chocolate-chip cookies with "dirty" mint-chip (with mint leaves and brown sugar) ice cream

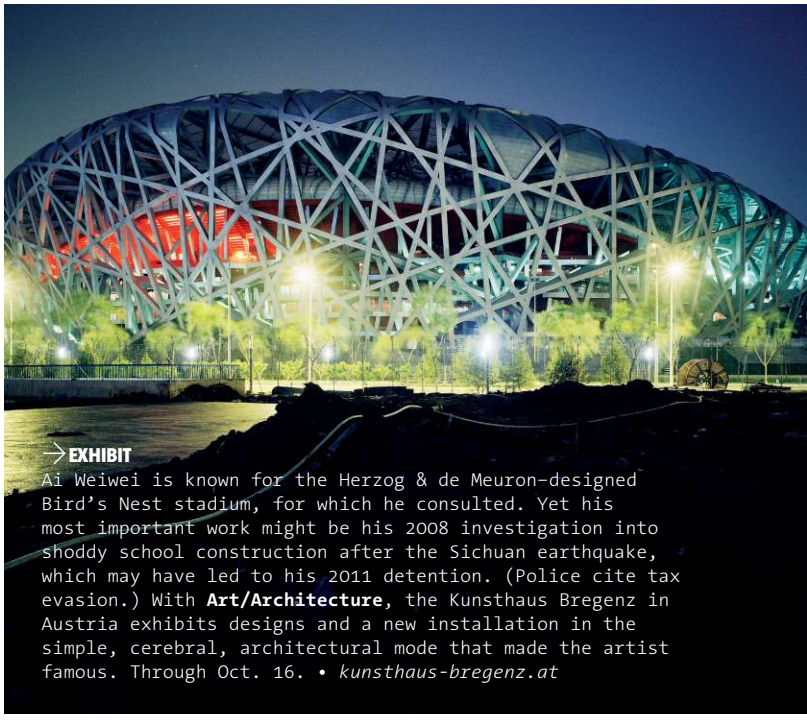
EDITED BY LINDSEY M. ROBERTS

WITH AN M.ARCH. IN HAND, Natasha Case, 27, didn't set out to build buildings, but ice cream with a cookie roof and floor slab. She and co-founder Freya Estreller, 29, started the food truck **Coolhaus** in 2009 in L.A. and named the sandwiches after architects and designers. "We think of ourselves as a marketing company for architects," Case says. They expanded into Austin, Texas, last year, and then into New York City this spring. Come Labor Day, you can pick up Richard Meyer Lemon Ginger and Oatmeal Cinnamoneo at a cart in Central Park. • *eatcoolhaus.com*



→EXHIBIT
George Nelson: Architect, Writer, Designer, Teacher is an exhibit organized by the Vitra Design Museum, and is the first retrospective of the prolific designer's work. The McNay Art Museum conceives the show as design "from the *Mad Men* era," a billing that doesn't quite encapsulate Nelson's iconic work at Herman Miller—his influence reaches well beyond the popularity of the swanky noir television drama. The exhibition title conveys his broader range: career highlights include work as a curator, photographer, and pioneer of corporate branding. Through Sept. 11. • *mcnayart.org*





→EXHIBIT
Ai Weiwei is known for the Herzog & de Meuron–designed Bird's Nest stadium, for which he consulted. Yet his most important work might be his 2008 investigation into shoddy school construction after the Sichuan earthquake, which may have led to his 2011 detention. (Police cite tax evasion.) With **Art/Architecture**, the Kunsthaus Bregenz in Austria exhibits designs and a new installation in the simple, cerebral, architectural mode that made the artist famous. Through Oct. 16. • *kunsthaus-bregenz.at*

→BOOK
It's hard to see Moscow without seeing the large 1937 monument *The Worker and the Peasant-Girl* by Vera Mukhina. But another design by the same artist is even more ubiquitous worldwide: the 12-sided beveled drinking glass. **Made in Russia: Unsung Icons of Soviet Design**—edited by *New York Magazine* contributing editor Michael Idov and featuring essays by artist Vitaly Komar, best-selling novelist Gary Shteyngart, and others—uncovers this and other lasting aspects of Soviet-era graphic and industrial design. • $25.00; Rizzoli, April 2011

TOP: VITRA DESIGN MUSEUM
BOTTOM LEFT TO RIGHT: MIKE MORGAN; COURTESY AI WEIWEI

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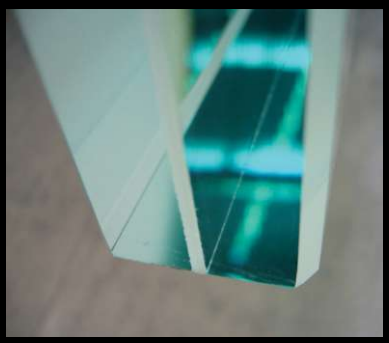

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→EXHIBIT

You might toss your to-do list at the end of the day, but many artists and writers held on to theirs—and even illustrated them. Eighty lists from Pablo Picasso, Alexander Calder, Eero Saarinen, and more are now at the Morgan Library & Museum in New York. **Lists: To-dos, Illustrated Inventories, Collected Thoughts, and Other Artists' Enumerations from the Smithsonian's Archives of American Art** features agendas of places to see, illustrated catalogs of completed works, and summaries of daily tasks including a 1963 packing list from painter Adolf Konrad, shown. As an exposé of the noteworthy minutiae constituting these and other well-known figures' daily lives, the exhibit is worthy of a spot on your own to-do list. Through Oct. 2. • *themorgan.org*

→OBJECT

Complaints were made about the comfort of minimalist artist Donald Judd's chair designs, but Judd (1928–1994) wrote: "The furniture is comfortable to me. … A straight chair is best for eating or writing. The third position is standing." **Donald Judd: A Good Chair Is a Good Chair**, at the International Design Museum in Munich, displays his furniture in the context of the museum's work by designers that Judd admired: the Eameses and Dieter Rams. Through Oct. 9 • *die-neue-sammlung.de/munich*

→INSTALLATION

To Swiss architect Peter Zumthor, enclosing nature is often the best way to preserve it. In his design for this year's **Serpentine Gallery Pavilion** in London, Zumthor takes nature under a protective wing to create a sanctuary as devoted to the greenery it houses as to its visitors. The nearly 4,333-square-foot structure incorporates 2,800 square feet of garden space surrounded by walkways, benches, and a timber frame covering all but the ceiling immediately above the garden. Left open to the sky, the structure stays true to his vision of a *hortus conclusus*, or a garden within a garden, a garden connected to nature. • Through Oct. 16. • *serpentinegallery.org*

TOP TO BOTTOM: COURTESY SMITHSONIAN INSTITUTION; JUDD FOUNDATION; GERRY EBNER

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→CRIT

Revival Redux

WHAT DOES COLONIAL REVIVAL—AND AN EXHIBITION ON THE SUBJECT AT THE MUSEUM OF THE CITY OF NEW YORK—TELL US ABOUT THE MODERN METROPOLIS?

JOHN HALPERN

A 1926 settee on display in "The American Style: Colonial Revival and the Modern Metropolis" through Oct. 30 at the Museum of the City of New York.

TEXT BY THOMAS DE MONCHAUX

Architect and writer Thomas de Monchaux was the inaugural recipient of the Winterhouse Award for Design Writing & Criticism. He teaches at Columbia University.

THOSE WHO REMEMBER the past are doomed to repeat it. At least in architecture, which has long conflated the historical with the historicist, the modern with the Modernist, the classic with the Classicist. Every building immerses us simultaneously into the moment of its actual creation, and into the moment, seconds, or centuries earlier, of its formal aspiration. And while every manner of Gothic has been revisited in recent millennia, it's the ancient formal language of those peninsular Mediterraneans, with its familiar combination of Pythagorean volumes and horticultural decoration, that has proven most enduringly subject to resuscitation.

So there's classicism and there's Classicism. One of the seemingly minor Classicisms is that gingerbread mélange of red brick, pale stone, split pediment, and white-painted trim that's come to be called Colonial. This Classicism is the subject of "The American Style: Colonial Revival and the Modern Metropolis," an exhibit curated by Donald Albrecht and Thomas Mellins at the Museum of the City of New York. The Colonial, we know; it's the modern and metropolitan that intrigue.

The Colonial vision of Classicism was itself already a kind of revival: a version of the English Georgian Neoclassical style. To the precise historian, such work from as early as the 1820s is to be considered a deliberate revival of the architecture of pre-Revolutionary Massachusetts and Virginia. To demonstrate the reach of Colonial Revival, "The American Style" assembles a lively and tightly edited mix of architectural fragments, furnishings, photos, contemporary documents, and ephemera, drawn mainly from the period in American tastes bracketed by the national centennial of 1876 and the bicentennial of George Washington's birthday in 1932. From Reconstruction to Depression, Colonial Revival addressed a surprisingly broad set of needs.

During the post–Civil War era, a return to roots by a reconsolidating nation produced a vogue for such items as the exhibit's several rather-too-sturdy Chippendale-esque cabinets and secretaries on display as well as the exhaustively picturesque silverware, wallpaper, and other works of decorative art shown alongside. Acquisitive plutocrats of the Gilded Age and the Roaring Twenties produced new markets for not-all-that-old American antiquities, institutionalized by such events as the Metropolitan Museum's opening of its American Wing in 1924, and formalized by the likes of McKim, Mead & White, whose partners took a famous sketching tour of New England's finest ruins in 1877. Included in the exhibit are the beautifully moody photos and working drawings of an early Newport mansion that they produced shortly thereafter, in which visions of prim church steeples and proper town halls were improbably reflected in that private pleasure palace. In the usual hall of mirrors created by this kind of appropriation, these architects and their contemporaries applied Beaux-Arts rigor and Rome Prize pomp to

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Left: Mott Schmidt's 1921 design for the Anne Morgan House in Manhattan borrowed elements of its façade from the 1765 Samuel Powell House in Philadelphia. Right: An interior view of the 1930 Simone LaSala House.

→

exaggerated reproductions of quite modest Colonial prototypes.

The Museum of the City of New York's own building, built in 1932 by Joseph H. Freedlander, is exhibit A for this sort of reproduction. Its pediments and flat-arched colonnade—perhaps familiar to some through its role as the Constance Billard School in the television show *Gossip Girl*, a classic of another kind—referenced the architecture of the long-demolished Federal Hall down on Wall Street. Built in 1700 and renovated by Pierre L'Enfant in 1788 to be the nation's first Capitol and the site of President Washington's inauguration, Federal Hall was unceremoniously demolished in 1812; 30 years later, the hodgepodge Classicism of that building was supplanted on the same site by an altogether different kind of revival, with a Customs House built in the scholarly form of a temple of the Periclean Peloponnese—perfect for a maturing democracy. And perfect for a nation increasingly indebted to the architectures of Athens and republican and imperial Rome for its post-colonial self-image as heir to the liberties and powers of those ancient states.

What's especially metropolitan about Colonial Revival? Some of it's a stretch. The curators note that, back when New York manufactured things, much of the stuff on display was made in the city and sold in its department stores. They point to the mass of buildings, from the haute clubs of Park Avenue to the high schools of the outer boroughs, that were rendered in a serviceable Neo-Georgian, which became so common as to be almost invisible. More substantially, albeit rather delicately, the curators observe in exhibition text that, for "new construction [such] formal qualities [as] flat façades, shallow ornamentation and rectangular spaces made the Colonial Revival an ideal urban style." In other words, it provided the thinnest, cheapest veneer that could be scraped across a building to give it a hint of respectability—or of mere anonymity in a fast-growing city of ubiquitous treatments.

To that end, what's especially modern about Colonial Revival? The curators might be a little reductive in their assertion (in reference to

COURTESY MUSEUM OF THE CITY OF NEW YORK

the late flowering of the style in New York during the 1930s and early '40s) that "the social and economic upheavals of the time, such as immigration, depression, and war, further spurred people's desire for tradition." Does the word "tradition" in this case refer to Colonial or Revival? And to which social or economic function does this particular formal architectural language refer? The same elements of style that once brought urbanity, polity, and up-to-date-ness to a seeming wilderness, two centuries later brought something bucolic, domestic, and nostalgic—yet also modern, convenient, and, in its ubiquitous postwar suburban incarnations, utterly automotive. This uncanny drift of formal signification and material culture has provided, at the very least, a career for Robert Venturi.

That which is revived must first have been removed. The disappearance of Federal Hall from Wall Street is an example of what, as early as 1830, the *New York Mirror* described as "that irreverence for antiquity which so grievously afflicts the good people of this city." And it is here that the practice of revival, whether Colonial or otherwise, becomes an essentially modern and metropolitan phenomenon. Boston, whose essential Colonial and Federal buildings are in splendid shape, gave the country some of the greatest works of Gropius, Pei, Le Corbusier, Rudolph, and others. Manhattan, the great Gotham that lost its equivalent original fabric to notable fires and commercial indifference, has replaced much of that fabric with fiercely sky-scraping buildings—modern and steely in their bones, yet skinned with a thin layer of wan historical reproduction.

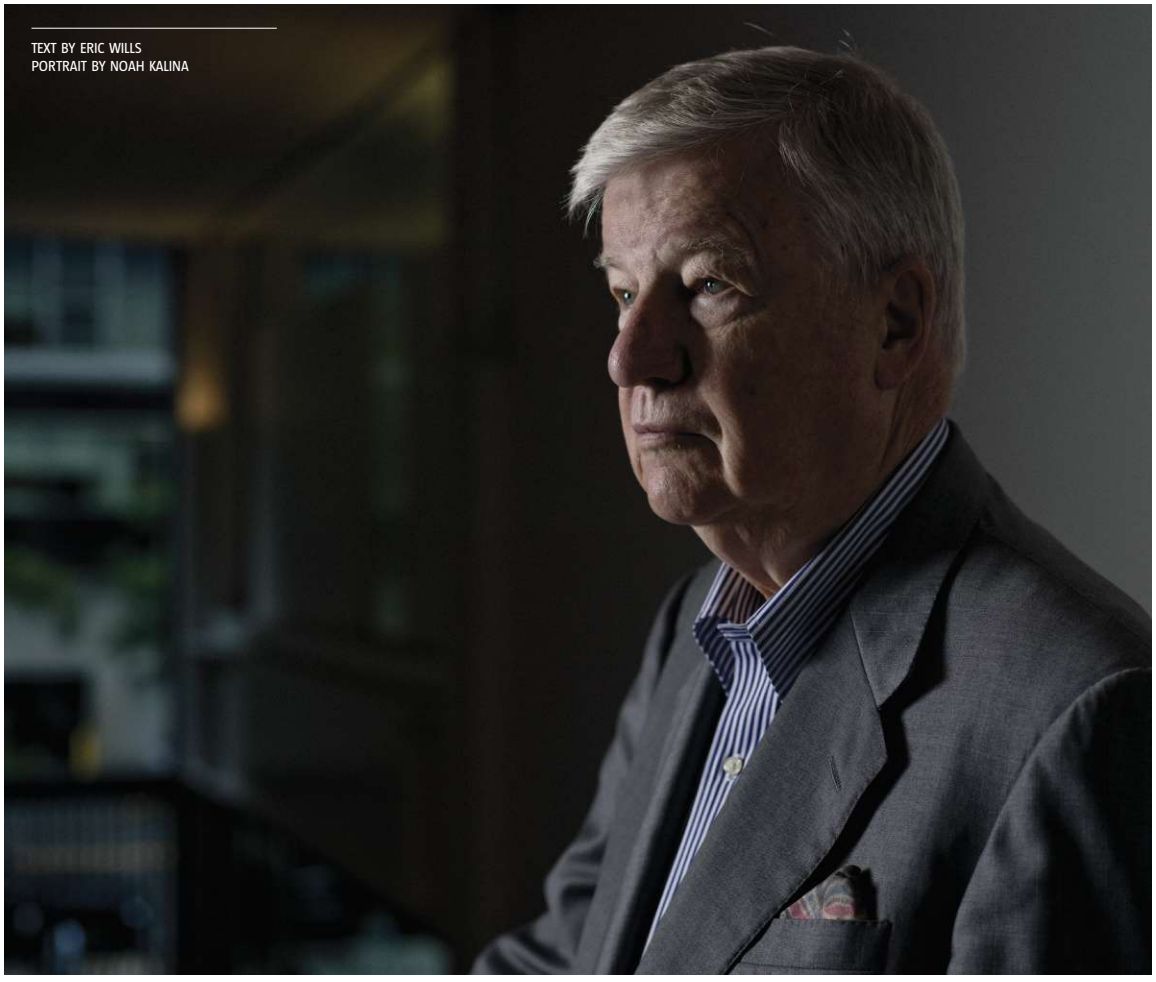
The most haunting image in the exhibit is a photo of a replica of that demolished Federal Hall standing in Bryant Park, erected by Sears Roebuck and Co. for the 1932 Washington bicentennial. (Sears also built a version of Washington's estate, Mount Vernon, out in Brooklyn's Prospect Park.) As Eleanor Roosevelt observed of the reconstruction's opening, it's "good for all of us in the trying times we are going through, to consider those early days." In the photo, this old-new-old, there-but-not-there non–Federal Hall is a ghost made tangible. It's a vision that reminds us that the past has a past, and that all the materials with which we would revive any lost time are always already secondhand. This brief Depression-incarnation of Federal Hall is haunting not for the ways in which it is different, in these respects, from every other American building today, but for the way—fleeting, searching, willful, displaced, sincere, ersatz, fragile, fierce—that it is exactly the same. □

→Q&A

Study in Contrasts

ONCE REVILED, HENRY COBB'S HANCOCK TOWER WINS AIA'S TWENTY-FIVE YEAR AWARD.

TEXT BY ERIC WILLS
PORTRAIT BY NOAH KALINA



"I DON'T THINK THAT I WOULD HAVE DONE THAT BUILDING IF I HAD NOT BEEN BORN AND GROWN UP IN BOSTON AND REALLY BELIEVED THAT I UNDERSTOOD THE PROBLEM BETTER THAN MY CRITICS DID."

FOR A BUILDING that Henry Cobb, FAIA, says is the closest he's come in his long career to poetry, the John Hancock Tower in Boston's Copley Square rose amid a rather inelegant and loud public squabble. For starters, local residents and architects fiercely opposed the idea of situating a 62-story skyscraper directly adjacent to H.H. Richardson's 1877 Trinity Church, a National Historic Landmark. Relegating that treasured icon to the shadow of a modern office building? Scandalous. And that was before the project attracted international ridicule during construction because of structural issues and window failures: 500-pound panes crashed to the sidewalk during high winds, earning the boarded-up structure the derisive nickname "Plywood Palace." But the sensitivity and deftness of Cobb's design—the way the emphatically minimalist exterior and diagonal siting of the rhomboid-shaped tower paid deference to historic Trinity—proved undeniable. In May, Cobb, a founding partner of Pei Cobb Freed & Partners, secured the AIA's Twenty-Five Year Award for the project, completed in 1976. ARCHITECT spoke with Cobb, 85, about the Hancock, which has become an unquestioned—even beloved—Boston landmark.

What was so challenging about the project? And why did it inspire such a public outcry?
It's unlike any other commission we've had: the dilemma of being asked to put a skyscraper not only next to a very highly valued historic monument, but also in the most important civic space in Boston. And the

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general view was that it was impossible as a premise, and therefore it was professionally irresponsible to accept the commission. People generalized the problem: In principle it's wrong and unacceptable to put a skyscraper next to Trinity Church. It doesn't matter how it's done. ... I don't think that I would have done that building if I had not been born and grown up in Boston and really believed that I understood the problem better than my critics did. It's not a causal thing to do something as universally thought to be outrageous as the Hancock Tower was.

Did you ever question the decision to accept the commission?

No, we never questioned the decision to go forward with it. There were some very difficult periods when it was even questioned whether the project would be completed or abandoned, but in terms of our commitment to the project as a concept, I don't think we ever lost faith. And, in fact, sometimes when things are extremely difficult, you acquire a kind of strength of purpose, which carries you through the difficulties. It's difficult for me to talk about these things, because

it's so far beyond what I would call normal professional relationships. ... It was such a complete break between us and the professional community in Boston that it was a breach that could not be mended, let's put it that way. If there is an extreme sport of architecture, the Hancock Tower is an example of it.

Would the use of current technology have changed the building's design? Would it have prevented the window and structural issues?
No. The issues we faced with the project, it wasn't that the knowledge wasn't there to deal with them. It's because the knowledge wasn't applied. Would the design be different today? The answer is, curiously, no. For example, you may find it strange, but the Hancock Tower recently received a LEED Gold Existing Building rating. One of the reasons that it's now such a hot property in the marketplace is because of the qualities it has, which is a lot of glass and shallow floor plates, which means everyone has daylight and a view. That is something which is rather rare in American office buildings. ... To be sure, there are [now] different technologies of glass and different coatings and different mechanical systems, but the fundamentals of the building would not be different today.

The project marked a turning point—a hinge point, you've called it—in your career. How so?
I talk about the contingent skyscraper, and it's a concept which I think is not only exemplified by, but was sort of invented in, the Hancock Tower. If I was going to say, "What have I contributed as a professional in my life?" I would say the idea of a contingent building. That is to say, a building that is not autonomous, not self-referential, but which is shaped by its place. That's not such an unusual concept in itself but it's very unusual when applied to tall buildings. Most tall buildings are self-referential by definition. If there was one singular quality that has made Hancock Tower not only acceptable, but I would say even loved in Boston, it's that it's not self-referential. It's clearly about its place. It doesn't diminish the quality of the city; it enhances the identity of the city. Now, most people today couldn't imagine Copley Square without that building. It's seen as a companion to Trinity Church. That was the goal of the building as a work of architecture.

How would you define the Hancock's legacy?
I think that the Hancock Tower, if it doesn't solve problems, it illuminates problems. It illuminates the issue of, for example, the transformation of scale that has taken place in cities in the last century. It says something about that problem, it says something about how you can join memory to invention. ... I think to the extent that architecture can provoke that kind of reflection, Hancock Tower does that in conjunction with its neighbors. That's the crucial thing. Not by itself, but in conjunction with its neighbors, it helps people think about the city.

What was your reaction to winning the Twenty-Five Year Award?
A sense of great satisfaction, because the Twenty-Five Year Award is not about immediate impact, it's about enduring value. That to me is more important than any lack of immediate impact. ... And, of course, it's very nice to be still around. Lou Kahn didn't live to see any of his Twenty-Five Year Awards. I'm very happy to be around. □

Cobb minimized the Hancock's perceived volume in part by introducing notches that bisect the end walls, highlighting the building's rhomboid shape. The trapezoidal base captures reflections of Trinity Church.

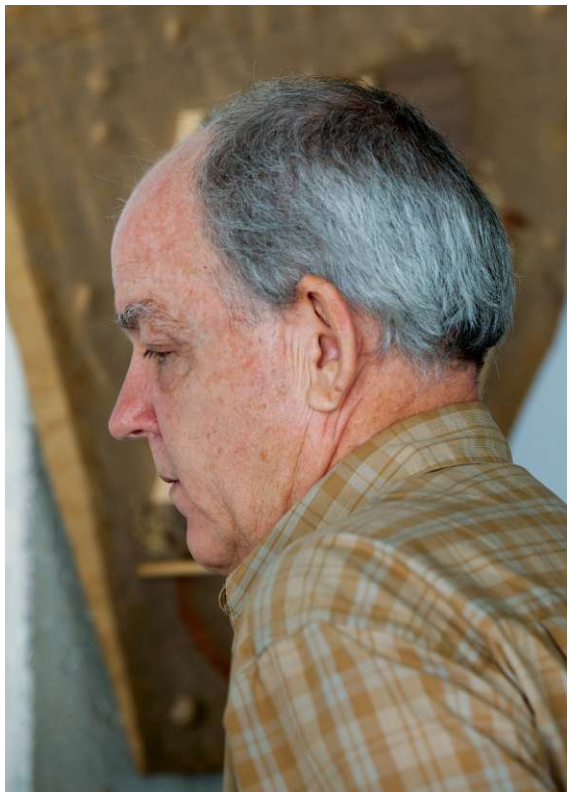
STUDIO VISIT

Lake|Flato Architects

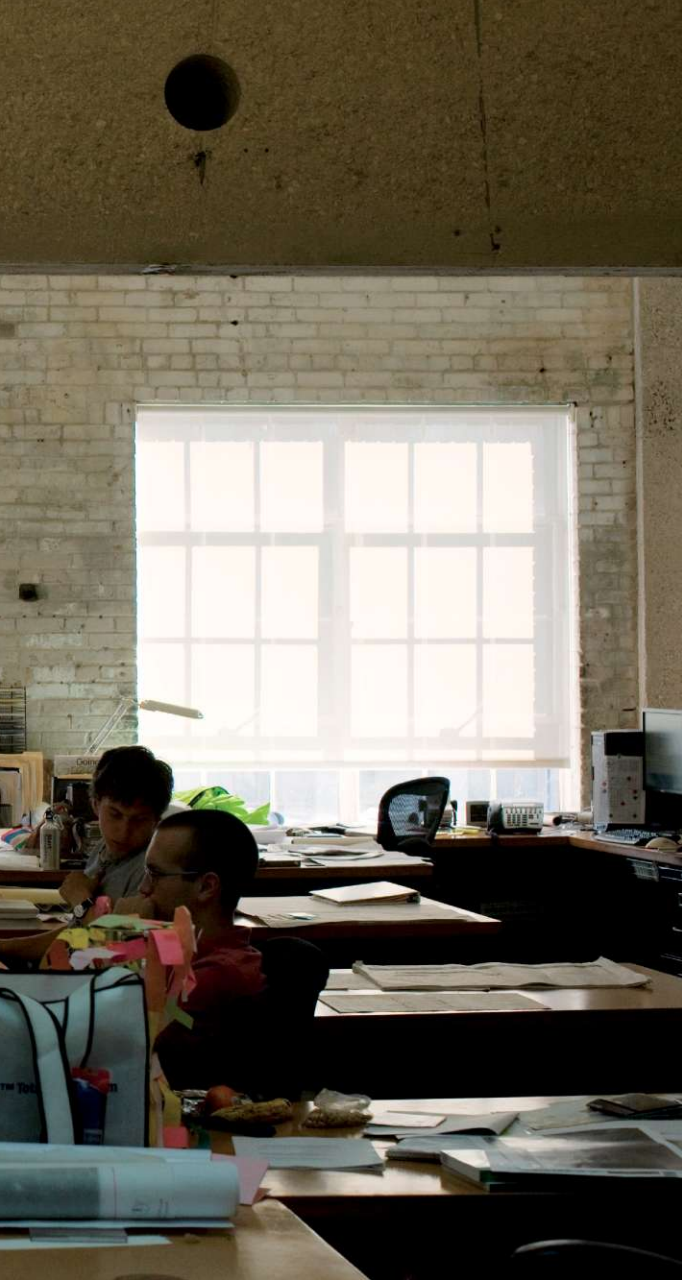
TED FLATO AND DAVID LAKE ARE MAKING THEIR MARK IN CENTRAL TEXAS. AND IN TURN, THE REGION'S HISTORY, ARCHITECTURE, AND GROWTH HAS HAD AN IMPACT ON LAKE|FLATO ARCHITECTS—BOTH ON ITS DOWNTOWN SAN ANTONIO STUDIO AND ITS WORK.

TEXT BY KRISTON CAPPS
PHOTOS BY JASON FULFORD

In 1984, Lake|Flato Architects moved into the second floor of a former car dealership, just blocks away from the Alamo. The designers handled the building's renovation in exchange for space. The studio has since expanded to encompass all three floors of the building.



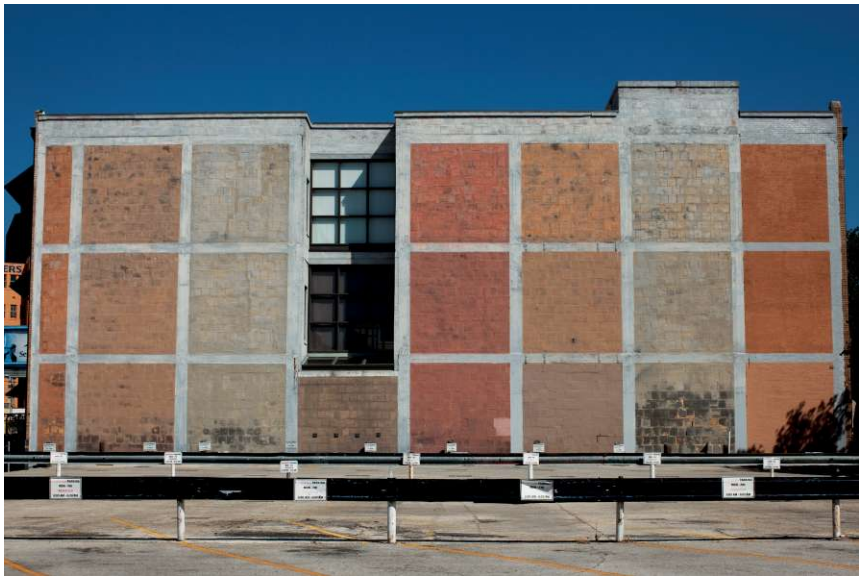
Flato, 56, FAIA (left), and Lake, 60, FAIA (right), both follow in the footsteps of a Texas giant. "Ted and I were tutored by O'Neil Ford," Lake says, "and he beat into us this notion that Modernism needs to be tactile and responsive to content, starting with climate and place and using local crafts and materials."



"The city has an interesting, old downtown, but it's very fragile," Flato says, describing San Antonio. One of the studio's most visible projects in the city is the former Pearl Brewery site, a mixed-use development currently under construction that serves as the northern terminus for the famed San Antonio River Walk. The firm's work is at the forefront of downtown-revitalization efforts to transform San Antonio into a more walkable, urban city—while maintaining its distinctive culture.

Lake|Flato books one annual getaway for the entire firm. "Every year we go to my place on the headwaters of the Nueces River to camp out there. It's a lot of people in tents," Flato says. (Left: A painting of the team at Kickapoo Ranch in West Texas.) "We spend a whole long weekend together with wives and husbands and kids. We don't do much discussion about work—it's all about enjoying each other."

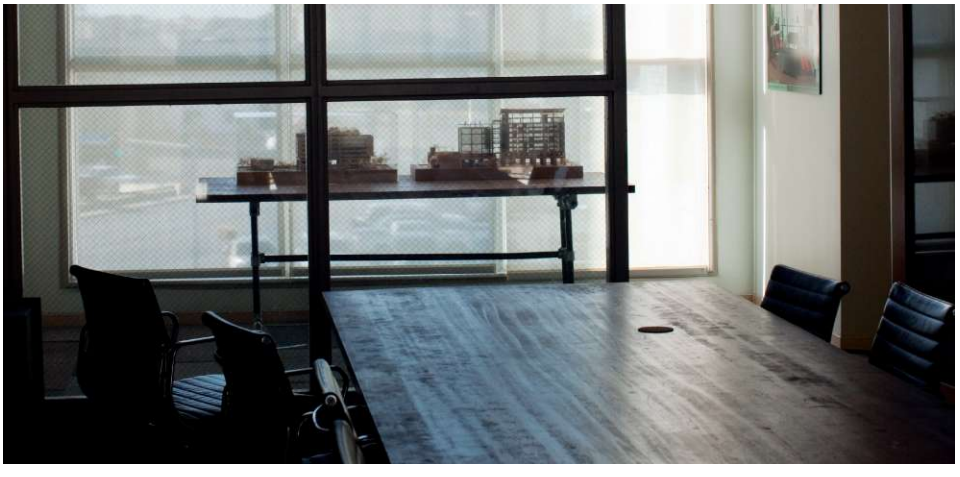
Much of Lake|Flato's work in Central Texas marries the region's unique culture with its newfound interest in density. "Austin was blessed with a great mayor who was an architect [Will Wynn] who noticed that there was a lot of older infrastructure holding Austin back from getting to the river," Flato says. The studio's "extroverted" design for the city's new central library, for example—sandwiched between two industrial redevelopment projects—will serve as a "new front door to Austin and to the river," Lake says. Austin being Austin, a restaurant located inside the library will double as a live music venue.



Lake and Flato share a mind on the question of the so-called "Texas Miracle"—the apparent durability of the state economy during the recession. "Texas has been attracting all these Fortune 500 companies for a while. The momentum for that has been a huge boon for the state," Lake says. "It hadn't gotten so overheated" to begin with, Flato notes, but growth has nevertheless slowed. "We were doing hotels for a while, and those have really stopped. There were some major things that really stopped. It's reasonably stable, but by no means is it overly vibrant." (Right: Lake|Flato seen from the exterior.)

"When David and I started the office 27 years ago, it was just the two of us," Flato says. The practice has since grown to include 55 people—many of whom come to Lake|Flato from outside the Lone Star State. "Because of that, their whole social network is the office [when they start at the studio]. We're a very, very tight family. We have a lot of couples in the office who didn't know each other before they came."

Naturally, a studio based in San Antonio for 27 years is going to swear its allegiance to the San Antonio Spurs. So Lake and Flato considered it an honor to design the Carver Academy for NBA Hall of Famer and legendary Spurs center David Robinson. "He's become an architecture advocate in the world of education," Lake says.



→BEYOND BUILDINGS

On the Road

BETSKY HITS THE HIGHWAY TO SURVEY A UNIQUE TYPE OF VERNACULAR ARCHITECTURE: THE ROADSIDE REST STOP.

The Commonwealth of Virginia is soliciting private-sector sponsorships for naming rights to its rest stops' vending areas and interior and exterior signage.

NOW THAT THE Minnesota state government shutdown is over, the rest stops are finally open. Thank heavens. Not only do the truckers have someplace to pee with Minnesota's government up and running again, but so do the patriots and perverts. Those are the three groups we associate with such conveniences: the stops are places where truckers converge to rest and perhaps socialize. It is where families stop not only to take care of business, but also to learn about the state through which they are traveling. And it is where people with desires that they feel they cannot satisfy at home or in a more traditional setting go to meet their needs.

As pieces of architecture, rest stops, which many of us will be visiting during this summer season, are something between infrastructure, civic representation, and (inadvertent) stage sets. They are a necessary part of the interstate highway network born during the Eisenhower administration, although there does not seem to be a uniform standard for them, in the manner that there is for minimum heights of bridges or curves of exit ramps. As spaces, they are generally completely cut off from their surroundings, appearing as bulges in the canal of asphalt, median, signs, and other markers that make up interstate highways. Rest stops emerge from strange mixtures of landscape, areas shaped by the curves of the on- and off-ramps, the parking areas, and other utilitarian concerns.

Functionally, rest areas range from the grand to the grotty: They can be fully equipped service areas with restaurants and even hotels, a veritable Edge City node without any influence on the neighborhood. Or they can be fueling areas as well as rest areas, or just places for toilets. The rest area strictly speaking is the latter: a place to rest, with a toilet facility, vending machines, and information.

When I first arrived in this country from Europe, I marveled not so much at the rest areas—the type is more sophisticated in Europe—as at the manner in which many of the structures, especially in New England, tried to discipline their utilitarian functions with brick, white-painted wood trim, gabled roofs, and even vestigial turrets. They were a cross between George Washington's home and a church of convenience. The anonymous designers working for the transportation departments of Connecticut or New Jersey had tried to make them into calling cards for what they felt was the historic character of the state, spreading Neo-Colonial architecture along the ribbons of transportation as the lingua franca of the American state.

A few states, notably states in the West, have experimented with modern architecture for their rest areas. Minnesota appears to be firmly in the Neo-Colonial camp. What that style has to do with the vernacular or the geography of that great state, I have no idea, but it confirms that rest areas, no matter what use we make of them or where they are, aim to be something that we share and believe should be provided to us. This summer, we should remember that these humble structures—the least-visible part of the U.S. highway system—also make us Americans. □

TEXT BY AARON BETSKY
ILLUSTRATION BY PETER ARKLE

→ Read more of Aaron's design observations at ARCHITECT's Beyond Buildings blog: go.hw.net/betsky.

RICHMOND TIMES-DISPATCH

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THE FIFTH ANNUAL R+D AWARDS JURY CHOSE 12 WINNERS THAT EXEMPLIFY INNOVATION IN ARCHITECTURAL SYSTEMS TECHNOLOGY.

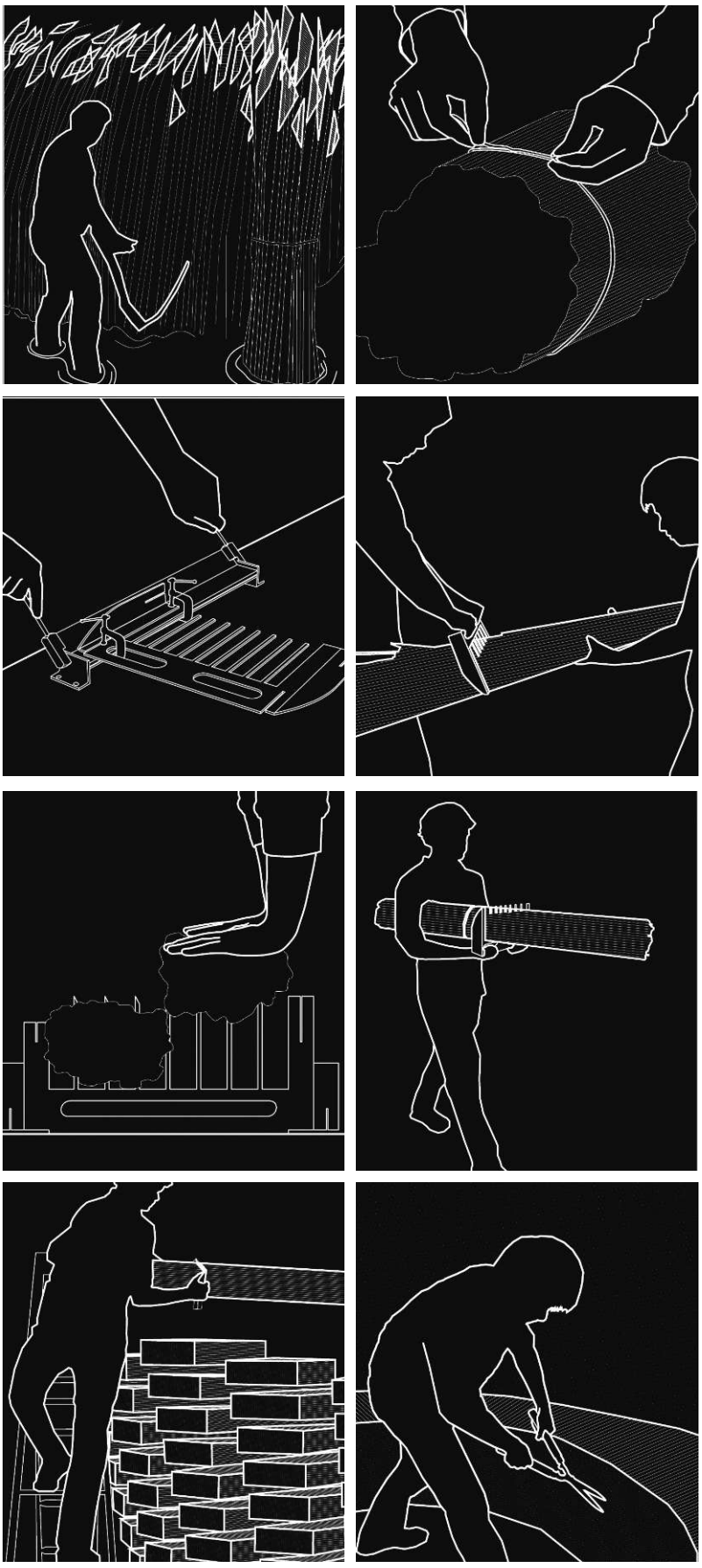
FIVE YEARS AGO, when we held the first annual R+D Awards, our goal was to create a showcase for the often unsung work that architects and manufacturers put into the development of their projects and products. The economy was still largely booming, and R+D was quickly becoming the next frontier of architectural practice. With the benefit of hindsight, it is clear that the heady days of prerecession development could not have continued unchecked for long. Today, budgets are smaller, and the carte given by clients is a little less blanche. But far from stifling innovation, hard times are forcing people to get creative.

This year's jury—Julie Eizenberg, AIA, William Massie, and Sylvia Smith, FAIA (see page 122)—picked projects and products that answer real-world problems. They selected six awards and six citations, which range from a digitally fabricated straw yurt to a glass-block façade system that purifies water. The distinction that the jury made between the six awards and six citations wasn't one of style or importance, but of the difference between whole systems and elements that are, as Smith puts it, "components to a thoughtfully designed building." The jurors discovered that, despite the still-lingering crunch, research and development is still going strong. "When money's tight," Eizenberg says, invention doesn't stop. Instead, it "comes from finding a cheaper way to do it." KATIE GERFEN

AWARD

HAIR, SPIKES, CATTAIL, AND TURKEYFOOT

DESIGNER
WEI-HAN VIVIAN LEE

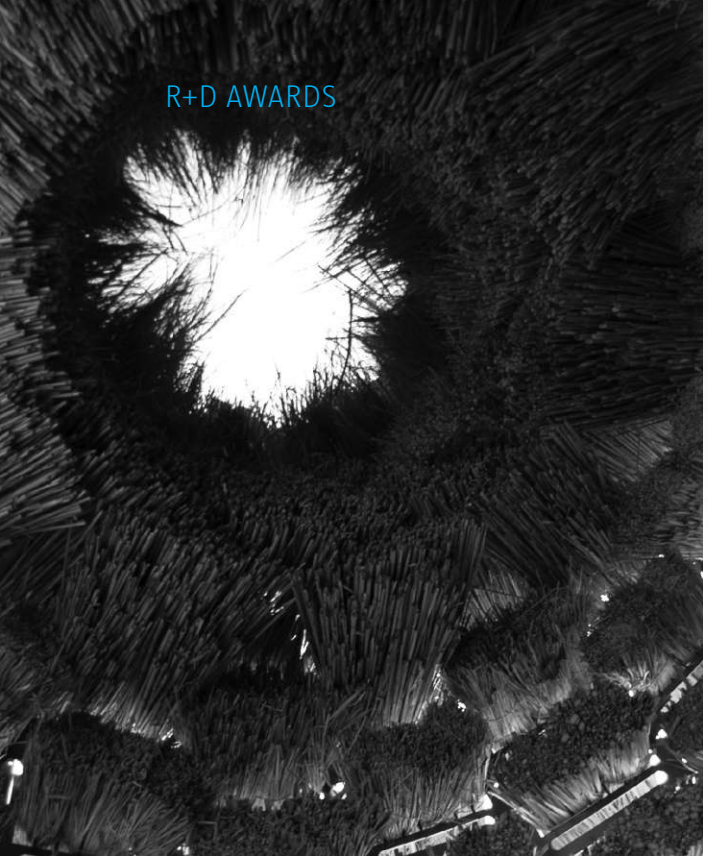


AT ITS CORE, Wei-Han Vivian Lee's research project Hair, Spikes, Cattail, and Turkeyfoot poses a radical question: Is the ubiquitous construction drawing still relevant in an age of digital fabrication? Constructing a digitally fabricated structure often requires a set of information that a drawing of a completed structure cannot convey, namely a carefully annotated kit of parts, where every fabricated piece is labeled in order of assembly, and every connection point identified. A lecturer in architecture at the University of Michigan's A. Alfred Taubman College of Architecture and Urban Planning, Lee tested her hypothesis that design is transcending documentation by analyzing an unexpected architectural throwback that likely doesn't have a standard CAD or BIM object in any database: thatch. And while thatch and digital fabrication may seem anachronistic, juror William Massie praised the overall analysis as "extending thoughts of materials and the history and science of building."

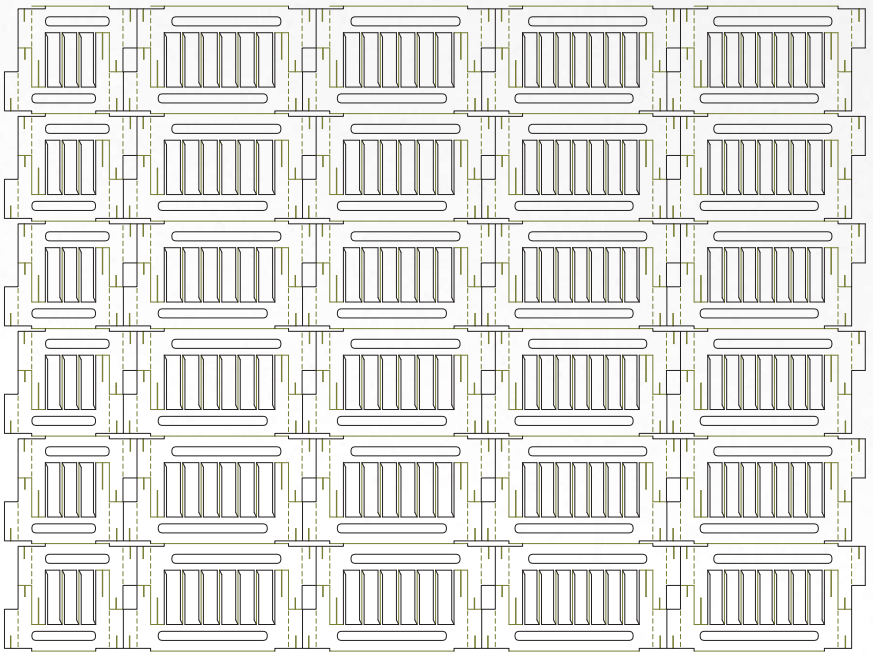
Lee consulted with William Cahill, one of the few master thatchers in the U.S., and researched the thatching vernaculars of Britain, Scandanavian countries, Laos, Indonesia, and Vietnam before digitally fabricating a series of combs—a tool used to thresh the grasses and reeds—from 14-gauge steel on a water-jet. These combs were used to create neat bundles of the fibers, and also became the steel support structure for the test structure: a pavilion formed entirely from thatch bundles. After the bundles were formed—from grasses such as cattail, phragmites, and turkeyfoot (the title of the project is, in fact, more literal than whimsical)—they were jammed down onto the spikes of each comb. The combs were then assembled into a wall structure and the ends trimmed to achieve the final result.

"What I really liked about this was this notion of digital fabrication and handcraft coming together," juror Sylvia Smith says. The ultimate product may be the pavilion, but Lee's study focused more on examining different forms of representation that could take the place of a traditional construction drawing for the project. She settled on three: axonometric documentation, a sequence of instructional drawings, and a catalog of parts. In short, a new form of representation for a new era of design. "Are we all going to run out and start building this way?" Smith asks. "No. But is it an interesting integration of old methods and new ways of thinking that could, in fact, overlap to other aspects of craft and building? I think it could." K.G.

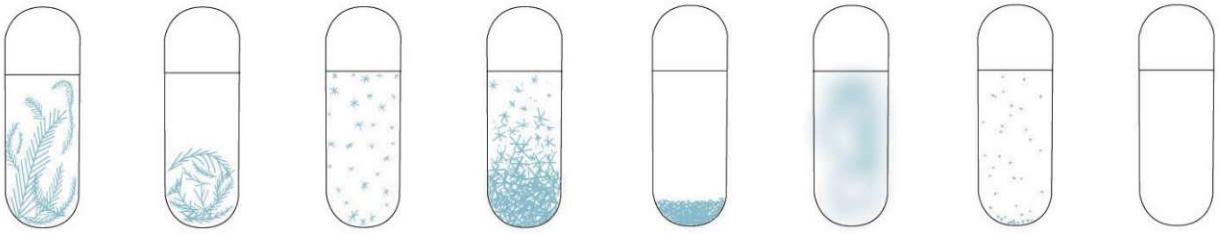
One of the methods of representation that Lee looked to in order to document the construction process is a series of instructional drawings (opposite) that outline the steps to create the bundles of cattail, phragmite, and turkeyfoot that create the final result: a digitally fabricated thatch pavilion (this image).



Comb-Course Diagram



The other two forms of representation Lee examined in her pursuit to eclipse the construction drawing are a catalog of parts, including the specific layout of comb courses (opposite, right), as well as axonometric representations of the final structure (this image). The final pavilion has an oculus (opposite, left) that is framed with the carefully trimmed fronds of the turkeyfoot bundles that make up the top several courses of the wall structure.



These fluid-filled glass tubes form the basis for Ply Architecture's Stormglass system. The liquid (a formula based on research into the original storm-glass tubes designed in the 18th century) crystallizes in various patterns depending on approaching weather conditions (top).

AWARD
STORMGLASS

DESIGNERS
PLY ARCHITECTURE

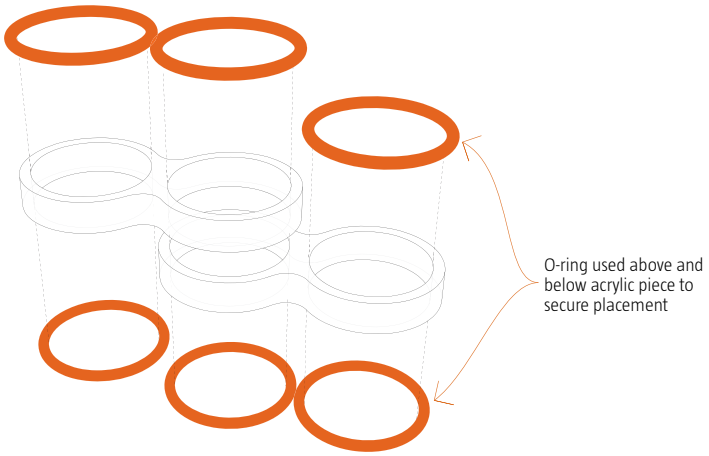
ANN ARBOR, MICH.–BASED Ply Architecture has researched a peculiar 18th-century weather-predicting instrument to create an architectural glazing system that is both functional and decorative. The instrument, called a storm glass, was used by Robert Fitzroy, captain of the *HMS Beagle* during Charles Darwin's famous voyage. A sort of crystalline barometer, the storm glass is a sealed glass cylinder containing a mixture of distilled water and chemicals that predicts weather based on crystalline shapes and patterns that form in reaction to weather conditions.

The architects' system, called Stormglass, substitutes conventional architectural flat-glass interior partitions with those formed by lashing storm-glass tubes together (since the network of tubes is not weather-tight, most research is being directed toward the building interior). Current flat-glass technology concentrates primarily on creating thermal efficiency while retaining as much transparency as possible to allow views. Stormglass responds to the natural environment not through transparency, but by encouraging varying levels of opacity in the tubes.

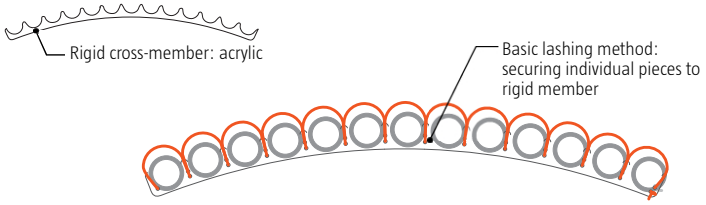
With any number of possible tube configurations, the system can create physical space in a room; the glass tubes can also reflect artificial interior light and filter daylight into a room, helping to modulate light levels. Juror Sylvia Smith was intrigued: "The tubes can create space, and then take advantage of ... [outside] weather conditions in the building."

The jurors appreciated how well the architects extrapolated the study of a single element, the storm-glass tube, to create an overall building system. Ply Architecture created digital models in Catia that allowed quick visualizations of the possibilities of different tube configurations. Ultimately, it was the exhaustive research process itself that most captivated the jury: It's not every day that an 18th-century nautical weather device is submitted to the rigors of repeated parametric modeling. SARA HART

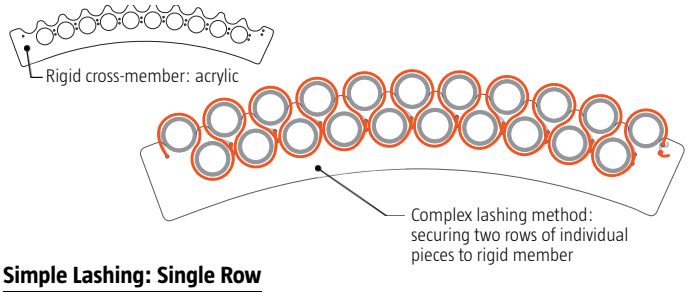
Tube-Connection Diagram



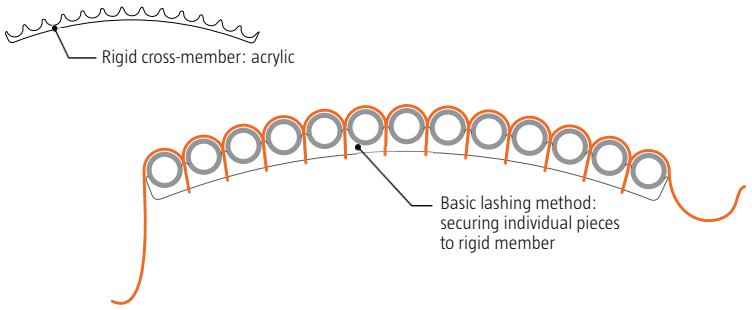
Double Lashing: Single Row



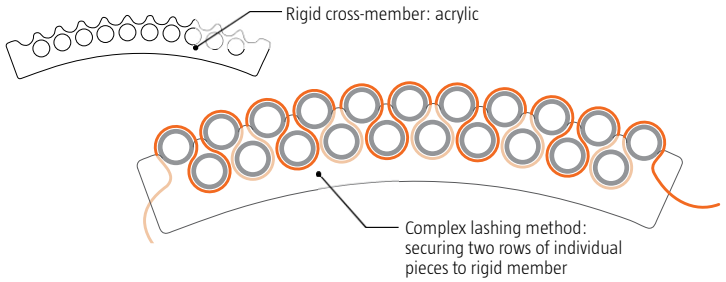
Double Lashing: Double Row



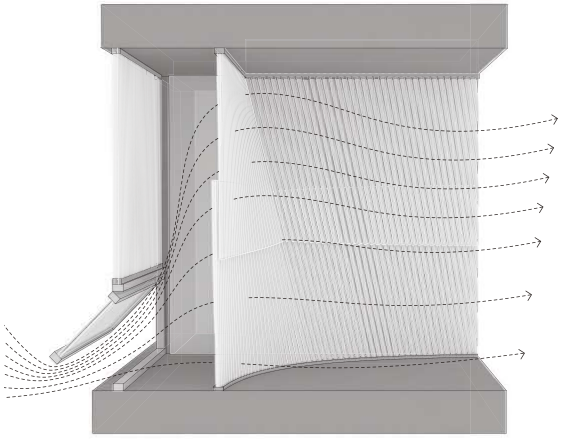
Simple Lashing: Single Row



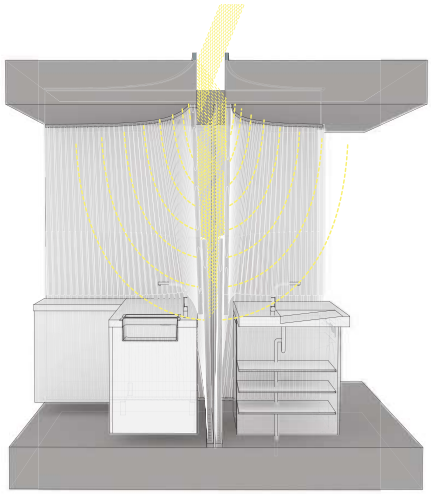
Complex Lashing: Double Row



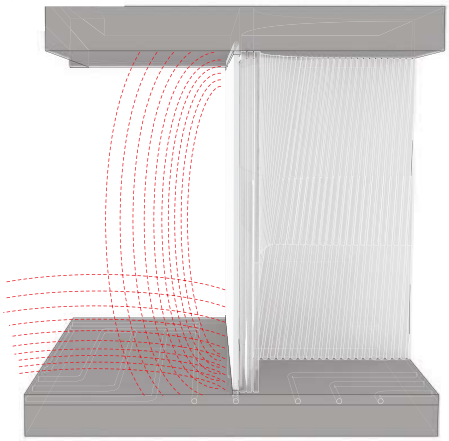
Stormglass As Air Diffuser



Stormglass As Light Diffuser



Stormglass As Heat Diffuser



Project Credits

Project Stormglass
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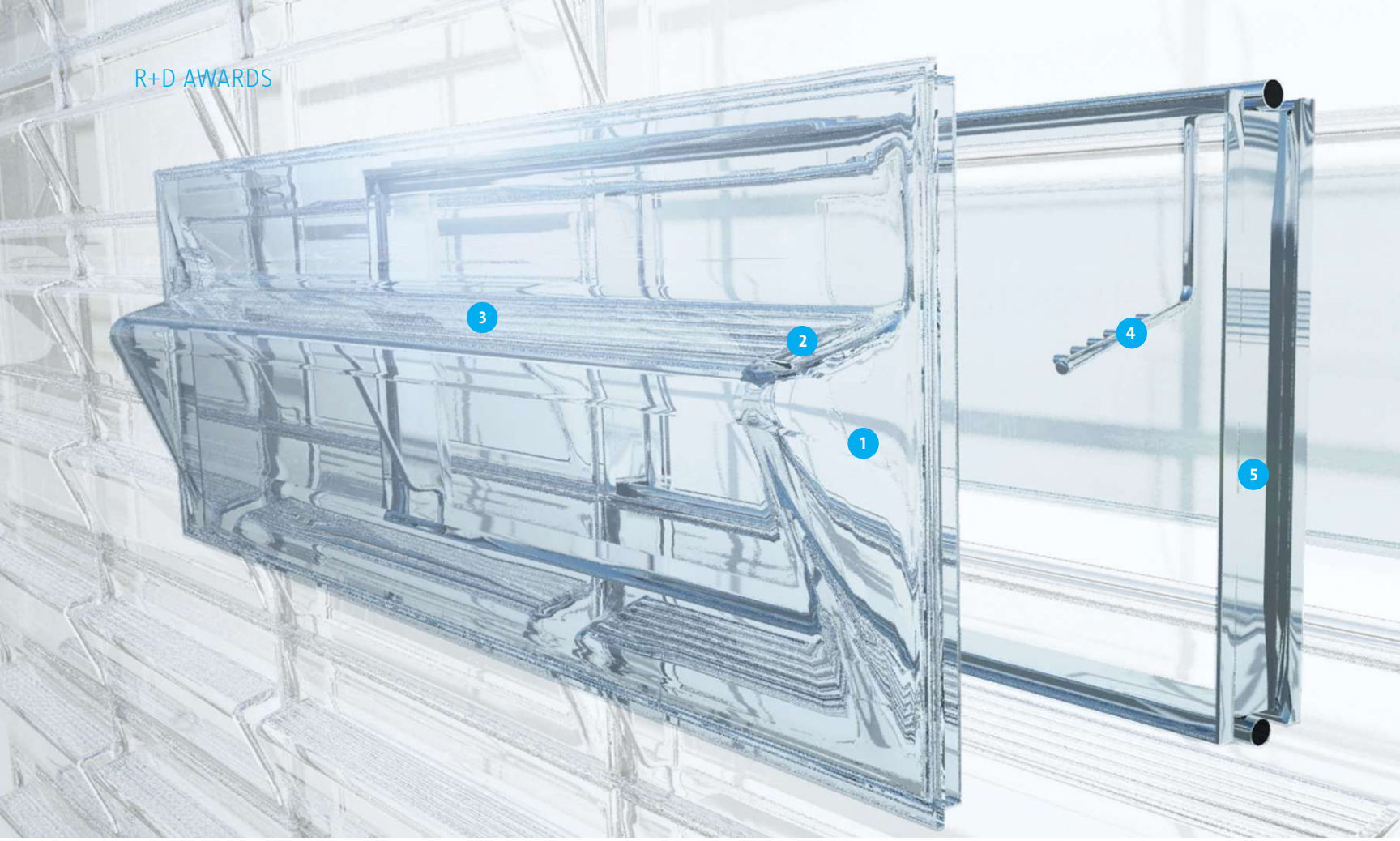
Architect Ply Architecture, Ann Arbor, Mich.—Craig Borum, AIA, (principal-in charge); Chris Bennett, Sara Dean, Ross Hoekstra, Jessica Mattson, Natasha Mauskapf, Jason Prasad, Wiltrud Simbuerger, Assoc. AIA, Julie Simpson, Alex Timmer, Lizzie Yarina
Orchid House and Storm Glass House Client Kathy Bernreuter and Michael Downing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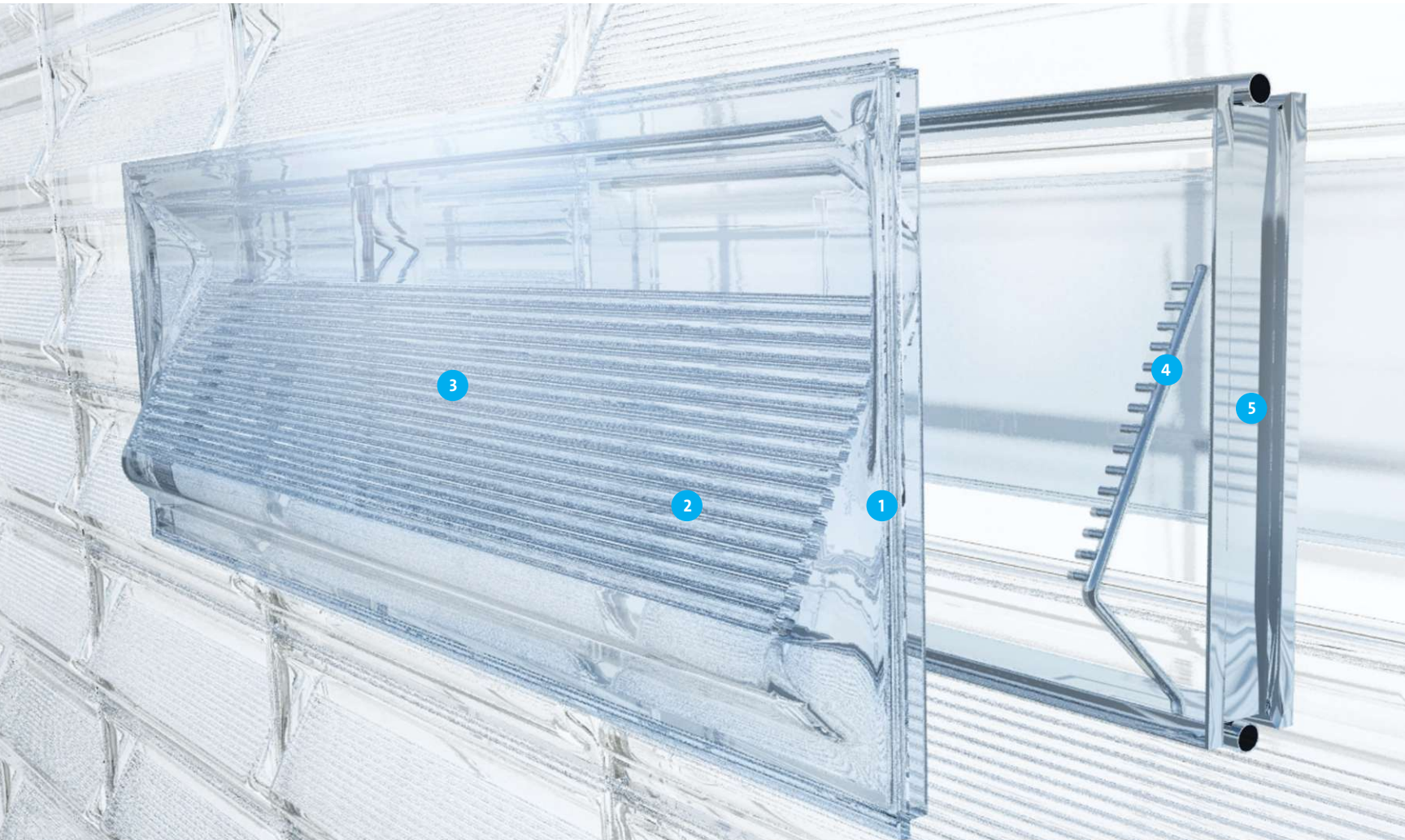
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SEWR MODULE FOR HOT, ARID CLIMATES
1. SOLAR-CAPTURE PROFILE
2. EMBEDDED SOLAR CONCENTRATORS
3. GRAYWATER FLOW CHANNELS
4. FLOWCHANNEL MANIFOLD
5. STIFFENING FRAME
6. INTERNAL LITE

SEWR MODULE FOR CONTINENTAL CLIMATES
1. SOLAR-CAPTURE PROFILE
2. EMBEDDED SOLAR CONCENTRATORS
3. GRAYWATER FLOW CHANNELS
4. FLOWCHANNEL MANIFOLD
5. STIFFENING FRAME
6. INTERNAL LITE

AWARD

SOLAR ENCLOSURE FOR WATER REUSE

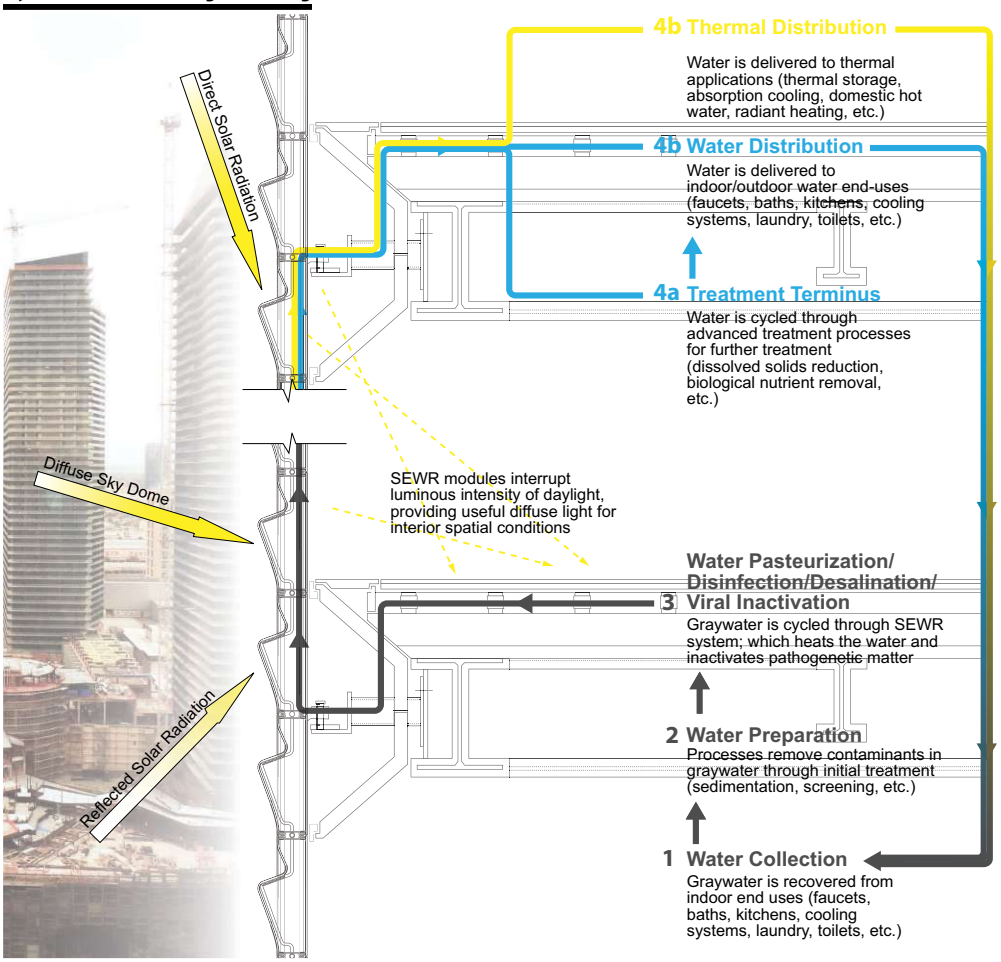
DESIGNERS
CENTER FOR ARCHITECTURE SCIENCE AND ECOLOGY

REDUCING ENERGY CONSUMPTION has long been a focus of the sustainability movement. But another resource is quickly gaining center stage: water. According to the World Health Organization and UNICEF, approximately one in eight people lack access to safe drinking water. In the United States, the building industry alone consumes 12 percent of all water withdrawals, and another 49 percent of water is used to create energy to power the built environment, according to the U.S. Geological Survey. In the face of such overwhelming evidence, the Center for Architecture Science and Ecology—a partnership between Skidmore, Owings & Merrill and Rensselaer Polytechnic Institute—developed a prototype that conserves energy and uses solar energy to passively filter graywater. And the system isn't stashed in the basement or hidden from view. Instead it takes the unexpected form of a glass façade.

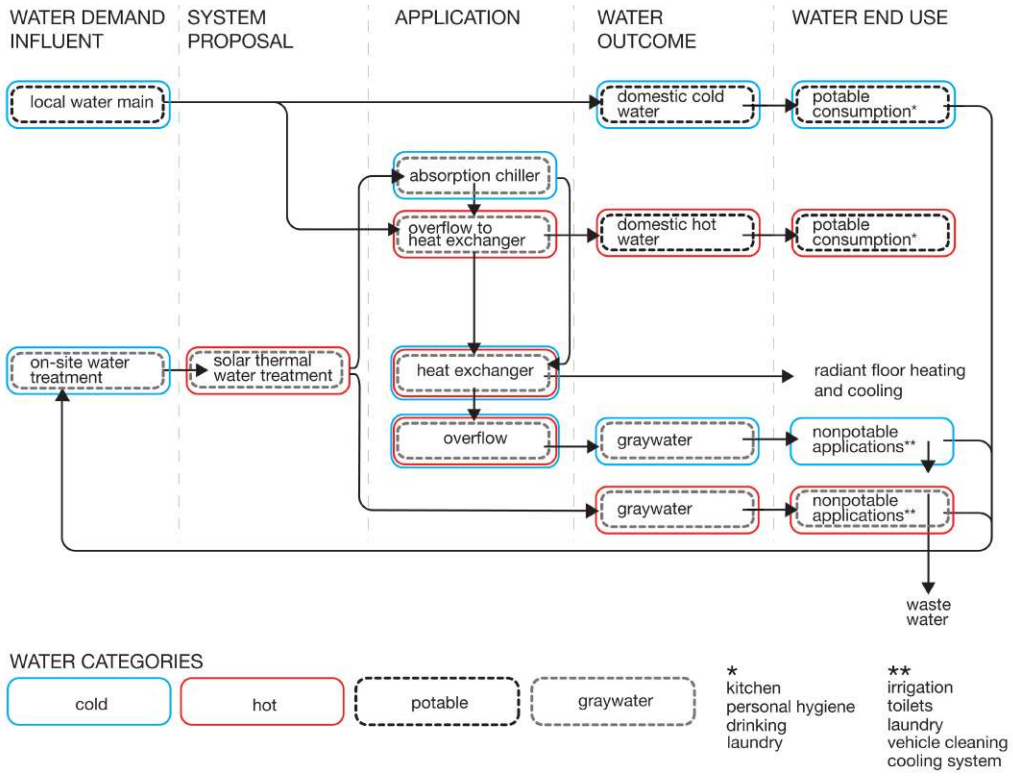
The Solar Enclosure for Water Reuse (SEWR), consists of a series of stacked, cast-glass blocks with carefully calculated profiles. Each block features a standard flat lite on the interior surface, followed by a stiffening frame. The external lite has solar concentrators and graywater flow channels embedded in a surface that is tilted to capture the maximum amount of solar energy. Graywater is directed from indoor faucets (such as faucets, baths, washing machines, and even toilets) and runs through an initial screening and sedimentation process to remove contaminants. The treated water flows through the channels in the SEWR façade system and is heated by the sun. The water is then directed back into the building for another round of treatment before being directed back into household systems. The jury was impressed by the level of SEWR's integration into the building systems. "It uses the active aspect of the environment and the existing moisture to make a dynamic system," juror Sylvia Smith says.

By keeping water treatment on site and limiting the amount of freshwater drawn from centralized grids, the system saves energy right out of the gate. And a fortunate side effect of running the water though the glass façade for treatment is that the water itself creates a barrier against heat gain. The façade allows diffuse daylight into the interior, but limits the energy needed to cool the structure. "It has a kind of internal logic to it," juror William Massie says. "It's one of those ideas where thickening of the edge of the building is really able to do something." K.G.

Hydronic Flows Through Building



Theoretical Wastewater and Heat-Exchange Networks

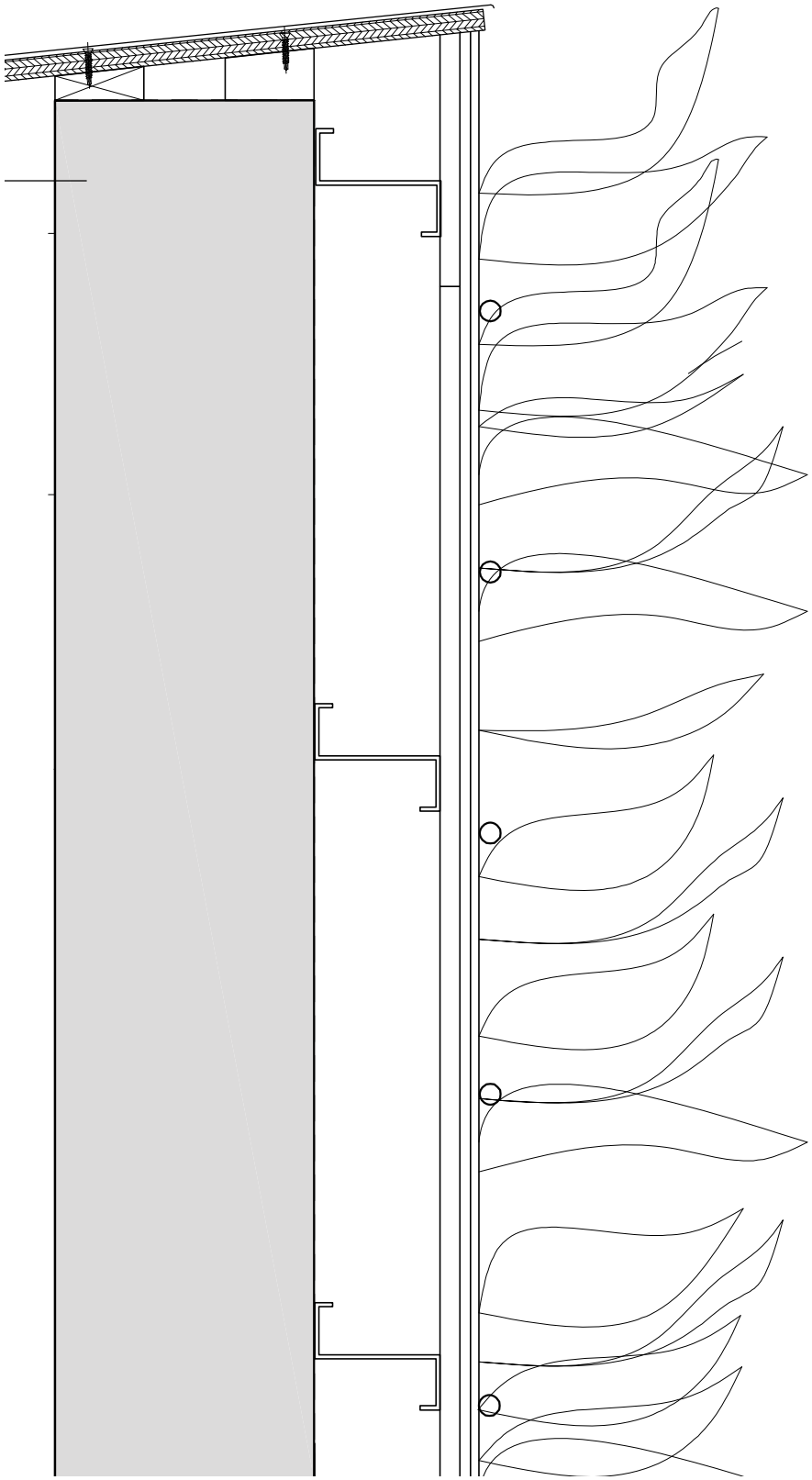


Project Credits

Project Solar Enclosure for Water Reuse
Collaborating Institutions Center for Architecture Science and Ecology (CASE), New York; Rensselaer Polytechnic Institute, Troy, N.Y.—Anna Dyson (director, CASE); Jason Vollen (associate director, CASE); Matt Gindlesparger, Kristin Malone, Peter Stark (researchers, CASE); Satoshi Kiyono (research assistant, CASE)

One of the projects highlighted in the Performative Envelope Lab research is the Leamouth Peninsula Building N in London. Tight, urban site conditions limit the amount of greenspace on the site, so the architects looked to include vegetation in vertical garden façades overlayed on reinforced-concrete walls on each of the four faces of the building.

Vertical Garden Façade Section



AWARD
PERFORMATIVE ENVELOPE LAB

DESIGNERS
SKIDMORE, OWINGS & MERRILL

"IT'S A SYSTEMIC APPROACH—they presented different strategies for different envelope and shading propositions," juror William Massie says, explaining why Performative Envelope Lab research by Skidmore, Owings & Merrill (SOM) stood out from the pack. SOM based its research on nine buildings, designed by different teams within the firm, each illustrative of forward-thinking building-envelope design. Projects covered techniques from frit patterns to parametric design to environmental shading.

The SOM team looked at curtainwalls post-construction and drew conclusions from real conditions, not solely from modeled performance. The jury lauded a large firm's commitment to self-evaluation and a continual manipulation of the exterior envelope in order to respond to the demands of each site. The lab's criteria went beyond factors of energy consumption or sustainability, and included issues of cultural context, identity, and security. One example, the Zhengzhou Greenland building in Zhengzhou, China, used a light-gauge-metal shading system to protect the all-glass tower from heat gain. The form takes its cues from the traditional stepped pagoda. In another example, the Leamouth Peninsula Building N in London, SOM responded to the need for greenspace on a tight site by creating a four-sided vertical garden. Its strategically detailed curtainwall allows for rampant plant growth with minimal maintenance.

But more than the individual projects themselves, it was a dedication to process that struck the jurors. They saw a practice devoted to skin analysis and to transforming conventional ideas toward façades. "We chose it [the Performative Envelope Lab] because it actually analyzed building façades in a meaningful way," juror Julie Eizenberg says. "It's research and development in the manner of standing back and looking at what was done and what are potentials, rather than research and development relative to invention." MIMI ZEIGER

Project Credits

Project Performative Envelope Lab
Architect Skidmore, Owings & Merrill
Project Examples Poly Beijing, Beijing, China; China World Trade Center, Beijing, China; University of North Carolina Genomic Science Building, Chapel Hill, N.C.; Government Service Administration Building, Denver; Rolex Tower, Dubai, United Arab Emirates; Infinity Tower, Dubai, United Arab Emirates; Zhengzhou Greenland, Zhengzhou, China; Leamouth Peninsula Building N, London; Jinao Tower, Nanjing, China
Contributors Bill Baker, Hendra Bong, Mark Borkowski, C. Keith Boswell, AIA, Arthur Cantwell, Peng-Chien Chang, Doojin Cho, Leo Chow, Eunjung Chung, Christopher Ciraulo, Stephan Ciulla, Brent Collins, Francis Cooke, Patrick Daly, Daniela Dan, Arvinder Dang, Tamara Dinsmore, AIA, Sean Doyle, Christine Dumich, Bernie F. Gandras, AIA, Daniele Ghertovici, Iana Gueorguieva, Nik Haak, Anwar Hakim, AIA, Maurice Hamilton, Cheng-Yu Ho, Justin Ho, Ping Jang, Philip Kaefer, Eric R. Keune, AIA, Thomas Kinzl, AIA, Tim Kleinert, Dianne Kontos, Raymond Kuca, Timo Kujala, Christiana Kyrillou, Brian Lee, FAIA, Henry Lee, Hunsang Lee, Luke Leung, Kenneth Maruyama, Aaron Mazieka, Bernard McDonagh, James Michaels, AIA, Hana Maulana Murdan, John Natale, Kevin O'Connor, AIA, Dan O'Riley, Jo Palma, Isaac Persley, Timothy Poell, Anne Poone, Inho Rhee, Kevin Rodenkirch, Peter Ruggiero, AIA, Hyejung Ryoo, Daniel Salinas, Mark Sarkisian, Mark Schwettman, Jorge Soler, Mathew Staublin, Ayumi Sugiyama, Surjanto Surjadji, Marc Tirikian, Patricia Tjandrawinata, Lucas Tryggestad, AIA, Peter Van Vechten, AIA, Sandra Ventura, Carsten Max Voecker, Ross Wimer, FAIA, Weiqi Wang, Angela Wu, Sky Xu, Eric Zachrison
Zhengzhou Greenland Photo Cliff Wallace

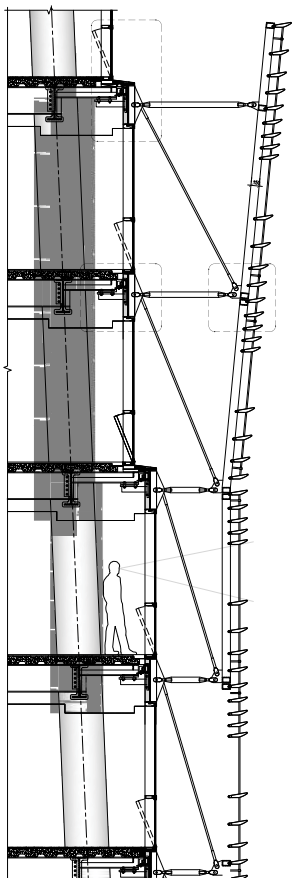
China World Trade Center: Glass Fins

University of North Carolina Genomic Science Building: Ceramic Frit

Jinao Tower: Double-Glazed Façade

Zhengzhou Greenland: Metal Sunshading

Zhengzhou Greenland: Shading Section



AWARD
THE BLUE SKY FRAME

MANUFACTURER
BLUE SKY BUILDING SYSTEMS

MOTIVATED BY THE DESIRE to build a house on a rugged site in Southern California's high desert, marketing executive David McAdam discovered a company that had devised a lightweight framing system for industrial applications—a point-loaded, bidirectional, moment-resisting frame made not of structural steel, but primarily of cold-formed, light-gauge, galvanized steel. McAdam worked with the manufacturer, a structural engineer, and an architect to modify the system for his house. The application proved so successful that McAdam solicited partners and formed Blue Sky Building Systems to market the frame for general residential use in 2010. Fifteen more projects have now been completed or are under development.

Manufactured with up to 70 percent recycled content, the Blue Sky Frame is shaped, cut, drilled, detailed, and labeled in a factory. Then it is shipped flat to the jobsite, where it is quickly bolted to peripheral columns made of structural tube steel. No welding is required, because the system is assembled using a specialized eight-bolt connection. "In my world of small buildings and residential architecture, there doesn't seem to be much innovation from companies in terms of trying to extend their products," juror William Massie says. But "this is a big extension." Massie also praised the system's pregalvanized option, noting that galvanizing a frame is usually a separate step that costs time and money.

With the Blue Sky system, a 1,000-square-foot house can be built in six to eight weeks. And given the absence of load-bearing walls, it is easy to achieve interior spaces with spans of up to 40 feet. There are eco-benefits are well: Since the system anchors only to a series of small footings, there is no need for intrusive site grading, which means minimal damage to the land. Factory prefabrication also minimizes site waste. "Architectural history, particularly in fabricated houses, is littered with great ideas," juror Sylvia Smith says. "I thought this was very clean." VERNON MAYS

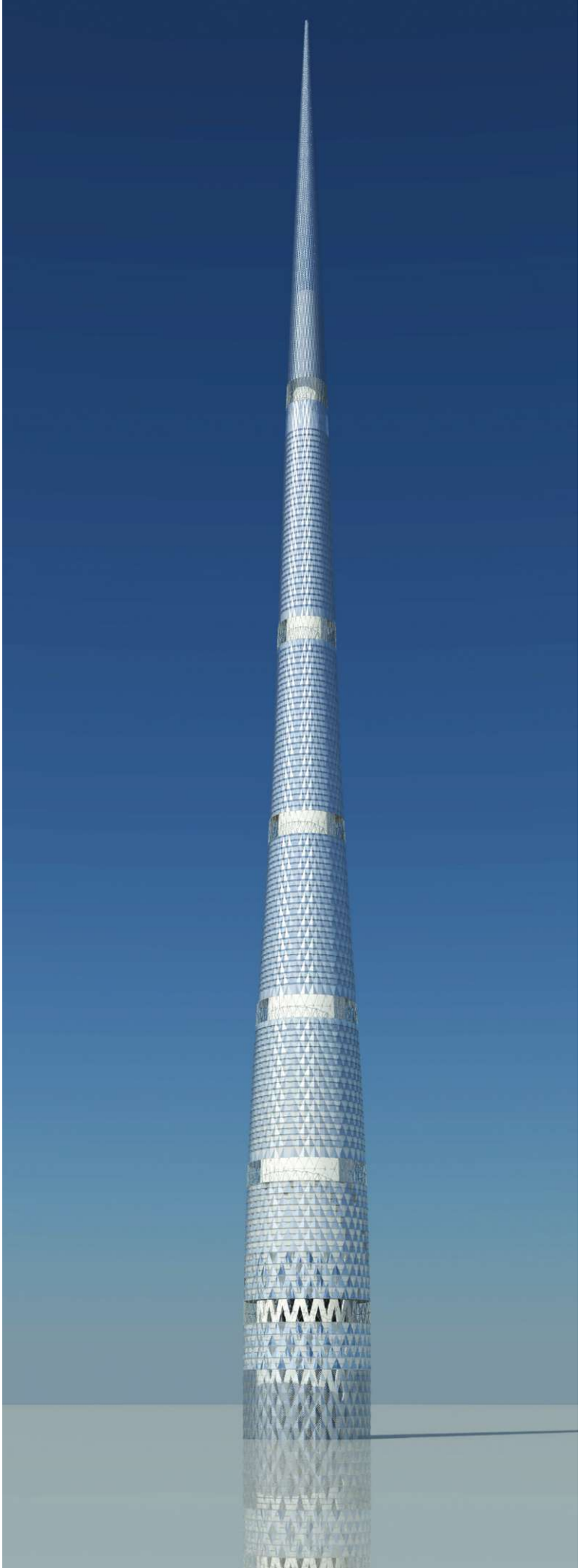
A completed home in Yucca Valley, Calif., built using the Blue Sky Frame, a light-gauge, pregalvanized steel moment-frame system.

The Blue Sky Frame is lightweight enough to be assembled with minimal machinery and a small construction crew, and because it connects to structural concrete footings, it is minimally invasive to the landscape. The pregalvanized components are delivered and assembled without special equipment or tools, and a 1,000-square-foot house can go from bare site (top left) to nearly completed enclosure (bottom right) in as few as three days.

AWARD

TREE TRUNK TOWERS: CANTILEVERED FLOOR/SUPER CORE STRUCTURE

DESIGNERS
SKIDMORE, OWINGS & MERRILL



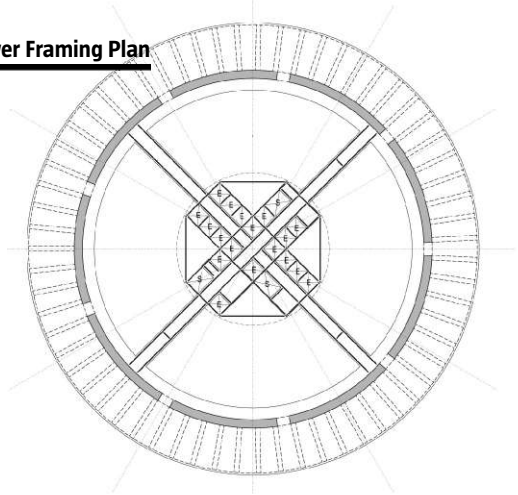
WITH THE INTENSE demand for high-rise buildings driven by global urbanization, architects keep pushing technology to conserve materials, increase efficiency, speed construction, and deliver more open, daylit spaces. To address these issues, Skidmore, Owings & Merrill (SOM) challenged the conventional model of tower construction: a perimeter moment frame tied by outriggers to an internal core tower with deep interior spaces. The firm's research focuses on a common strategy employed in three competition tower schemes: the "tree trunk," which proposes a structural supercore with cantilevered floors and a column-free perimeter. The projects are diverse in size, scope, and locale, and include the 25-story Takshing House Redevelopment tower in Hong Kong, the 110-story Fluidic Tower in Seoul, South Korea, and the 3,281-foot-tall (a)Spire Tower, designed for an undisclosed desert location. Each scheme enlarged and elaborated the structural concept.

In the case of the two larger towers, the supercore is built using concrete formwork technology that is both consistent and fast, typical of cooling-tower construction used in the nuclear power industry. Tapering as they rise, these internal core elements produce a maximum footprint and allow the building to transfer loads efficiently to the ground while accelerating the construction schedule. The large footprint of the supercore permits cantilevered floors—up to 40 feet for office-lease spans, less for residences and hotels. In addition to providing space for air movement and technical functions, the enlarged supercore offers "found" space that can be used as a place for meeting, gathering, shopping, and dining within the interior volume.

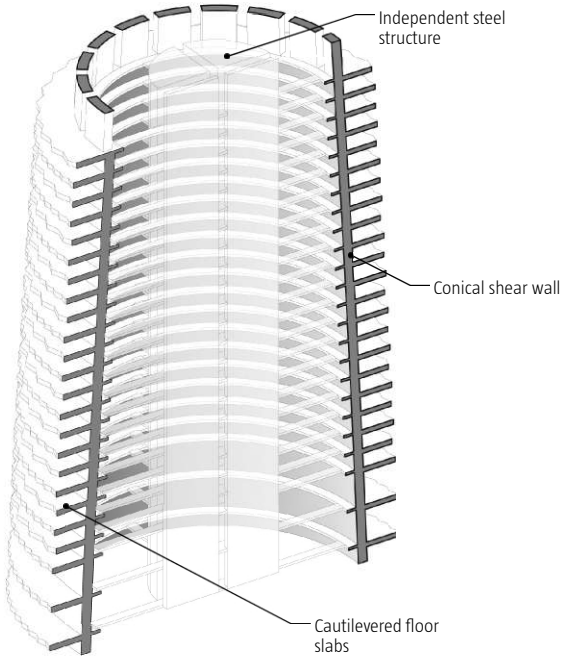
"I'm extremely jealous of what people who've been dabbling in high-rise buildings have been able to do," juror Julie Eizenberg says. "The way that technology runs now and the way money is distributed, the real invention over the past five years has been significantly in towers. The other part that's interesting is how few of them—excuse me, how none of them—is in the States." V.M.

The concept of a structural core with cantilevered floor plates is by no means new, but extrapolating that technology to create high-rise towers, ranging from the 25-story tall Takshing House Redevelopment in Hong Kong (left) to the 110-story Fluidic Tower in Seoul, South Korea (this image), to the 3,281-foot-tall a(Spire) Tower (far left) is the focus of SOM's research.

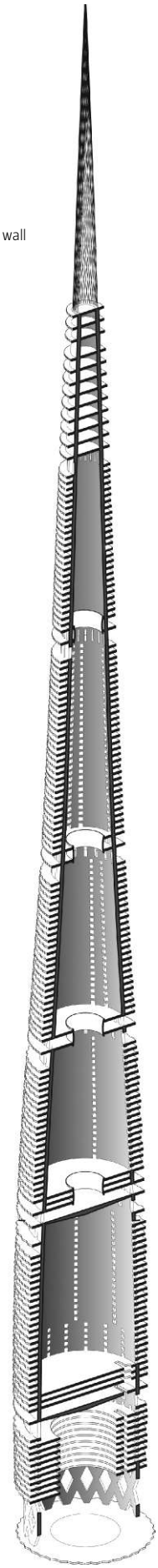
(a)Spire Tower Framing Plan



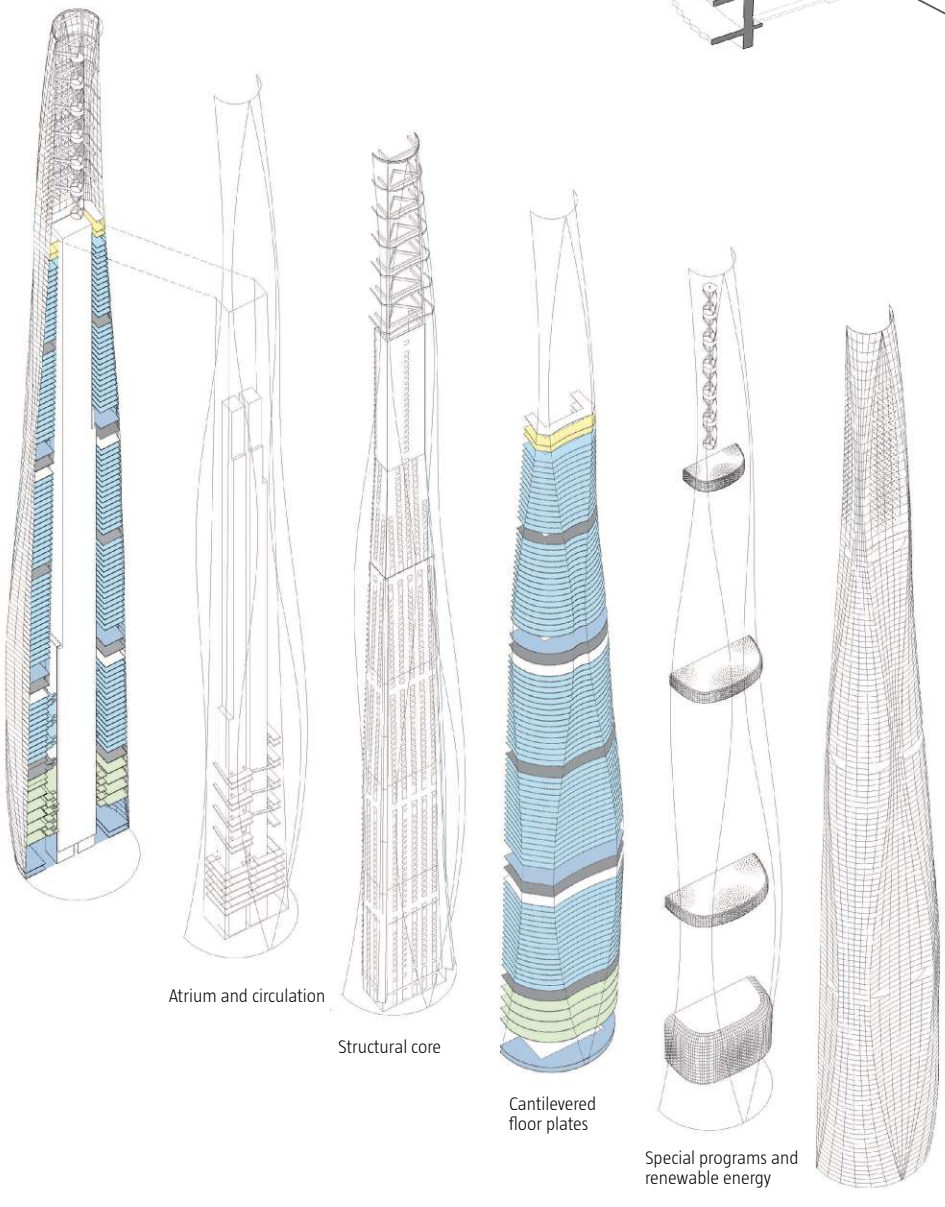
(a)Spire Tower Structural Diagram



(a)Spire Tower Section



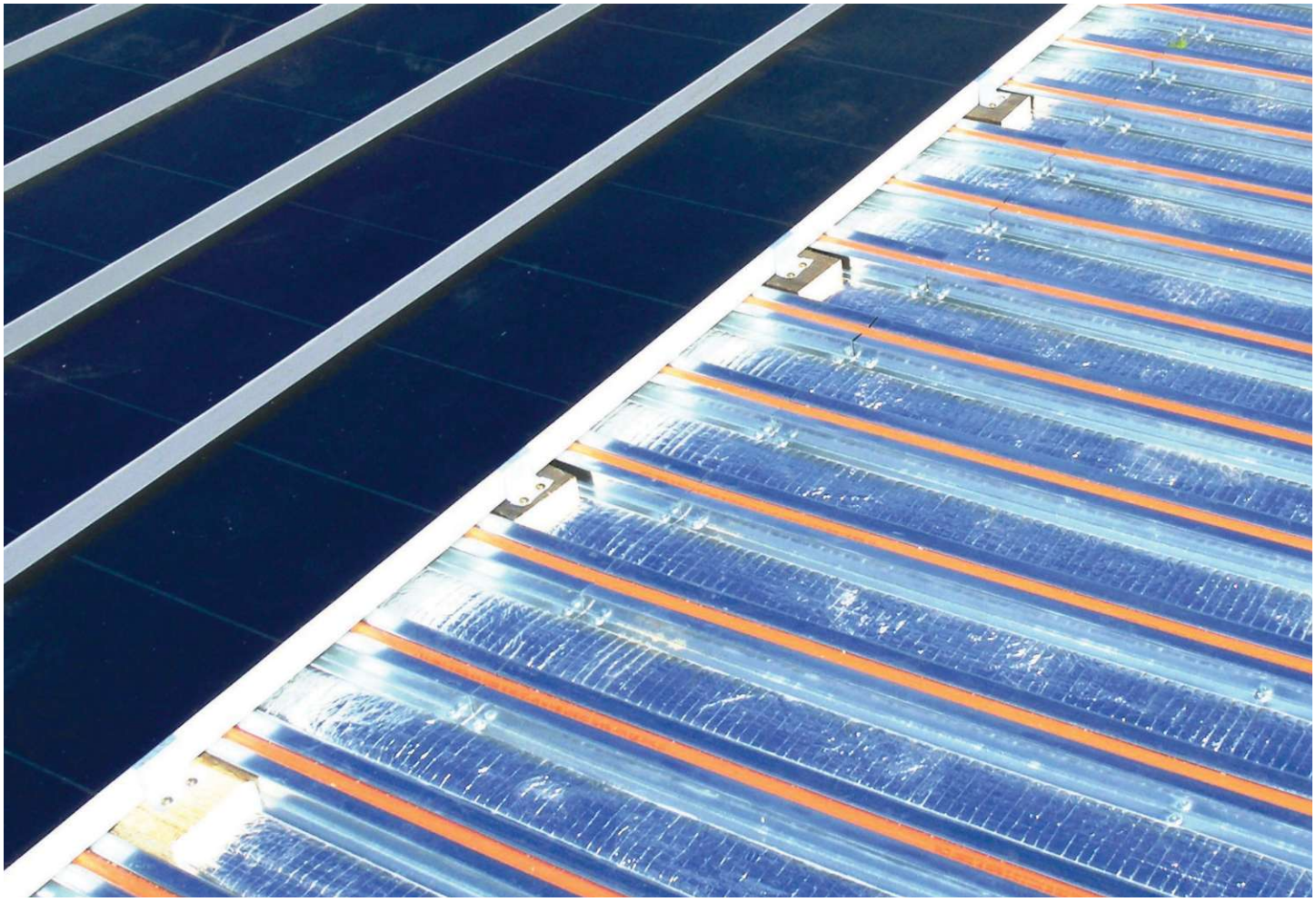
Fluidic Tower Exploded Axonometric



Project Credits

Project Tree Trunk Towers: Cantilevered Floor/Super Core Structure
Architect Skidmore, Owings & Merrill
Takshing House Redevelopment Brian Lee, FAIA, William F. Baker, James J. Pawlikowski, Thomas Kerwin, FAIA, David Krysak, Ame M. Engelhart, AIA, Craig Bahney, Henry Chan, Casey Renner, Yue Zhu, AIA (project team)
(a)Spire Tower Brian Lee, FAIA, William F. Baker, George J. Efstathiou, FAIA, Eric R. Keune, AIA, James J. Pawlikowski, Heather K. Poell, AIA, Casey Renner, Thomas Kinzl, AIA, Neil Katz, Craig Reschke, Weiqi Wang, Craig Bahney (project team)
Fluidic Tower Brian Lee, FAIA, William F. Baker, Jeffrey J. McCarthy, AIA, Eric R. Keune, AIA, James J. Pawlikowski, Thomas Kinzl, AIA, Michael Pfeffer, AIA, Casey Renner, Inho Rhee, Tatsuhiko Shibata, Chung-woon Jung, Kwangmin Kim, Aurelie Horn, Craig Reschke, Benton Johnson (project team)

Fluidic Tower Atrium



CITATION
SOLAR SANDWICH

MANUFACTURER
ENGLERT

THE HOLY GRAIL for adding photovoltaics (PV) to a building is making them blend in to the point of obscurity. The Solar Sandwich, a system manufactured by Perth Amboy, N.J.–based Englert, struck judges for just that reason: It is designed to look like any of the company's other standing-seam roofing systems. Metal panels topped with thin PV laminates conceal a solar thermal system (made by Dawn Solar Systems).

The surface-mounted PVs generate electricity, but also absorb heat, which is directed into the solar thermal system underneath. Using a closed-loop system of tubes filled with glycol-enhanced water, energy is transferred from the roof to a conventional heating system where it is used to warm the building and provide hot water. But what impressed juror William Massie most was the level of integration with the roof system. It looks "so much not like anything," he says—in a good way. HALLIE BUSTA

Project Credits

Project LED Handrail System, Hoboken Pier C, N.J.
Client City of Hoboken
Design James Carpenter Design Associates, N.Y.—James Carpenter (principal); Richard Kress (senior designer and project manager); Johanna Kindvall, Torsten Schlauersbach (design team)
Structural Engineer Skidmore, Owings & Merrill Structure—William Baker, Dmitri Jajich
Fabrication TriPyramid Structures—Michael Mulhern, John Rappa
Subcontractors Johnson Screens; X-Tend Mesh; LED by i2 Systems
Installation EIC Contactors
Landscape Architecture and Pier Design Michael Van Valkenburgh Associates
Photo David Sundberg

CITATION
LED HANDRAIL SYSTEM

DESIGNERS
JAMES CARPENTER DESIGN ASSOCIATES

IN MOST PROJECTS, a handrail is the kind of detail that could be easily value engineered down to a sturdy steel part. Which is why the amount of innovation displayed by the LED Handrail System that New York–based James Carpenter Design Associates designed for the Pier C waterfront park in Hoboken, N.J., was so interesting to the jury. Supported by stainless steel stanchions, LEDs housed in a flexible mesh tube cast a soft glow on both the surface of the water and the Michael Van Valkenburgh Associates–designed esplanade. The light also causes the woven-metal balustrade to shimmer day and night. "I've walked this, and it's quite beautiful, it's tactile," says juror Sylvia Smith.

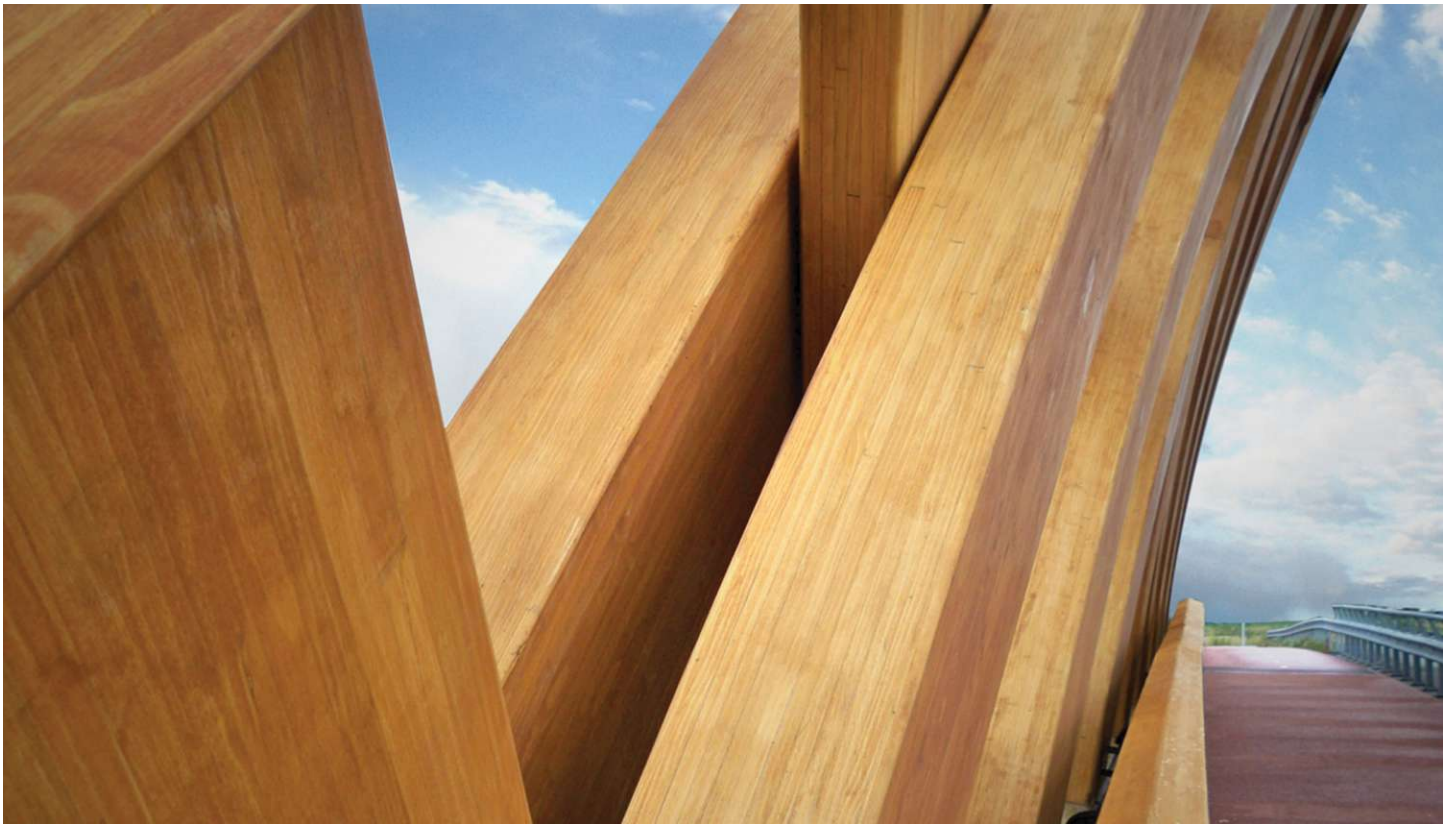
The jury was especially impressed that Carpenter had given so much consideration to the handrail's production. He borrowed cost-efficient tubes made for the filtration industry and had the modular pieces (which can be easily adopted for other applications) load tested for 200 pounds of pressure, proving that the system can be bent and can withstand heavy wear and tear while not interrupting the illumination. "I thought that was fascinating," juror William Massie says. KRISTI CAMERON

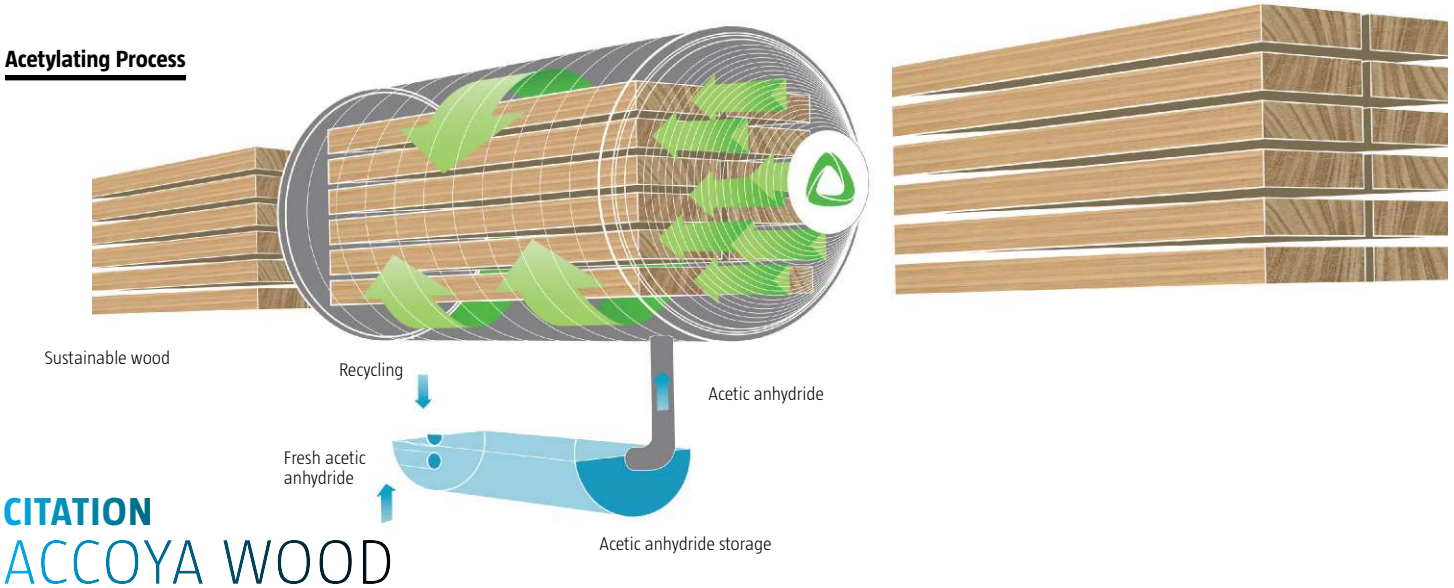
CITATION
SANICUBIC CLASSIC

MANUFACTURER
SANIFLO

PRAISED BY JUROR Julie Eizenberg for "solving an invisible kind of problem, yet allowing for much more potential for doing things responsibly," the Sanicubic Classic lifting station is a grinder system that reduces solids in the wastewater stream. Manufactured by Saniflo, the product is capable of handling 25 gallons of effluent per minute from multiple fixtures in a house or commercial structure. Each lifting station has two one-horsepower motors, each of which operates a fast-rotating cutting blade. By grinding the solid waste from toilets, dishwashers, sinks, and other plumbing fixtures, the product reduces the strain on septic and sewer systems. Each unit can handle effluent pumped from 36 feet vertically or 328 feet horizontally.

The jury praised the versatility of the product's uses ranging from public restrooms in airports to residential plumbing, and the reduction of material being forced back into already overtaxed public-utility systems. "It's a great idea," juror William Massie says. K.G.

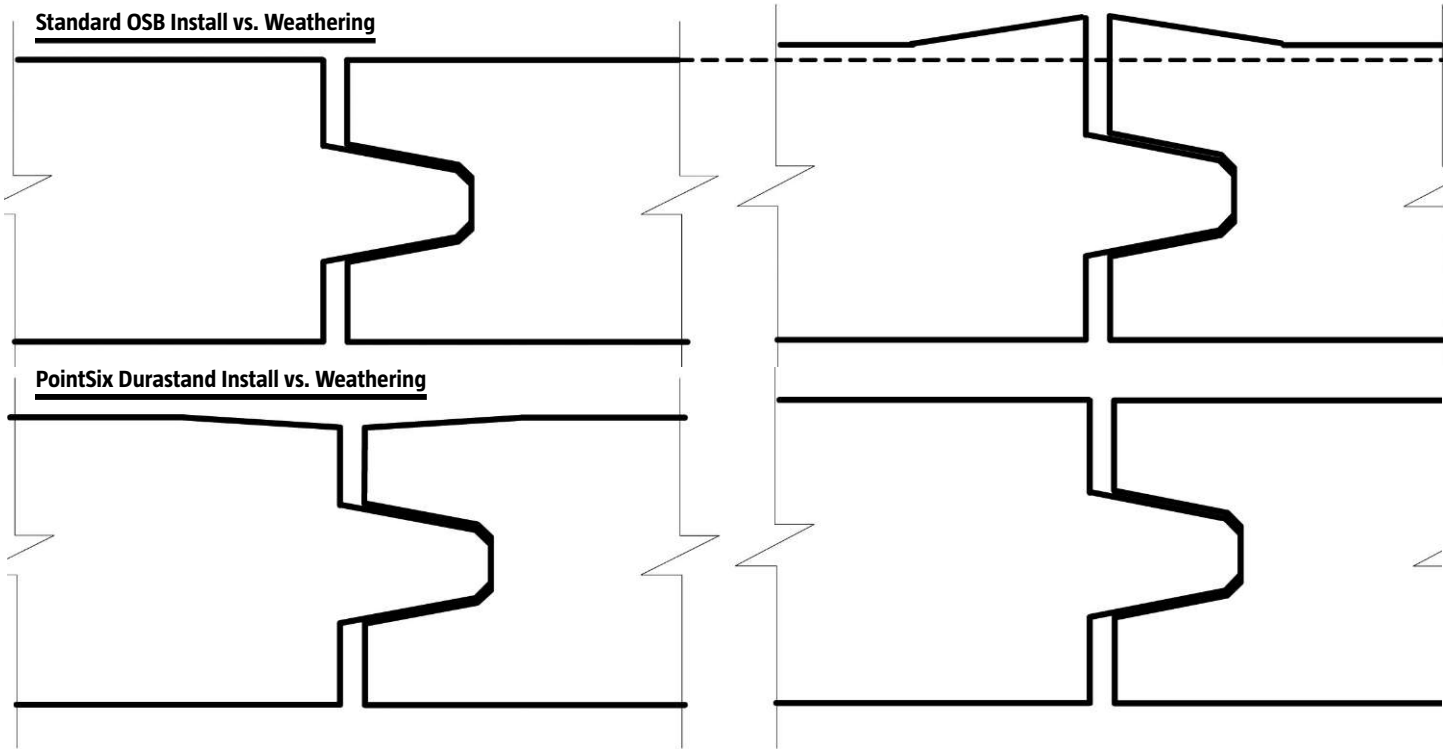


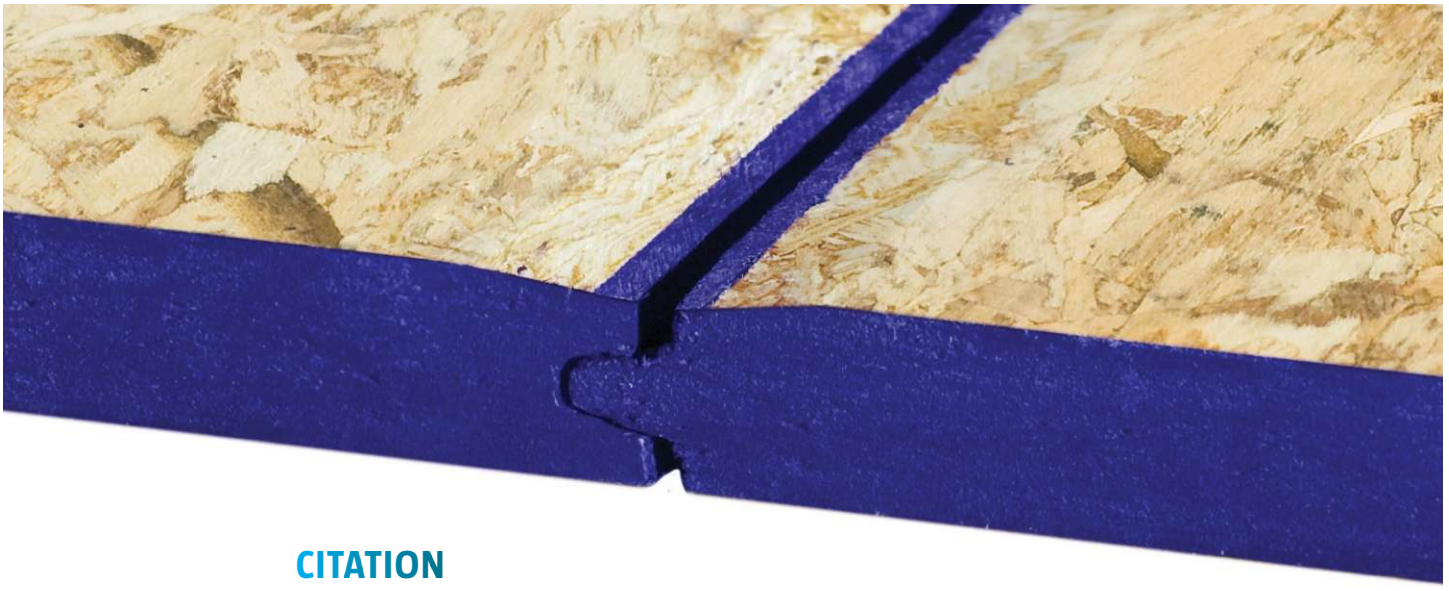


CITATION
ACCOYA WOOD

MANUFACTURER
ACCSYS TECHNOLOGIES

IN AN ERA OF ever-increasing awareness about the limitations of natural resources, manufacturers are leveraging research and technology to find new alternatives for raw materials. Accsys Technologies did this with the development of Accoya, an acetylated wood product that gives sustainably sourced softwoods the strength and durability of old-growth tropical hardwoods. The process takes fast-growing, FSC-certified softwood boards and replaces the wood's natural free hydroxyls (the chemicals that absorb and release water, causing wood to swell and shrink) with stable acetyl groups that do not bond with water at all. As a result, Accoya wood does not expand and contract with changes in climate—allowing coatings and finishes to last longer—and it is more resistant to insects. Composed of hydrogen, oxygen, and carbon, the acetyl groups are nontoxic; the chemical byproducts from the treatment process are either recycled back into the process or sold for use in other industries. Juror Sylvia Smith praised the company's "multifaceted investigation" into the chemical processes, while juror William Massie appreciated the product's ability to "simulate tropical species of wood through technical processes." K.G.





CITATION
POINTSIX DURASTRAND FLOORING

MANUFACTURER
AINSWORTH ENGINEERED

THE JURORS SINGLED out Ainsworth Engineered's PointSix Durastrand Flooring because the product elegantly resolves problems that they have faced in the field. Conventional oriented-strand board (OSB), when left exposed to the elements during construction, has a tendency to absorb water and swell. When used as a subfloor, the material can expand out of flush alignment and require postinstallation sanding.

Based in the rainy Pacific Northwest, the Ainsworth Engineered team is intimately familiar with the effects of weathering. The PointSix boards are chamfered 0.6 millimeters at the edge to accommodate swelling and curling up at the edges: Instead of swelling too much and requiring sanding, these boards expand to the point of creating a nearly flush surface, held in place by tongue-and-groove attachments. In the system's design, "there's an understanding that the building process takes a certain amount of time," juror William Massie says. Juror Julie Eizenberg appreciated the product's potential to help mitigate litigation. There have been "lawsuits because buildings were being left out … and when they went to do the next level of construction, everything was falling apart," she says. M.Z.

CITATION
TAKTL

MANUFACTURER
TAKTL

ONGOING INNOVATION in high-strength concrete and proprietary formulas for ultrahigh-performance concrete (UHPC) have made the material stonger, thinner, and more malleable than ever before. This year's jury was taken with a UHPC formulation called Taktl, made by a company of the same name launched as a separate entity five years ago by architectural-products manufacturer Forms+Surfaces. The jurors were impressed by the company's commitment to innovation and its eco-minded manufacturing model, which sources local materials. Taktl engineers focus on performance testing and the development of materials such as formulations, coatings, reinforcements, and pigments. An in-house team of designers uses modeling software to find new applications for the materials. Juror Julie Eizenberg praised the "dedication to experimentation with the product, which came through really clearly." S.H.

THE JURY

SYLVIA J. SMITH

SENIOR PARTNER
FXFOWLE

As the senior partner in charge of the Cultural/Educational Studio at New York–based FXFowle, Sylvia J. Smith, FAIA, has overseen the adaptive reuse of the Lion House at the Bronx Zoo and the redevelopment projects at Lincoln Center (with Diller Scofidio + Renfro), including the renovation of Alice Tully Hall. Another of her Lincoln Center projects, the Hypar Pavilion Lawn and Restaurant, recently received an Honor Award for Architecture from the AIA New York Chapter. Before joining FXFowle in 1982, when the firm was known as Fox & Fowle, Smith earned her M.Arch. from the University of Virginia School of Architecture, and a bachelor of arts in studio art from Dickinson College.

WILLIAM E. MASSIE

HEAD OF ARCHITECTURE DEPARTMENT
CRANBROOK ACADEMY OF ART

In addition to heading the architecture department at the Cranbrook Academy of Art, William Massie serves as the Bloomfield Hills, Mich., institution's architect-in-residence, and he retains his position as a tenured professor at the Rensselaer Polytechnic Institute in Troy, N.Y. Known for his research into digital information and computer applications in construction, Massie applied these principles to American House 08, his first in a series of 10 prefabricated houses, constructed entirely within his 12,000-square-foot studio. Massie and his eponymous firm have won awards for both design and research, including the Museum of Modern Art's Young Architects Program in 2002.

MIKE MORGAN

JULIE EIZENBERG

PRESIDENT
KONING EIZENBERG ARCHITECTURE

Julie Eizenberg, AIA, co-founded Santa Monica, Calif.–based Koning Eizenberg Architecture with partner Hank Koning, FAIA, in 1981. In addition to serving as company president, she also acts as the principal-in-charge of architectural design and master planning. The firm has garnered more than 70 design awards, including an AIA Housing Award for the Hancock Mixed-Use Housing, a Rudy Bruner Gold Medal Award for Urban Excellence for the Children's Museum of Pittsburgh, and the AIA California Council firm of the year award in 2009. The firm has also published two books, including *Architecture Isn't Just for Special Occasions* (The Monacelli Press, 2006).

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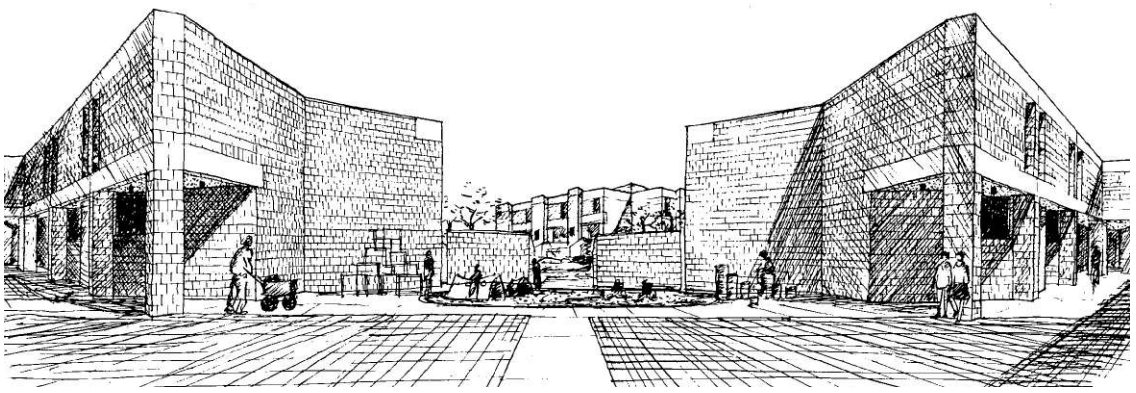

→1969 P/A AWARD

DENSITY IS DESTINY

THIS PUBLIC HOUSING PROJECT SHOWS HOW EVEN THE MOST SOPHISTICATED DESIGN CANNOT OVERCOME THE PROBLEMS THAT COME WITH TOO MUCH DENSITY.

TEXT BY THOMAS FISHER, ASSOC. AIA

1969 P/A Awards Jury
Henry Cobb, FAIA
Lewis Davis
Richard M. Gensert
Roger Montgomery
Cesar Pelli, FAIA

TAI SOO KIM, FAIA, with the firm Huntington, Darbee & Dollard, won a P/A Award in 1969 for the Van Block housing project. Though built largely as planned, the complex has since been partly demolished, a fate that befell many public housing projects from that period.

Comprising 14 L-shaped buildings one mile south of downtown Hartford, Conn., the project impressed the jury with its ingenious packaging of 104 two- and three-bedroom units on a tight, urban site. Kim arranged the brick-clad buildings in an alternating zigzag pattern, with a series of courtyards linked by diagonal walkways that threaded through the complex beneath gateways formed by the ends of each building.

The dwelling units echo that chevron pattern. The front kitchen and dining space stand at a 45-degree angle from the sunken, rear living room on the first floor, while one or two front bedrooms angle away from the rear master bedroom on the second floor, increasing both the variety and privacy of the interior spaces.

The jury applauded the inventiveness and rigor of the design. Lewis Davis called it "unique," while Cesar Pelli, FAIA, said it was "one of the best … I have seen." Such accolades, however, could not prevent the demolition of roughly half of the complex decades later, eliminating the pedestrian walkways and courtyards in favor of automobile access to parking lots in front of each unit. Juror Henry Cobb, FAIA, thought that "the weakest part … [of the project] is the site plan," and, given the subsequent demolitions, that observation proved prescient. □

TAI SOO KIM, FAIA

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